

**EFFECTS OF SELECTED TECHNOLOGIES ON ACADEMIC PERFORMANCE OF  
STUDENTS AT MOUNT-KENYA UNIVERSITY THIKA SUB-COUNTY, KIAMBU  
COUNTY, KENYA**

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REQUIREMENTS FOR THE AWARD OF DEGREE OF BANCHELOR OF  
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**DECEMBER 2024**

**DECLARATION**

I am hereby declaring that this research project is my original work and has not been presented for award of a degree or for any similar purpose in any other institution.

Signature:  .....

Date: 9/12/2024 .....

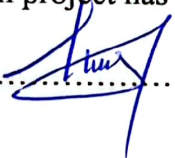
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## **ABBREVIATIONS AND ACCRONYMS**

<b>AERA</b>	American Educational Research Association
<b>CAT</b>	Continuous Assessment Test
<b>ICT</b>	Information Communication Technology
<b>IT</b>	Information Technology
<b>LAN</b>	Local Area Network
<b>MAN</b>	Metropolitan Area Network
<b>MKU</b>	Mount Kenya University
<b>RAT</b>	Random Assessment Test
<b>SES</b>	Social Economic Status
<b>SPSS</b>	Statistical Package for Social Sciences
<b>WAN</b>	Wide Area Network
<b>Wi-Fi</b>	Wireless Fidelity



## OPERATIONAL TERMS

**Technology** It is the application of scientific knowledge and tools to solve practical problems, improve processes and achieve specific goals.

**Social Media** Refers to application of website that are arranged to allow people to share views, ideas and information more efficiently in shorter time

**Digital Devices** These are electronic gadgets that are used for communication and data processing

**Internet** Global interconnection of many computers for the purpose of communication and sharing of resources

**Academic Performance** Refers to how well a student is achieving in their studies. Includes factors such as grades, tests score, class participation, and overall comprehension of the material

**Data** These are raw facts that are meaningless to the user, and they are processed to information

**Information** The output of the computer that is meaningful to the computer user

**Computer** an electronic device that accepts data (input) and process it in to information (output) under the influence of special instructions called program

**Network** A set of device nodes connected by communication links/transmission media

**Information Technology;** Technology that merges computing with high speed communication links carrying data sound and video

**Cyberbullying** Is use of electronic communication to harass, intimidate or harm other people

**Biotechnology** Involves using biological systems, organisms, or derivatives to develop or create new technologies

**Microblogging** Is a form blogging that allows users to publish short, often frequent, update or post

**E-Learning** Refers to use of digital technologies, such as computers and internet, to access educational content

**Hacking** Is an unauthorized access or manipulation of computer systems or networks

**Software Engineer** Is a professional who designs, develop, and maintains software

**Software** This is a program and application that runs on a computer

**Hardware** It encompasses the physical components of a computer system

**Hotspot** Is a physical location or access point that provides internet connectivity, in Wi-Fi it allows the devices to connect to internet wirelessly

## ABSTRACT

The aim of this research was to assess the general effects of the modern technology to the academic performance or achievement of the students in MKU in Thika sub county in Kiambu county, while putting in to consideration the usage of the social media platforms as one of the specific objective of the study. The biggest concern was to investigate how often the student surfs into YouTube, WhatsApp, Twitter, Tik Tok, Instagram and Facebook during lecture hours. The study interest was also to research on the exact thing or services that the students engages into through these platforms. Is it chatting? Watching videos? Playing games? Updating status? Posting photos or? Another specific objective of this study was to determine the impact of the internet among the Mount Kenya University students. What benefits and limitations do they face by the availability of the network in the university. The other specific objective of the study was to investigate the effects of the digital devices usage on their studies. For what purpose do the students use their laptop and smartphones. The other thing was to investigate on how the students use of search engines likes of Google and ChatGPT on academics' activities for example doing the assignment and researches. The data was collected through Simple random method, which involved use of questionnaires and physical interview to both the students and the lectures of Mount Kenya University. A sample size of 10% of the total population of the students which was 5,000 was used for data collection and 10% of 100 lecturers of the university was also sampled. The design of this research will be Descriptive, since it contains both qualitative and quantitative techniques of data collection. This task of data collection was very anonymous and confidential since no personal information that was captured on the questionnaires that were issued. Data was collected, analyzed, interpreted and presented. The study rejected all the null hypotheses. The objectives of the study were achieved.

## **CHAPTER ONE: INTRODUCTION**

### **1.0 Introduction**

This chapter focuses on the background to the study, statement of research, purpose of the study, conceptual framework, research questions, objectives of the study, hypotheses of the study, significance of the study, delimitations of the study (scope), and limitations of the study.

### **1.1 Background to the Study**

According to widespread belief, technology is the use of information and tools to solve real-world problems and improve people's lives. The American Heritage Dictionary defines technology as "the application of scientific knowledge, engineering principles, and tools to create, innovate, and solve real-world problems." According to Apple, technology is something we examine and that is always evolving as it continues to touch our lives. According to Michael, W. (1991), this is true in schools, colleges, institutions, and other settings. Over many years, technology has advanced from the development of rudimentary tools such as stone implements and fire.

Landes (1969) established in his research that the emergence of modern technology has been a worldwide phenomenon. During the industrial revolution, it originated in Western Europe and North America and gradually extended to the rest of the world. North America was the first continent where technology expanded. According to McCullough (2011), early advancements in the United States, such as the discovery of the steam engine and the telegraph, shaped Modern technology. According to Hobsbawm, later technologies arrived in Europe. European countries such as the United Kingdom, Germany, and France were forerunners in industrialization and technical growth, with breakthroughs in manufacturing, transportation, and communication. In the late nineteenth century, Asian countries such as Japan embraced modern technology, resulting in rapid industrialization and technical innovation.

Colonialization encouraged the adoption of modern technology in the African continent, with European powers bringing modern technologies for commercial exploitation in 1986. Kenya proceeded on a path of technical growth after attaining independence in 1963, focusing on education, infrastructure, and industry (Kimunya,2013). Following Kenya's independence in 1963, there was an endeavor to bring modern technologies throughout the country. As part of the national development plan (Kenya Vision 2030), this included infrastructure, healthcare, and

communication, which gradually reached Kiambu County in Central Kenya. Kiambu county has since undergone modernization and technical advancement, with a continued emphasis on agriculture and education. Education and labor brought technology to Thika Sub county. Investments in education skills development in the sub county that lead to technology adoption.

IT (Information Technology), biotechnology, and transportation are just a few examples of the many fields of technology. On a global scale, technology also assists in inter-human communication, economic growth, and issue resolution. The use of computer networks, software, and hardware to communicate, store, and alter data and information is referred to as information technology. Social networking platforms, the Internet, and digital devices are products of IT development and growth that Mount Kenya University professors and students enjoy using. Social media platforms were developed to enable social networking, communication, and information exchange via the use of contemporary technology. Text, photographs, videos, and other sorts of information may be shared through these platforms. According to media sources, social media has evolved throughout time and some of its platforms include WhatsApp, Facebook, YouTube, Twitter, Instagram, Tik Tok, among others.

Twitter first went up in 2006. Microblogging gained popularity by enabling users to follow others and post brief messages, resulting in real-time interaction and news transmission through it. Since its founding in 2005, YouTube has grown to become the top platform for people to publish, view, and share videos on a variety of subjects. Instagram was first launched in 2010. It emphasizes visual material and mobile usage while concentrating on photo and video sharing. Tik Tok was first introduced in 2016, particularly among the younger generation. It is renowned for its short-form video content and extremely engaging user experience. In the year 2009 there was the launch of WhatsApp, which Facebook eventually purchased. A messaging app called WhatsApp enables text and video communication.

Internet is yet another tool that people utilize daily. Internet refers to global interconnection of computers for purpose communication and sharing of resources. The existence of many network kinds enables the connections of the computer nodes through communication lines. Examples of these networks are LAN, WAN and MAN

The study addressed the digital devices or gadgets that are part of technology and their impact to the academic performance of the students in the universities. These devices are the laptops and the

smartphones which are so much portable. Besides it, they are extremely popular among young people and especially those in the universities including Mount Kenya University. The academic performance was specifically on the exams and research of the students. The study urged that there was a need for further research to find out why students at this university are so much involved in social media but neglect their primary objectives there.

## **1.2 Statement of the Problem**

Students' exposure to technology, particularly social media platforms and the internet in general, has had a considerable influence on academic achievement. Mount Kenya University students have grown far also and absorbed in online activities and have lost sight of their fundamental academic aims. During class time, most of them utilize social media sites and internet by use of their gadgets to pass the time and distract their focus away from what the lecturers are teaching. Students frequently participate in activities such as downloading movies, viewing videos, downloading music, conversing, and watching Tik Tok videos instead of learning in class.

All of this is due to the widespread availability of digital gadgets such as smartphones and laptops, which have been enabled by innovative technology. Worse, students in campus are overly reliant on their cell phones because of their addiction to social media. In addition to their academic life, technology has an influence on students' daily lives. They end up investing their school fees in these enterprises just to learn it was slime.

Mount Kenya University's academic success is also influenced using search applications engines such as Google Play and ChatGPT. This is because when students receive an assignment from their teachers, they simply research it from Google and ChatGPT. Through this they are able to perform excellently.

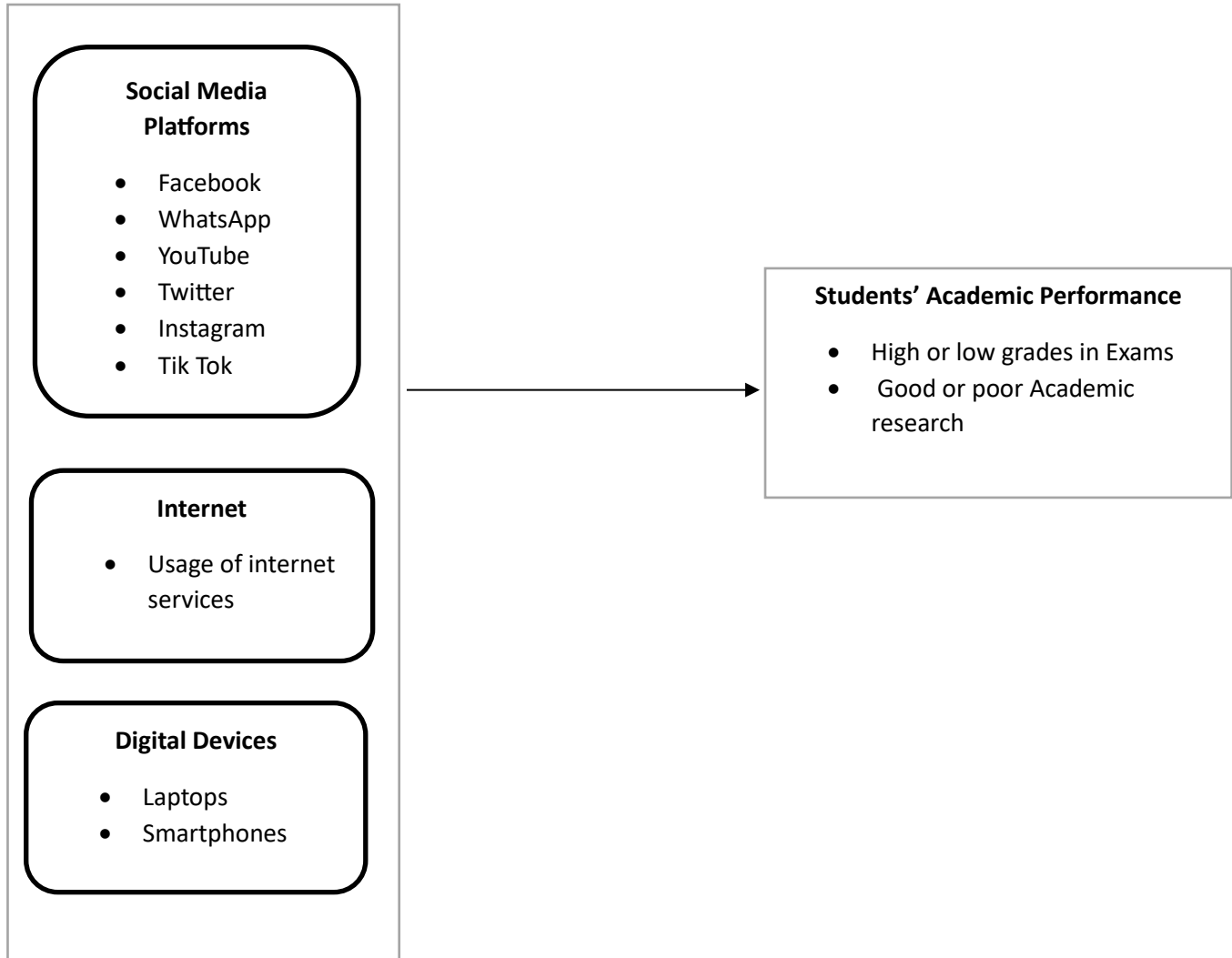
## **1.3 Purpose of the Study**

The purpose of this research was to establish and examine how the technology through social media platforms, the internet and the digital devices impact the academic performance of the Mount Kenya University students in Thika

## 1.4 Conceptual Framework

### INDEPENDENT VARIABLES

### DEPENDENT VARIABLE



*Figure 1:1 Conceptual framework*

## **1.5 Research Questions**

As a researcher of this study, I had to ask myself the following questions;

- 1) What makes the students get addicted to use of social media platforms?
- 2) What danger was the students exposed to when they intensively get into use technology during the times that they should be concentrating academically?
- 3) Were there ways that the students can use technology only for academic purposes during the lecture time?

## **1.6 Objectives of the Study**

The study was guided by the following objectives:

### **1.6.1 General Objectives**

To find out the effects of technology on the academic performance of the students in Mount Kenya University in Thika.

### **1.6.2 Specific Objectives**

- 1) To investigate the effects of the social media platforms on the academic performance of the students in Mount Kenya University -Thika.
- 2) To determine the effects of internet on the students' academic performance of students in Mount Kenya University-Thika.
- 3) To find out whether the use of some digital devices has any effects on academic performance of the students in Mount Kenya University-Thika.

## **1.7 Hypotheses of the Study**

**H<sub>0 1</sub>** Students' exposure and addictiveness to the social media does not affect their academic performance.

**H<sub>0 2</sub>** Use of internet for other purposes apart from academics has no considerable influence on students' academic performance.

**H<sub>0 3</sub>** The use of digital devices has no impact on students' academic performance.

## **1.8 Significance of the Study**

The research was to assist lecturers and campus management in making the greatest use of technology, which was then to be transferred to students during campus presentations, as well as in guidance and counselling sessions. The study was also to make the students learn about the



dangers that they subject themselves to when they do Tik Tok, movie watching, music listening, having online chatting, among other activities during class hours since they lost a lot of their time there. Again, the research was providing the administration with the opportunity to improve networking at the institution. Students were able to do research on their specific courses because of this good network in the university and availability of Wi-Fi in the school.

Illegal and unclean activities that most students engage in while in the university enabled them to know how horrible they are in society, as well as the high likelihood of them getting imprisoned. These included hacking, cyberbullying, cloud chasing, and other actions that falls within this category. On the same time students were to be taught the value of technology when used correctly. The professional prospects that come with technology, notably social media, the internet, and research tools, such as academic writing, they were also made aware about them and also the opportunities that come with IT skills such as software systems analyst, database manager, computer instructor, software engineer, web administrator among others.

### **1.9 Delimitation or Scope of the Study**

The research was able to look at how technology affects students' academic achievement. The process of data collection was assumed to be a bit hard to carry out due to respondents who were assumed to be afraid of being exposed. Respondents were also suspected to have a thought of the hidden objective of the study in gathering such information from them. The study had late responses. During the study I was doing frequent visits in the university for observations and interviewing a portion of Mount Kenya University community and also issuing of the questionnaires. Again, the incorporation of technology in campus was beneficial to the research. I avoided any remark that was superficial or even unrelated to the study. This was aid in making the investigation more real and simple to carry out because there were no difficulties in obtaining the necessary facts. Again, to avoid becoming discouraged throughout the data collection process, I never dealt with unfriendly respondents in the targeted population.

### **1.10 Limitations of the Study**

The investigation assumed to be difficult to carry out due to the little data available. During the interview, the respondents, who were the Mount Kenya University students and the lecturers, were assumed not provide the information that was required by the study. Some were assumed to reject in participation in the interviews, for it is difficult to pursue undergraduates to participate in such

interview. Another drawback was seen to be the use of open-ended surveys, because the study assumed that not all respondents will provide accurate information. During time of data collection, I promise the respondents of a total security over them. Thus the information that they provided was be confidential and anonymous.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.0 Introduction**

This chapter is made to review what the other scholars have said about the effects of the technology on the academic performance of the students in the universities as far as the use of the social media usage is concerned the internet and the hardware devices as well as.

### **2.1 Technology Effects on General Academic Performance of the Students**

Technology has both beneficial and bad influences on the academic achievement of students. Various experts have conducted studies on both the detrimental and beneficial effects of technology on the academic performance of students at colleges and universities. According to Weller, M. (2018), technology allows students to easily obtain information. This is made easier by the students' use of digital devices, as well as the existence of search engines on the internet, which can be accessed rapidly. The use of technology into university classrooms has increased and expanded student learning on a regular basis. Students may use technology to solve problems, do research, and engage with people all around the world. To engage and support critical thinking, computer-based tools, mind tools, and learning environments have been modified and designed to operate as intellectual partners with the learner. According to Jonassen (two thousand), who conducted research on the effects of technology in classrooms, the aim of a mind tool is to expand students' cognitive capability during the learning process so that they may create, solve problems, investigate, cooperate, and engage internationally.

Mount Kenya University students are therefore favorably influenced by technology since they can access material through social media, perform online learning, are more efficient in their studying, and collaborate on their tasks. Overall, technology continues to have a detrimental impact on students. Destruction diminished face-to-face engagement, plagiarism, health problems, and information overload are among them. Technology enables students to have access to copious amounts of information, facilitating research and learning. This is according to M. Waller's (2018) research on "Twenty Years of Education Technology."

According to Means B. et al (2013) in his study on the evolution of evidence-based practices in learning, the usage of technology allows students to perform online learning. This is made possible by educational tools such as learning management systems and online courses, which improve students' knowledge of the subject. The gap in the impacts of technology persists since no one

knows for sure if the content on social media that students and especially Mount Kenya University student access is useful and in line with the course or not. Another issue is how much research the students conduct. They do not read library books manually to compare and expand their expertise on information obtained online. When it comes to E-learning, which is made possible by technology, we need to know whether students genuinely focus on studying online, in their laptops or cellphones. Do they pay close attention?

## **2.2 The Effects of Social Media platforms on the Student Academic Performance**

Social media platforms are online websites and applications that enable users to produce, share, and interact with content and other media in an interactive manner on social media. These platforms may include Facebook, WhatsApp, YouTube, Twitter, Instagram, and Tik Tok, among others. The study on some of these platforms and how they affect the academic performance of students, particularly those in campus and in colleges, has already been conducted, and further study is now being conducted. In this research, I will discuss a few of these platforms.

### **2.2.1 Facebook**

To begin, consider Facebook. It is a platform that Zuckerberg launched in 2004. It enables users to build profiles, connect with friends, share material, and participate in a variety of online activities. Facebook can have an impact on students' academic achievement in both positive and negative ways. According to Smith (2013), Facebook has over 1.5 billion active members or users, with 699 million people logging in daily for an average of 8.3 hours each day. Today, Mount Kenya University students are included in this number. Much Facebook research has concentrated on defining usage and finding motivations for use (Hargittai, 2017).

According to Jones et al. (2007), when students visit Facebook during class, they miss essential lecture and discussion details, which might impact their mark positively or adversely. Other impacts of the platform include clamor for addiction. This suggests that students are spending far too much time on Facebook, whether they are free or not. Something is urging them to log in in the back of their minds. According to the findings of (Debatin, Lovejoy, Horn, and Hughes, 2009). O'Brien (2011) identified procrastination as another harmful effect of Facebook on students' academic performance and research. This platform consumes their attention, causing them to do poorly academically. Other negative impacts of Facebook include distraction, privacy concerns, and decreased productivity. Despite the platform's detrimental influence on students', research

reveals that students will continue to frequent use the website since it has a good impact on them. Facebook allows students to connect with family members and friends (Facebook 2010). Again, there is contact and networking on the site, as well as knowledge exchange and supporting groups. As a result, it is critical for students to learn self-regulation.

### **2.2.2 WhatsApp**

WhatsApp is yet another medium that is quite popular among today's youth. It continues to have an influence on students' academic performance, particularly at Mount Kenya University. Students may use WhatsApp to work on group projects, share study materials, and debate academic matters. Another effect of WhatsApp on students is information sharing. Because of the availability of WhatsApp groups or Walls, they might obtain essential information from the lecturers via this medium. It may also be used to create a space for study groups. They may compare notes, ask questions, and help one other learn. The use of this platform allows students to communicate with their peers across oceans and provides a familiar setting for them. It also offers speedy communication.

Even while WhatsApp provides all the benefits to university students, it also has a negative aspect to it. Maheswari (2014) discovered that WhatsApp incorporates a lot of video sharing and conversation in his investigation. The conversation done through it is unconcerned about grammatical standards because it accepts any language, even "Sheng." Face-to-face engagement is also reduced. This indicates that relying too much on digital communication may limit in-person social connection, which is vital for overall growth. It also causes sleeping disruption owing to late-night texting, which interrupts the sleeping routine.

### **2.2.3 YouTube**

YouTube is a social networking website where users post videos and news. Duffy, (2008) and Pranksey, (2009) investigated the efficacy of utilizing YouTube in their research. they realized its used as an instructional tool. In this scenario, Mount Kenya University, like other institutions, has adopted YouTube as a platform for disseminating educational content such as recorded lectures, instructional videos, and demos. These resources have improved students' knowledge of complicated concepts, provided additional information, and encouraged flexible learning outside of the classroom. Again, YouTube provides students with the flexibility to access these resources at their own leisure and revisit them as required.

Furthermore, YouTube provides a platform for peer-to-peer learning, where Mount Kenya University students may create their own instructional content, tutorials, and explanations, establishing a collaborative learning environment. However, YouTube has a detrimental influence on the students' performance. Excessive YouTube use can result in distractions and time waste, diverting students' focus away from academic duties. It also causes students to delay on their academic tasks since they spend a significant amount of time browsing nonacademic information. YouTube's participatory nature, with its comment sections, might expose children to unsuitable and untrustworthy content, resulting in misinformation and harm to their learning results.

#### **2.2.4 Twitter**

This platform primarily contains microblogging services, which allow users to post and engage with brief messages known as "tweets." The tweets are limited to characters' count, 280 characters, however this restriction fluctuates over time. Twitter's real-time nature has made it a popular medium for exchanging ideas, news, views, and updates on a wide range of issues. Users may continue to share links, text, photographs, videos, GIFs, and other types of tweets. Twitter, like any other site, has an influence on students' academic achievement. Smith, J. (2019) discovered in his research that Twitter provides a platform for students to network. They can network with classmates, teachers, and professionals in their area, stimulating scholarly debate and future cooperation. According to Smith, Twitter also allows students to easily obtain current information, news, and academic resources, which can improve students' knowledge and research ability. It has a mixed influence. Lee and Kim (2018) state Twitter as a medium for inquiry and information literacy. While Twitter may be a major source of information, students must critically examine the credibility of the source, as disinformation and biased content are common on the network. Twitter's detrimental influence on academic achievement can be mitigated by effective time management and placing restrictions on its use. Johnson and Kim observed that Twitter had a lot of low concentration in their analysis. Students' focus and academic performance may suffer because of multitasking between studying and Twitter. It also entails a great deal of procrastination. Students who spend too much time on social media, particularly Twitter, may procrastinate, resulting in missed deadlines and poorer grades.

### **2.2.5 Instagram**

Instagram was introduced in 2010, and it primarily revolve around photo and video sharing. This app has got its on impact on the academic performance of the students in the universities including the MKU. According to Simth and Johnson, (2018) found that excessive time spent on Instagram was negatively correlated with GPA, suggesting a potential destruction from academic responsibilities. In contrast, Jones et al. (2019) argued that the impact varies with some students using of the Instagram as a source of motivation and connection, positively influencing their academic engagement. A further research then is required to be conducted so as to nuance effects of the Instagram on the academic performance and more for MKU.

### **2.2.6 Tik Tok**

Tik Tok was launched back in 2016. It focuses on the short-form videos often set to music. Tik Tok centers around creating and sharing entertainment, often humorous, videos. It has gained popularity among younger people. Chen et al, (2021) in his study he found that excessive us of Tik Tok was linked to increased procrastination and reduced study time among the students in the colleges. This negatively affected their academic outcomes. Conversely, Lee and Kim (2022) urged that Tik Tok could serve as stress reliever, positively influencing mental wellbeing and enhancing academic performance. As far as the case study is concerned a further study need to be done to investigate effects of Tik Tok on students' academic lives.

## **2.3 The Effects of Internet on the Students' Academic Performance**

The Internet is the worldwide connectivity of computers used for communication and resource exchange. In his study, Jagboro (2003) stated that the internet may be regarded of as a rich and multi-layered comprehensive ever-changing text for information distribution and medium for collaborative engagement between persons and computers without regard to geographical limitations of location. As a result, the internet has become an essential component of modern education and communication. The presence of a network facilitates internet access. A network is a collection of interconnected devices or computers that may communicate with one another, share resources, exchange data, and get internet access. Networks are classified into many sorts based on their size, function, and geographic coverage. LAN is a type of network that is often used on a local scale, such as in a house, workplace, or colleges. WAN is type of network that connects cities and nations over a vast geographical region MAN is a type of network that can be found in cities

or on big campuses. The MAN is the mode of network that exists at Mount Kenya University. According to studies, the internet has both beneficial and adverse effects on students' academic achievement. Smith, J. (2018) discovered in his research that the internet allows students to access vast amounts of knowledge, as well as access to academic articles and data for assignments and projects. Jones (2019) claims that the internet provides online learning materials. This allows students to tailor their learning to their tastes and schedules. The internet also facilitates self-paced learning (Johnson, P. 2017). Online lessons allow students to study at their own speed, according to their own learning styles and requirements. Despite the beneficial effects of the internet on students' academic achievement, there are some drawbacks. According to Martin (2018), the ease of access to internet resources might induce students to plagiarize, resulting in academic dishonesty. Face-to-face engagement is still reduced by the internet, which may impair students' social and interpersonal abilities. M. Thompson (2017). Another detrimental influence of the internet on students' academic performance is that it causes information overload. The huge amount of information accessible on the internet may be overwhelming, making it difficult for students to identify trustworthy sources. E. Wilson (2020).

## **2.4 The Digital Devices.**

Digital devices are electronic devices that use digital technology to process and store data. They include computers such as laptops and smartphones, among others. It is by the presence of the digital devices that creates a room for the students in Mount Kenya University and from other campuses get the access to the social media, and the internet.

### **2.4.1 Laptop and Smartphone**

Smartphone and the laptops they are both portable and mostly used by the students in Mount Kenya University as well as. Previous studies show that both smartphones and the laptops have both negative and positive impacts on the academic performance of the students. K, R. H., & Lauricella, S (2011) discovered that laptops and smartphones allow the students access to educational resources. They can access online textbooks, research articles and educational websites. They still enhance note taking and organization according to Lui, A. M., & Reed, M. (2017). Laptops can be valuable tool for taking organized notes, creating outlines, and managing assignments, leading to improved study habits and academic performance. Another positive impact of the digital devices on students' academic performance is that allows engagement in interactive



learning. Some instructors integrate technology into their teaching methods, using apps and platforms that encourage students' communication, and collaboration Gikas, J., & Grant, M. M. (2013). They also enhance productivity of tools. Digital devices enable the students to communicate with their peers and instructors, fostering collaboration and discussion outside of classroom. This leads to improved comprehension and knowledge sharing. Laptops, offers productivity tools like word processors and spreadsheet software, which aid in organizing and presenting academic work (Wresch, 2014). Smartphones and laptops also allow the students to quickly access to a wealth of academic resources including e- books, research papers and online libraries (Khan, 2017). This access can facilitate research and enhance the depth of learning.

According to research, digital gadgets have a detrimental impact on students' academic achievement. According to Mueller, P. A., and Oppenheimer, D. M. (2014), digital gadgets, particularly laptop computers, have an influence on memory retention. When compared to conventional handwritten notes, laptop notes can result in superficial processing of material, thereby lowering students' capacity to recall and apply what they have learned. In their research, Hambrooke and Gay discovered that contemporary technology hinders contact and engagement. Excessive usage of digital devices for non-academic purposes might result in decreased engagement with instructors and classmates, hampered classroom discussion and cooperation learning. Ravizza et al., (2017) observed that digital gadgets have a detrimental influence on grades in his investigation. There is a link between in-class gadget use and academic achievement, with students who use their devices for unrelated tasks during class performing worse on examinations and assignments.

## **2.5 Students Academic Performance**

Academic performance, according to Wehmeyer (2019), is the consequence or effect of a student's effort and involvement in the learning process, which is often measured by a mix of assessment, grades, standardized exams, and other educational indicators. Academic performance is a multidimensional notion that incorporates a student's success, talents, and consequences within an educational setting. It is an important indicator of a student's competency, information acquisition, and skill development in a variety of academic fields.

Academic performance has several components. According to American Educational Research Association [AERA] academic performance includes grades and assessment. It is commonly

assessed through grading system, where students receive letter grades based on their performance in coursework and examination. There is also standardized tests. CATs, RATs, assignments, and full exams are always the measure to the academic performance, on either national or international scale, providing a standardized means of comparison. (Zwick & Green, 2018). According to AERA, (2014) academic performance also has cognitive abilities as another component. It is reflected by critical thinking, problem solving skills, and content knowledge. Non cognitive factors are also another component of academic performance. These factors include motivation, self-regulation, resilience, and social emotional skills, which contributes significantly to academic performance. (Duckworth, 2007)

Academic achievement is also assessed and measured using several techniques and methodologies. AERA (2014) discusses grading schemes, which vary by educational institution but commonly award letters grades such as A, B, C, and so on. Zwick and Green (2018) discussed standardized assessments in their research. These assessments give an objective assessment of students' knowledge and skills in a variety of courses or domains. AERA revealed in its 2014 research that academic success may also be measured through teacher assessment. Teachers' observations provide qualitative information about students' behavior, engagement, and participation.

According to the findings, academic performance may be impacted by a variety of circumstances. Sirin (2005) revealed that SES impacts academic achievement in his study. Family income and parental education are examples of social economic statuses. According to AERA (2014), the learning environment impacts students' academic achievement. The quality of the learning environment, which includes class size, access to educational materials, and teaching methods, has a significant impact on academic performance. According to Deci and Ryan (1985), motivation and interest can also impact academic achievement. The inherent desire and interest of the student in the subject or course is crucial.

## **2.6 Theoretical Framework**

In this study we employed the Albert Bandura's Social Learning Theory. It is also known as social cognitive theory. This theory emphasizes the importance of observational learning and modelling in acquisition of behaviors, attitude, and emotional responses. The social learning theory helped in linking the usage of internet, social media platforms and digital devices to academic performance. For the theory has the acquisition of behaviors that are developed primarily within a social group.

Since the theory involves the attitude of an individual, we looked at the students' attitude towards the academics and the technology at the same time, for the theory facilitate the understanding of two aspects. The work comprising the usage of technology in the class and the academic performance. The theory also describes the environmental and cognitive constitutes which work together to produce the change in behavior and learning part time for individual. Social learning theory is as viewed as social process that individuals will self-initiate, control learning and make a determine effort to build knowledge by their own effort, creating, and connecting information. In line with this theory skill developed by tertiary, students through their frequent use of technology for education purposes are required exclusively within their environment and among their peers. According to the theory students learn from one another through observation, imitation, and modeling resulting in positive learning outcomes. Following Bandura's Social Learning Theory, we posit that social media usage for educational related purse by students will help them to acquire skills and knowledge to boost their academic performance. However, most of tertiary students spends most of their academic hours in the social media, and internet through the digital devices for non-academic purpose.

## **2.7 Summary of the Identified Gaps**

There was a concern on how the students in Mount Kenya University use technology particularly the Social Media Platforms and internet through digital devices to engage in the schoolwork. The use of the technology in the university is something that would be harnessed most by improving internet connectivity where the students access digital content either online or offline (Salim 2013). Still the technology in general has its own advantages and disadvantages to the students not only academically but also in the other fields like social life and economical life and many more. But once utilized well, technology can be of benefits to the students, and they can perform better than ever if they get good utilization of the internet materials. The gap becomes on how to handle the advantages and disadvantages of the technology on the students' academic performance.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.0 Introduction**

This chapter provides the methods in which the researcher uses to gather information of his study. it consists of Research Design, Study Area, Target Population, Sampling Techniques, Sample size, Measurement of Variables, Research Instruments, Validity of Measurements, Data collection Techniques, Data Analysis and Logistical and Ethical Consideration.

### **3.1 Research Design**

Cooper and Schindler (2016) define research design as a study strategy and the plan that will implement the strategy, outlining the techniques and steps for gathering, measuring, and analyzing data. It may also be described as a methodical approach to addressing the research challenge, in which the investigator uses a variety of techniques to examine the issue and their rationale. (Thomas, 2006).

To gather data for this study, a sample size of people was interviewed and given questionnaires using the descriptive survey approach, when gathering information about people's attitudes, opinions, and behaviors, this kind of study design is helpful (Orodho, 2012). This descriptive survey theory was selected because entails describing, recording, assessing, and reporting conditions as they exist. It was used in this study because it is suitable for establishing the relationship between the dependent and independent variables and for making data collecting easier to determine the population parameter.

Kothari (2006) found that while quantitative research was effective in capturing general aspects of the phenomenon, qualitative research was more ideal for studying phenomena including the subjective evaluation of people's attitudes, opinions, and conduct. Because it deals with the attitudes and opinions of the respondents, this study will also collect data using both qualitative and quantitative research designs.

### **3.2 Study Area**

Mount Kenya University (MKU) in the Thika sub county of Kiambu County was the site of the study. It is located forty-two kilometers away from Nairobi, off Garissa Road. This area was chosen mostly because of its strong networking. Again, Mount Kenya University -Thika branch has access to contemporary technology. The students in this school have ample access to digital

devices such as computers and cellphones, as well as social media platforms and the internet. Additionally, the university has well-installed Wi-Fi, which allows students to browse the internet.

### **3.3 Target Population**

The target population is defined as all the members of a real or hypothetical set of people, event, or objectives from which a researcher wishes to generate the research study Creswell, (2017). In this study the target population was Mount Kenya University students. Full-time students, who had registered for MAY\AUGUST semester 2024. Still the study engaged the lecturers of the university. The total population of the students was 5,000 who were all full-time based students of the university. It also involved the lecturers of the university who were 100 of them.

### **3.4 Sampling Technique**

A sample is said to be a smaller group (subset) that represents a given percentage of a group procedurally selected from a population (Ngechu,2003). According to Orodho, (2012) sampling is the process of selecting individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group. In this study the sampling procedure/ technique that was used was the Simple Random Sampling technique. The sample was drawn from the MKU students and the teaching staff through the above procedure, and both samples was expected to give the reasons as the why technology is that much used in the university. This procedure was selected because it has no complexities in it and again, it gives an equal opportunity for any element to be selected.

### **3.5 Sample Size**

A sample size is a subset of people from which data and conclusions are derived. According to Mungenda and Mungenda (2003) a sample size of 10% -30% of the total population is adequate for the study. This study shall use of 10% sample size of the total population of student which is 5,000 and 10% of the lecturers' population which is 100.

Students  $5000 * 10 / 100 = 500$

Lecturers  $100 * 10 / 100 = 10$

Total = 510 (Both lecturers and students)

### **3.6 Measurement of Variables**

Measurement of variables involves determining a thing's quantitative value using a predetermined set of guidelines or standards in the process of measurement. It entails gathering information and classifying or valuing numerical values to reflect a certain attribute or set of attributes of a thing, phenomenon, or event. A variable is measured at more than one level. The type of indicator used during the measurement and how the variable is conceptualized will determine in one way or another. Different methods might be used to measure the same variable (Sarantakos, 2015). This means that there are several approaches to measurement. There are four scales of measurements, which include nominal, ratio, ordinal, and interval.

### **3.7 Research Instrument**

In this inquiry, primary and secondary data gathering methods was employed. The researcher did the primary data collection method herself. This could entail surveying, observing, and conducting experiments, among other things. A secondary data collection strategy involves the researcher obtaining data from pre-existing sources, such as previous studies. The primary methods when employed as study tools, open-ended questionnaires are made to make data collection simple. Additionally, there was semi-structured interviews. I kept using observation as a research tool. To collect facts through observation, one must use their unaided senses. It involved keeping track of how many students use the university's wireless hotspots. The above-mentioned primary technique ensures that relevant data are collected for the specific study issue. Respondents run the danger of answering questions incorrectly, which could lead to prejudice and misleading information. When using the primary technique of data collection, Kumar (2005) advises being cautious about the structure, validity, and reliability of the data as well as personal bias.

### **3.8 Validity of Measurement**

Validity, as defined by Mugenda and Mugenda's 2003 study, is a gauge of how effectively data collected using a certain tool represent a specific concept inside a specific area. Stated differently, validity is the degree to which an instrument evaluates the variables it is designed to measure. To guarantee robust validity for this research, I complied with the specified research goals. I checked for content validity by reading the pertinent literature review related to the study. Facial validity I got through interviewing various respondents on how they feel about issues pertaining the effects of technology in higher education. Face validity was also demonstrated by their facial expressions

throughout the interviews. A strong face validity for the study was added by seeing how students behaved in the WIFI locations.

### **3.9 Reliability of Measurement**

According to Mugenda and Mugenda (2012), reliability is a metric that indicates how consistently a research tool produces data or results following multiple trials. To determine the reliability of the research instrument, the questionnaires and interviews were used. The same group received both two times to test for consistency in the responses.

### **3.10 Data Collection Techniques**

In this study, questionnaires were picked and dropped as a means of data collection. Since it gave respondents more time to complete answering the questionnaires. Additionally, dropping and picking facilitates the research's ability to quickly and readily assimilate vast amounts of information. The study took multiple trips to the university to observe how the students behave when using the Wi-Fi areas and how often they use their smartphones during class times. The research took less time because all of the aforementioned required little money and time.

### **3.11 Data Analysis**

Descriptive statistics was used in this study's data analysis. Since the case had a qualitative design, non-measurable data like respondent attitudes and sentiments about the circumstance was examined using qualitative analysis. Descriptive statistics was also used in this instance to examine, clarify, and compile the characteristics of the data that was gathered. To check for inaccuracies in terms of completeness and ambiguity, the data was sorted. Questionnaires that were not complete and others wrongly answered were disposed. A program known as the Statistical Package for Social Sciences (SPSS) v. 20 was used to compute, interpret, and analyze frequencies and percentages. The analysis of the data will be based on the research questions.

### **3.12 Logistical and Ethical Considerations.**

All of the procedures or tasks that a researcher needs to perform in order to successfully complete their research are included in the logistic. Rensik (2015) defined ethics as the standards of behavior that set boundaries between what is and is not acceptable. I discussed the two aforementioned factors throughout the investigation. I asked the administration of the school for a letter of authorization allowing me to conduct the research at Mount Kenya University. In order to obtain permission from the university administration and management to engage with lecturers and

students during the data collection process. I also requested permission from the case study mentioned above. I guarantee the study's confidentiality and anonymity to the participants. As a result, the information they gave was to stay confidential because no disclose of any personal information, including names, phone numbers, or the courses they are enrolled in anywhere. This was used in both the questionnaires. The data collection process was entirely voluntary. No one was forced to participate; only those who were willing. Since the respondents were contented and willing to supply the necessary information, the data in this instance was somewhat genuine. I made sure that everything was morally right and did not put participants in danger that could endanger their physical or mental health.



## **CHAPTER FOUR: FINDINGS AND DISCUSSION**

### **4.0 Introduction**

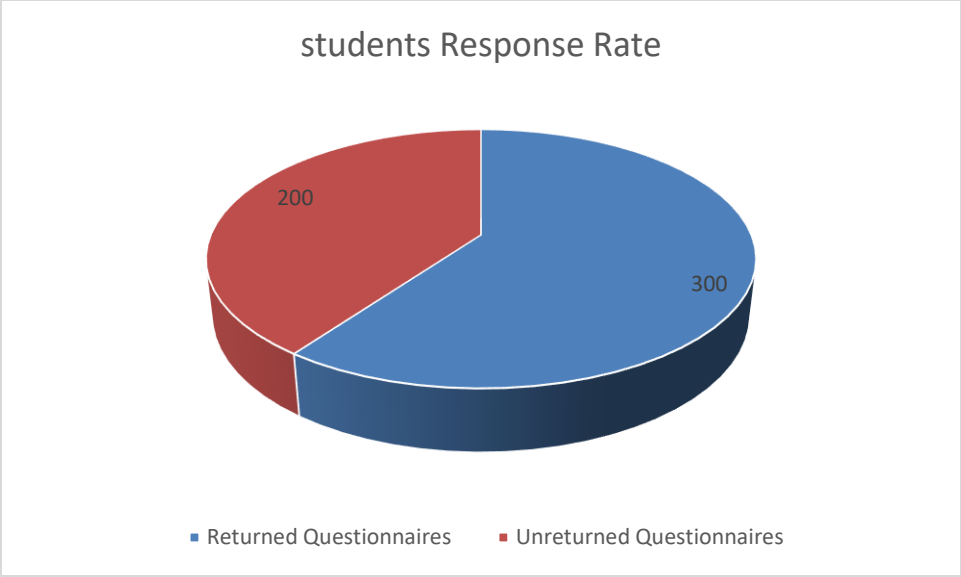
This chapter consists of data analysis, presentation and interpretations. Statistical Packages for Social Sciences and Microsoft Excel application were used in data analysis. The data analysis was done using tables and Pie charts and the results were interpreted, differently for the lecturers and the students.

### **4.1 Descriptive Analysis**

This section carries the discussion of the data collected, according to the variables and also the objectives of the study. They include effects of technology on the academic performance of the Mount Kenya University students in general, social media platforms effects, internet effects and the digital devices effects to their academic performance. The analysis, presentation and discussion was done separately for the students and the lecturers.

### **4.2 Return Rate for Students' Questionnaires**

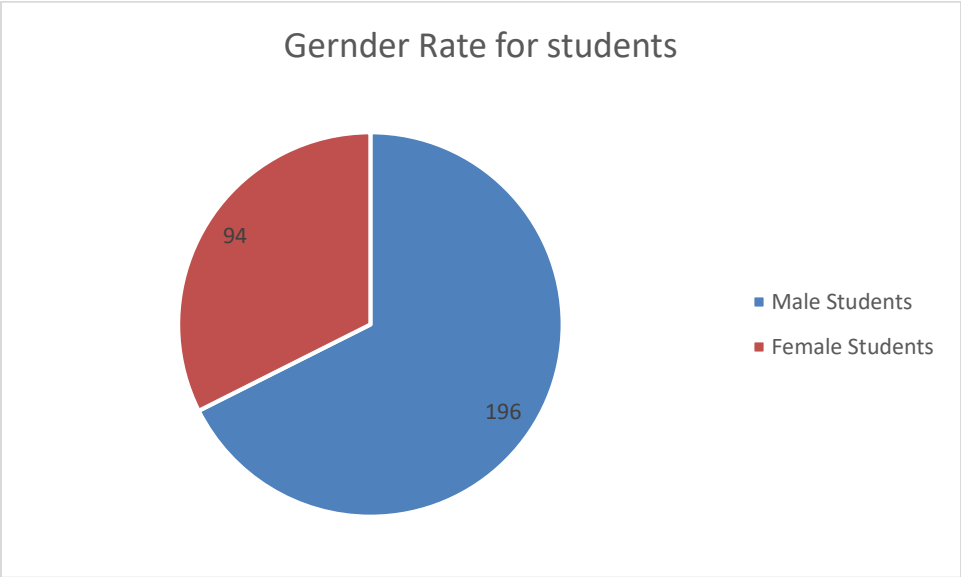
The total sample size for the study was 500. A total of 500 questionnaires were issued to the students of the university. Out of these 300 were returned, which represented a response rate of 60%. This agrees with Babbie, (2004) who asserts that a return rate of 50% is acceptable to analyze and publish, 60% is good and 70% and above is very good. Based on these assertions, a 60% response rate is adequate for the study. The other 128 (25.6%) questionnaires were not returned and 72 (14.4%) of them were wrongly answered. The pie chart below represents the response rate of the students who participated in the study.



Figure; 4.1. Return Rate for students' questionnaires

**4.3 Students Gender Rate**

The research interviewed both gender of the students in the university. Female students participated most, with 65.33% ( 196) and males were at 31.33% (94).



Figure; 4.2 Students Gender Rate

#### 4.4 General Effects of the Social Media Platforms

The respondent gave the effects of the social media usage in general, as far as their usage of this platforms is concerned. These includes Facebook, Twitter, WhatsApp, Instagram and Tik Tok.

##### 4.4.1 Hours Spend On the Social Media Platforms

Different respondents gave the average hours on which they spend on these platforms per day. Majority of the respondents indicated that they do spend more than three hours per day, resulting to 43.33% which is 130. Other 105 (35%) spends in between 2-3 hours, 45 (15%) respondents spend 1-2 hours and 20 (6.67%) spend less than an hour in the social media platforms. Table 4.1 shows these data.

**Table 4.1 Hours spend on the social media Plat forms**

	<b>Frequency</b>	<b>CF</b>	<b>Percentage (%)</b>
Less than an hour	20	20	6.67
1-2 hours	45	65	15
2-3 hours	105	170	35
3 and above hours	130	300	43.33
<b>Total</b>	<b>300</b>		<b>100</b>

##### 4.4.2 Rate at Which Students Uses Social Media Platforms During Class Hours

The respondents also gave information on how often they get use of the social media platforms during class hours. The analysis showed that 0% of the respondents they never use social media during class hours, 15% (15) the rarely use, 90(30%) they use it sometimes, 120 (0%) they frequently use and 75(25%) uses always. The following Table 4 .2 shows this interpretation.

**Table 4.2 Rate of social media usage during class hours**

	<b>Frequency</b>	<b>CF</b>	<b>Percentage (%)</b>
Never	0	0	0
Rarely	15	15	5
Sometimes	90	105	30
Frequently	120	225	40
Always	75	300	25
<b>Total</b>	<b>300</b>		<b>100</b>

#### **4.4.3 Purpose of The Social Media Platforms**

Data on the purpose of the social media platforms to the students was also collected. There were those who uses it for educational purposes, others for entertainment and others for communication purposes. 150 (50%) uses it for educational purposes, 100 (33.33) respondents uses it for entertainment purposes and 50 (16.67%) uses it for communication purpose. This data was interpreted using a pie chart.

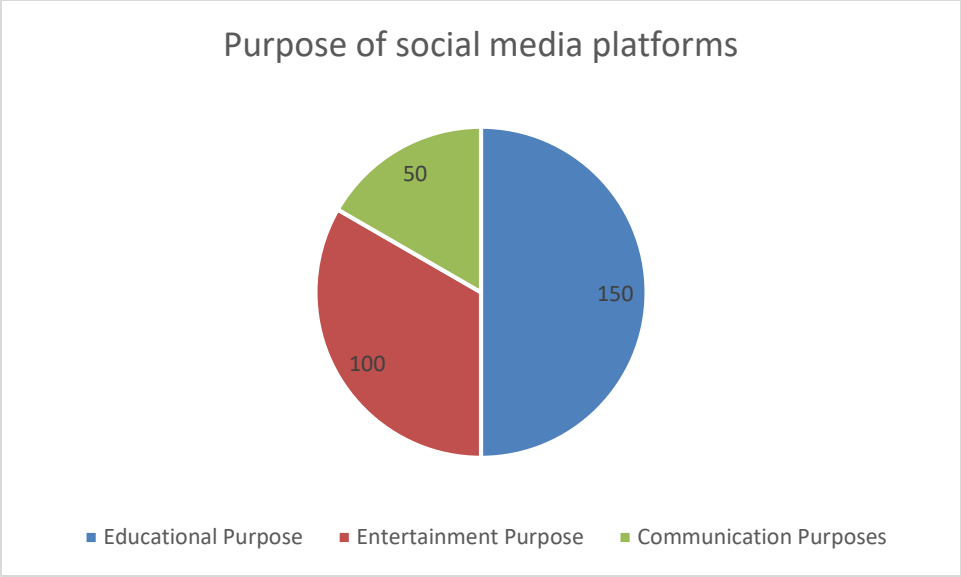


Figure 4.3 Purpose of the social media platforms

**4.4.4 How The Use of the Social Media Has Effected the Academic Performance in General**

The respondents also gave information on how the social media platforms has affected their performance academically. Negatively, Positively or none of the ways in which the social media has impacted their performance. Those who social media has impacted them Negatively were only 28(6%) respondents, positively were 280(93.33%), None were 2(0.67%). This data was presented in form of a pie chart as it follows

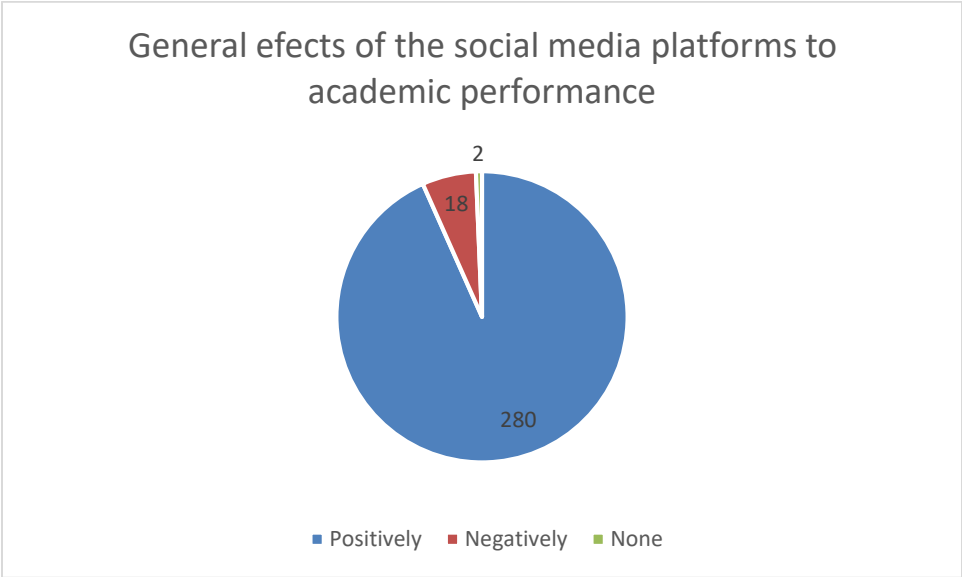
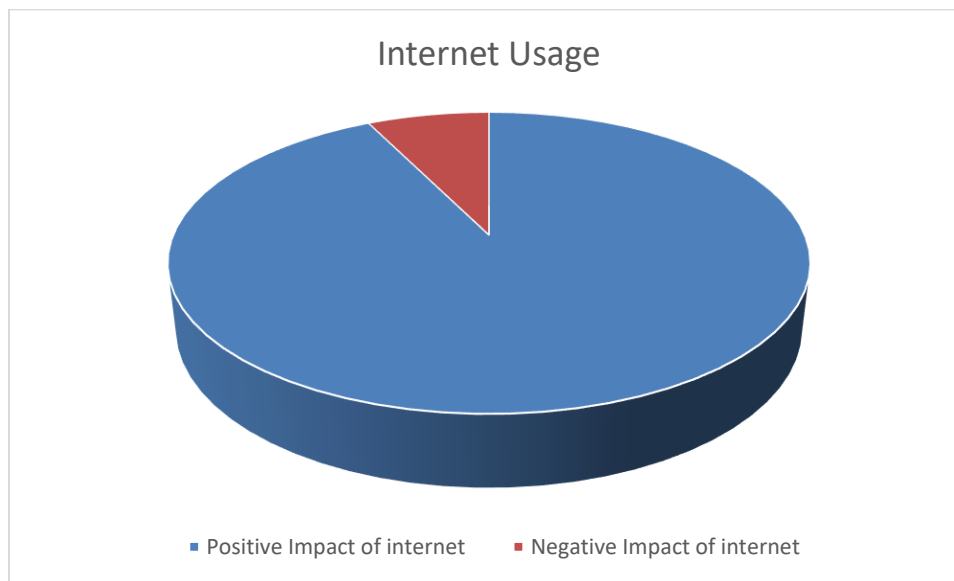


Figure 4.4 General effects of the social media platforms to academic performance

#### 4.5 Internet Usage

The study was also interested on investigating on the internet usage in the institution. 278 (92.67%) indicated that internet had impacted them positively and 22 (7.33%) had been negatively impacted by the internet. The pie chart below contains the data on which the use of the internet has impacted the studies of the respondents.



*Figure; 4.5 Internet usage*

#### 4.6 Digital Devices – smartphones and laptops

The study also went ahead and did an investigation on the impacts of the digital devices such as laptops and smartphones on the academic performance of the students of the institution. The questions contained this section they were to; 5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree with the statements given. The following Table 4.3 shows the data collected.

**Table 4.3 Digital Devices**

**Key 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral(N), 2=Disagree(D), 1= Strongly Disagree (SD)**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
<b>Total</b>					
Smartphone and laptop helps me to type assignments	92	102	6	83	17
<b>300</b>					
	% 30.66	3	2	27.66	5.66
<b>100%</b>					
Smartphone and laptop allows me to access softcopy	118	82	76	20	14
<b>300</b>					
lecture note	% 39.33	27.33	25.33	6.66	4.66
<b>100%</b>					
Both the above devices allow me to join	202	60	18	10	10
<b>300</b>					
zoom classes	% 67.33	20	6	3.33	3.33
<b>100%</b>					

From the above Table 4.3, use of digital device in typing of the assignment 92(30.66%) respondents Strongly Agreed, 102(34) Agreed, 6(2%) were neutral, 83(27.66%) Disagreed, 17(5,66%) Strongly disagreed. Use of the laptops and smartphones to access softcopy lecture notes, 188(39.33%) respondents Strongly Agreed, 82(27.33%) Agreed, 76(25.33%) were very Neutral, 20(6.66%) Disagreed and 14(4.66%) respondents strongly disagreed with this statement. Use of the smartphones and laptops to join the virtual classes 202(67.33%) Strongly Agreed, 6(20%) Agreed, 18(6%) were very Neutral, 10(3.33%) Disagreed and 10(3.33%) respondents strongly disagreed with this statement.

#### **4.7 Lecturers' Perceive On the Effects of Social Media, Digital Devices and Internet to The Academic Performance of the Students in Mount Kenya University**

Out 100 lecturers of the university 10 of them participated in the study by answering the questionnaires. These included both Male and female lecturers of the institution. The 10 questionnaires issued were all returned, leading to 100% rate of response. This agreed with the Babbie, (2004) who assert that return rate of 50% are acceptable to analyze and publish, 60% is good and 70% and above is very good. All the respondents were males.

##### **4.7.1 Social Media Usage in Relation to Lecturing in The University**

The respondents in use of the social media platforms has positively and negatively impacted the lecturing in the institution. The closed ended questionnaires issued on this section the lecturers were to 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral(N), 2=Disagree(D), 1= Strongly Disagree (SD) with the statement provide. Table 4.4 shows the analyzed data for different statements.



**Key 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral(N), 2=Disagree(D), 1= Strongly**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>SD</b>
<b>Total</b>					
Fast communication	10	0	0	0	0
	10				
	% 100	0%	0%	0%	0%
	100%				
Low concertation of the students in class	10	0	0	0	0
	10				
	% 100	0%	0%	0%	0%
	100%				
Knowing the current affairs world wide	10	0	0	0	0
	10				
	% 100	0%	0%	0%	0%
	100%				

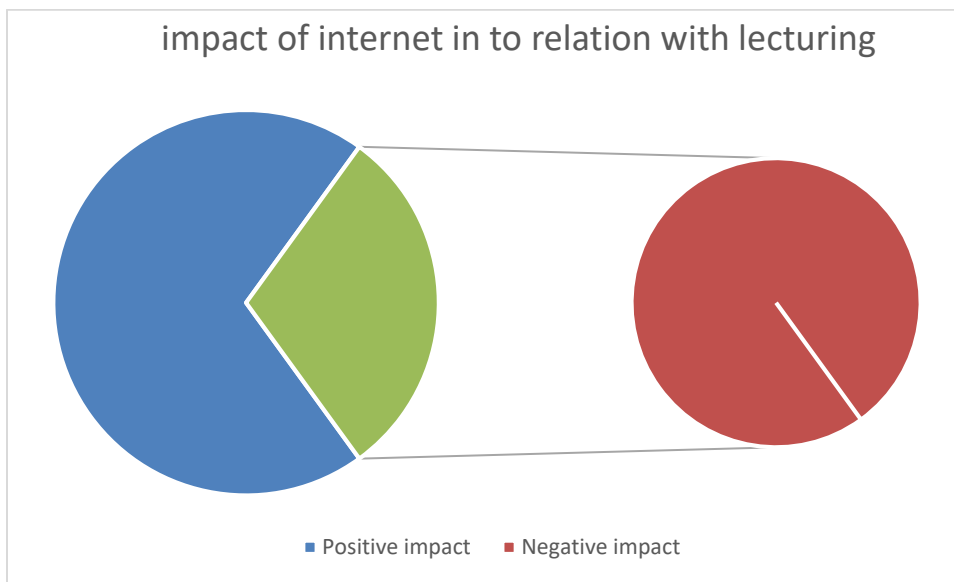
**Disagree (SD)**

**Table 4.4 Social Media usage in relation to lecturing in the university**

From the above Table 4.4, respondents Strongly Agreed 10(100%) with the statement that social media has made communication to be easy in the campus, 0 (0%) respondent Agreed, 0(0%)Neutral, 0(0%)Disagreed, 0(0%) Strongly Disagreed with that. With the concern of the students' concentration in the class, due to use of the social media usage. Strongly Agreed respondents were 10(100%), 0(0%) Agreed, 0(0%)Neutral, 0(0%)Disagreed, and 0(0%) respondents Strongly Disagreed. The study also wanted to know whether the use of social media enables the students and the lecturers to stay informed all the time. 10(0%) respondents Strongly Agreed, 0(0%) Agreed, 0(0%)Neutral, 0(0%)Disagreed, and 0(0%) respondents Strongly Disagreed.

#### 4.8 The Internet Usage in Relation To Lecturing (LAN and WIFI)

The study also did a research on the internet usage in relation to lecturing by the lecturers. They respondents were to answer whether the presence of the Wi-Fi and Local Area Network in the university has a positive or negative effects to the academic performance of the students. Out of the 10 respondents, 7(70%) agreed that internet affects the student academic performance positively and 3 (30%) agreed for negative impact. This data was presented in the following pie chart



*Figure; 4.6 impact of internet in to relation with lecturing*

#### **4.9 The Digital Devices in Relation With Lecturing**

The lecturer who were interviewed also gave their views on the availability of the digital devices among their learners. They were to Strongly Agree, Agree, be Neutral, Disagree or Strongly disagree with the statements given. The following Table 4.5 shows the analysis of the data collected

**Table 4.5 The digital devices in relation with lecturing**

**Key 5= Strongly Agree (SA), 4= Agree (A), 3= Neutral(N), 2=Disagree(D), 1= Strongly Disagree (SD)**

Statement	SA	A	N	D	SD
<b>Total</b>					
Laptop helps to store notes for the students	10	0	0	0	10
%	100%	0	0	0	0
100					
I do data analysis for the students' performance through my laptop	10	0	0	0	0
%	100%	0	0	0	0
100					
Laptop creates a room for me project notes for students	7	2	1	0	0
%	70	20	10	0	0
100					
Digital devices make students loose concentration	6	0	2	2	0
%	60	0	20	20	0
100					

From the data above, it was clear that 100% of the respondents strongly agreed with the statement that the presence of the laptops and smartphones in the university helps them store the notes for the students. Use of the digital devices for analysis of the students' performance through laptops 100% respondents also agreed. Loose of the concentration in the class was also another impacted of the digital devices in the class. 60% (6) Strongly Agreed with this statement, 0% Agreed, 20(20%) were Neutral, 20%(2) Disagreed and 0% Strongly Disagreed.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.0 Introduction**

This chapter consists of the summary of the findings of the study, conclusions drawn from the study and recommendation for further study.

### **5.1 Summary**

The study was able to observe that the technology has both negative and positive impacts to the academic performance of the students in Mount Kenya University. This was drawn from the data collected from both lecturers and the students of the university. The response rate of the lecturers was good at 100% compared to that of the students which was at 60%. Females participated more in the study than the males.

Social media platform which is the likes of Tik Tok, WhatsApp, Twitter, Facebook and Instagram has effected the performance of the Mount Kenya University positively although there were slight negative effects of these platforms. they have made the communication in the university and outside the university easy among the students themselves and the lecturers. Still social media has enabled the students to learn more about their different careers hence acquiring wide knowledge. However, the negative effects of the social media are that excess usage of its platforms lowers the concentration of the students during the lecture hours.

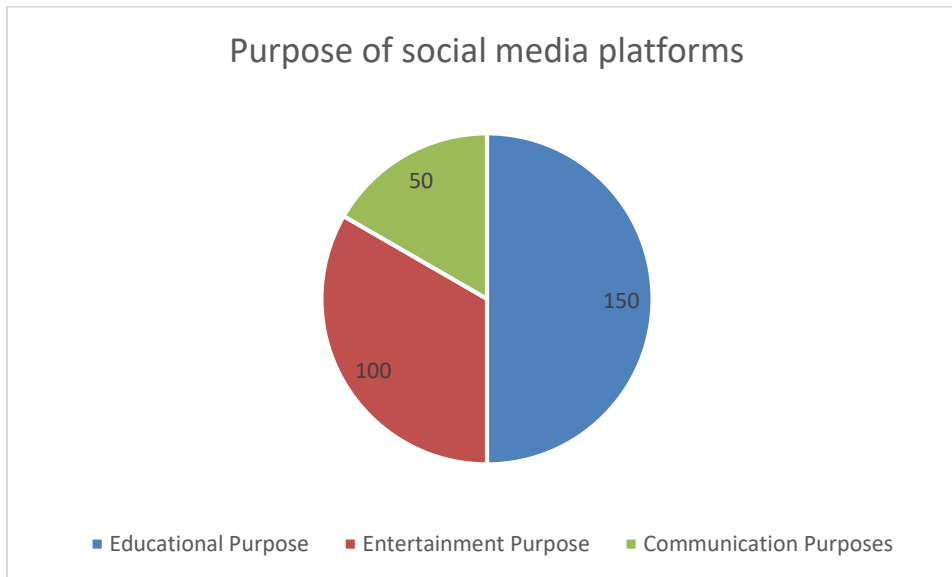
Internet was also noted to be another form of the modern technology that has a great impact to Mount Kenya University student academic performance. Availability of WI-FI in the university and Local Area Network has positively affected the learners of the university, for out of internet they are able to do the research on the area of their specification and also in doing the assignment given by the lecturers.

Digital devices also are as another objective of the study. The research concluded that the availability of laptops and smartphones among the students and the lecturers of the university had also impacted the academic performance entirely. These devices facilities to virtual classes, doing of the assignments, analysis of the students' data among other positive effects. All the same digital devices also affect the performance of the learners negatively for it has led to access of different online sites leading to lower concentration of the learners during class time. Wastage of time was also noted to emerge from the excess use of the laptops and smartphones.

## 5.2 Conclusion

The study concluded that technology has a great effect to the academic performance of the students in Mount Kenya University in Thika. These effects have been found to be both negative and positive effects. It was clear that the social media platforms help the students of the university to enhance their learning for they are able to access online learning sites, do research, revise, do assignments among other things. To some point the study was able to discover that the social media lowers the concentration of the learners and it also consumes their time in most cases in entertaining themselves. Internet and the digital devices also affects the performance of the learners.

From the findings all the hypothesis we rejected. The research concludes that **H<sub>0 1</sub>** Students' exposure and addictiveness to the social media does not affect their academic performance. It was clear that from the research that the students are affected by the social media. This was because some spend more hours in social media platforms, again there are those uses the social media platforms for different purpose. *Figure 4.3* of chapter four shows different purposes which the students uses the social media platforms.



From the data above it the aforementioned hypothesis was rejected since the respondents indicated that they are affected by the social media both negatively and positively.

**H<sub>0 2</sub>** Use of internet for other purposes apart from academics has no considerable influence on students' academic performance. This was rejected be use of the internet for other purposes

apart from academics has no considerable influence on the students' academic performance. The research rejected this for it discovered that the students use of the internet for none academic purposes has a great impact to their performance. From the findings in chapter four *Figure 4.5* the study was able to discover that 278 (92.67%) of the respondents are positively affected by the internet and 22 (7.33%) are negatively.

**H<sub>0 3</sub>** The use of digital devices has no impact on students' academic performance. This null hypothesis was rejected because from the findings in the previous chapter indicated that the digital devices has got great impact to the students' academic performance. *Table 4.3 Digital Devices* shows the effects of the digital devices among the students.

Statement	SA	A	N	D	SD
<b>Total</b>					
Smartphone and laptop helps me to type assignments	92	102	6	83	17
<b>300</b>					
	% 30.66	34	2	27.66	5.66
<b>100%</b>					
Smartphone and laptop allows me to access softcopy	118	82	76	20	14
<b>300</b>					
lecture note	% 39.33	27.33	25.33	6.66	4.66
<b>100%</b>					
Both the above devices allow me to join	202	60	18	10	10
<b>300</b>					
zoom classes	% 67.33	20		6	3.33
	3.33	<b>100%</b>			



From the above observation it was concluded that the availability of the digital devices such as laptops and smartphones has no impact to the academic performance of the students was rejected as hypotheses. This was because the study was able to discover that these devices brings lower concentration of the learners if they access the internet for long time.

### **5.3 Recommendation for The Study**

From the findings the study recommended that student students should balance the use of the social media platforms, internet and digital devices with their studies. They should weigh if the technology in general brings most of negative effects or positive effects and adjust to benefit from the positive effects. Again, the students should be careful with what they do in the social media platforms for they can sometimes endangering may be if they engage in things like hacking and also cyberbullying. The study also recommended that if the time to use the internet and the social media is minimaxed the students can do excellently in their academics.

### **5.4 Recommendation for Further Study**

The study recommends for further research on the effects of selected technology on the academic performance of the students in the universities and in colleges. Investigation on the impacts of the social platforms, internet and the digital devices should be done to find more on their contribution on the academic performance of the university students. The study recommends that the future should investigate the reason as to why people are so much into social media platform, internet and digital devices.

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## APPENDIX

### QUESTIONNAIRES

The purpose of the questionnaire is to assist in collecting of data on the effects of technology on the academic performance of the students in Mount Kenya University- Thika. All the responses and information will be treated confidentially and will be used for academic purpose only.

### QUESTIONNAIRE FOR STUDENTS

Please answer the following questions in the sections provided below.

#### BACKGROUND INFORMATION

**1. Kindly indicate your gender:**

Male  Female

**2. Kindly indicate your age:**

18-22 Years

23-27 Years

Above 27 years

**3. Kindly indicate your program of the study**

Degree

Diploma

Certificate

#### SECTION A; EFFECTS OF SOCIAL MEDIA PLATFORM USAGE

(Facebook, WhatsApp, Twitter, YouTube, and Tik Tok, Instagram)

**4. On average, how many hours per day do you spend on social media platforms?**

Less than an hour  1-2 hours  2-3 hour  Above 3 hours

**5. How often do you use social media platforms during class hours?**

Never  Rarely  Sometimes  Frequently  Always

**6. What is the purpose of using social media platforms?**

Educational purpose  Entertainment  Communication

**7. How has the use of social media platforms affected your academic performance?**

Positively  Negatively  None

**SECTION B; INTERNET USAGE**

**8. What impact has the internet brought in your studies?**

Negative  Positive

**SECTION C; DIGITAL DEVICES IMPACTS; SMART PHONES AND LAPTOPS**

**11. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

NO	Statements	5	4	3	2	1
1	Smartphone and laptop helps me to type assignments					
2	Smartphone and laptop allows me to access softcopy lecture notes					
3	Both the above devices allows me to join class WhatsApp groups					
4	Sometimes I use laptops for non-academic purpose during lecture hours					
5	Without a phone I do feel uncomfortable					

**SECTION D: GENERAL ACADEMIC PERFORMANCE (low or high grades)**

**12. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

NO	STSTATEMENT	5	4	3	2	1
1	Availability of the internet in the campus helps me to research, download academic softcopy notes, research for past papers questions					
2	There above digital device has made my studies simple and easy					
3	For a better performance in studies laptop or smartphone is a requirement					
4	Smartphones has made the communication with lectures easy					

***THANK YOU FOR YOU PARTICIPATION***

## QUESTIONNAIRE FOR LECTURERS

The purpose of the questionnaire is to assist in collecting of data on the effects of technology on the academic performance of the students in Mount Kenya University- Thika. All the responses and information will be treated confidentially and will be used for academic purpose only.

Please answer the following questions in the sections provided below.

### BACKGROUND INFORMATION

**Please answer the following questions in the sections provided below.**

**1. Kindly indicate your gender:**

Male  Female

**2. Kindly indicate your age:**

18-22 Years

23-28 Years

Above 27 years

**SECTION A; EFFECTS OF SOCIAL MEDIA PLATFORM USAGE (Facebook, WhatsApp, Twitter, Tik Tok and Instagram)**

**4. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

NO	Statement	5	4	3	2	1
1	Use of social media platforms has made communication with students easy and more so the WhatsApp					
2	Due to sharing of videos more in the tik tok students has low concentration during class time					
3	I acknowledge that Twitter keeps the students aware of the current affairs of the world					
4	Social media in general affects students' performance positively					
5	Social media in general affects students' performance negatively					

**SECTION B; THE INTERNET (usage of LAN AND Wi-Fi)**

**5. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

No	Statement	5	4	3	2	1
1	Internet through various networks has made the teaching and learning process very easy for it is possible for me to hold an online class					
2	Internet allows me to gain new teaching methodologies used by other teachers on online class					
3	Internet enables me to acquire software teaching materials					
4	Wi-Fi in the campus creates room for me to research the content through Google Play, and AI app					
5	Sometimes internet hinders to have a smooth lesson due to low concertation of the students					



**SECTION C: DIGITAL DEVICES (Laptop and Smartphones)**

**6. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

NO	Statement	5	4	3	2	1
1	Laptop helps to store notes for the students					
2	I do data analysis for the students through my laptop					
3	Having a smartphone in the class sometimes destructs in case of frequent calls					
4	Digital devices has made the communication with the students and the administration easy					
5	Laptop creates a room for me project notes for students					

**SECTION D: ACADEMIC PERFORMANCE IN GENERAL (High or Low grades)**

**7. Kindly state to what extent you agree or disagree with the following statements.**

**(5= Strongly Agree, 4= Agree, 3= Neutral, 2=Disagree, 1= Strongly Disagree)**

NO	Statement	5	4	3	2	1
1	Students exposure to technology has impacted their performance negatively					
2	Many students fails to complete their assignment on time due to much time spend on the mobile phones and laptops					
3	There is a lot of laziness among the students once it comes to doing the academic research					
4	Many of the assignments issued to students the do use Google or ChatGPT to carry out the					
5	A slide number of the students has improved in their academic are due to availability of technology					

**5. What is the influence of technology in Mount Kenya University on the students' academic performance in general?**

Positive

Negative

None

**6. is there improvement on the general academic performance for the student after the exposure to modern technology?**

YES

NO

***THANK YOU FOR YOUR PARTICIPATION***