

# Attitude, Perception, Challenges and Satisfaction of Baraton University Students and Lecturers Towards the Use of E-Learning

Mr. Micah Asume and Isaiah Ouma

International Rescue Committee P.O Box 62727 Nairobi, Kenya, University of Eastern Africa  
Baraton P.O Box 2500 Eldoret, Kenya

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## ABSTRACT

In Kenya, institutions of higher learning have worked hard to make the process of adopting e-learning successful. Therefore, this study aimed at exploring attitude, perceptions, challenges and satisfaction of learners and lecturers on the use e-learning implementation in Kenyan Institutions of higher learning. This study used survey research design. The study targeted 195 learners from the 13 departments in Baraton University and 26 lecturers from these departments. The study used of purposive sampling in determining the study area. Descriptive statistics (means and standard deviations) was used to analyze the data addressing research questions 1, 2, 3, and 4. The study concluded that lecturers and learners have a positive attitude towards the use of e-learning, e-learning has high effects on learners and lecturers educational practices, there are moderate challenges hindering implementation of e-learning, learners and lecturers are satisfied towards the use of e-learning, lecturers and learners both have similar attitude towards the use of e-learning and lecturers and learners have different levels of satisfaction towards the use of e-learning in Baraton University.

**Keywords:** Attitude, Perception, Challenges, Satisfaction.

## BACKGROUND OF THE STUDY

As institutions of higher learning adapt to technology in teaching and learning, they have worked hard to make the process successful. Singh & Thurman, (2019) have defined e-learning based on their personal perspectives and knowledge, that e-learning encompasses all forms of electronically supported teaching and learning that are procedural and aim at effecting the construction of knowledge in regard to individual experience, knowledge and practice of the learner. According to (Basilaia, Dgebuadze, Kantaria & Chokhonelidze, 2020) e-learning in the broadest sense is concerned with learning that occurs online through the internet, offline through the use of CD-ROM or other facilities like television, radio, and telephone.

With the development of affordable pervasive technology devices, Information and communication technology (ICT) has expanded into all aspects of our lives. This technology revolution is seen as a relentless force that is changing our lives on a daily basis. Predictions suggest that this incredible rate of change in information management is not going to slow down soon, rather it will increase to cover most countries in the world, (Serrano-Cinca, Muñoz-Soro & Brusca, 2018). The exponential growth in the number of people acquiring smartphones, tables, wireless technology, 3G and 4G networks, along with social media and MOOCs (massive open online courses), has opened doors to some amazing changes in an e-learning environment.

Horzum, (2017) suggested growth in online course enrollment is increasing more rapidly than in higher education courses offered overall. As online education continues to expand, institutions of higher education are determined to find ways of ensuring quality in online course development, (Simpson, 2012). Puzziferro and Shelton (2008) insisted that developing an online course is a complex and multifaceted process that

cannot be completed by one person alone. They also suggested that online course development needs a common framework for consistency, design, pedagogy and content, (Puzziferro & Shelton, 2008, p. 119)

The wide acceptance and availability of the Internet means that e-learning eliminates time, distance and socio- economic status barriers and at the same time allows people to take more responsibility for their lifelong learning. Students can take advantage of a wide range of experts and resources that may not be available locally.

New technologies such as Information Communication Technology (ICT) and e-learning are the main driving forces in most institutions of higher learning across the world, and Kenya is no exception. Juma (2003) argues that when e-learning and ICT were set to be acknowledged by most institutions as a savior, their limitations have surfaced and now there is a call to have blended learning.

In Kenya, most schools have not effectively adopted the use of ICT in learning, teaching and managing as it was intended (Farrell, 2007). However, institutions of higher learning have adopted the blended learning model because they lack skill and infrastructure needed to adopt e-learning. According to Garrison & Vaughan, (2013), blended learning is a thoughtful fusion of online learning and face-to-face experiences. For this reason, many institutions across the world have opted to blend learning in order to deliver various courses, especially during the time of COVID-19 and Baraton University wasn't left out. By implementing e-learning fully, institutions of higher learning will reap many benefits.

According to Garrison et al (2013, e-learning comes with a number of benefits as it encourages the learners to take responsibility for their learning. In addition, it will help them build self-confidence and self-knowledge. The adoption and use of e-learning in institutions of higher learning can lead to collaborative and active learning, increased motivation amongst students, better access to information and sharing of experiences, deepened understanding of courses, and help students communicate and think in a creative manner (Omwenga, Waema & Wagacha, 2004).

### **Statement of the Problem**

There are a number of concerns that need to be surpassed when adopting and implementing e-learning in institutions of higher learning in Kenya. Salmon (2005) opines that focusing training on the technological features of the e-learning system is one of the major steps toward ensuring success. According to Pityana (2009), the success of e-learning implementation rests on the vital requirement that instructors and students possess positive attitude and adequate technical skills to use e-learning tools effectively. In addition, Rennie & Morrison (2019) argue that e-learning is still a developing exercise in Kenyan universities due to a number of concerns that are related to resources, attitude, perception and training. Therefore, this study aimed at exploring attitude, perceptions, challenges and satisfaction of learners and lecturers on the use e-learning implementation in Kenyan Institutions of higher learning.

### **Research Questions**

1. What is the attitude of learners and lecturers towards the use of e-learning in Baraton University?
2. What are the perceived effects of e-learning to learners and lecturers in educational practices at in Baraton University?
3. What are some of the challenges hindering the implementation of e-learning in Baraton University?
4. What is the level of satisfaction of learners and lecturers towards the use of e-learning in Baraton University?
5. Is there a significant difference between the attitudes of learners and lecturers towards the use of e-learning?
6. Is there a significant difference in levels satisfaction between learners and lecturers towards the use of

e-learning?

### **Significance of the Study**

The findings from this study will offer the Ministry of Education and institutions of higher learning with data on how the implementation of e-learning has happened and the circumstances that have compromised its fully use in the education sector. Secondly, the outcome of the study will help policy makers in this institution and other institutions to know the right policies to be adopted in order to facilitate the delivery of education services using technology. Lastly, the findings will help institutions of higher learning to understand the attitude, perception, challenges and satisfaction of learners towards education that is delivered using technology.

### **Justification of the Study.**

Kenyan institutions of higher learning are still struggling with e-learning implementation, especially during the post Covid-19 pandemic, as e-learning has picked and needs to be maintained. A number of issues need to be tackled before e-learning can be recorded as successful. For this reason, this research intended to look at attitude, perception and satisfaction of learners and lecturers towards the use of e-learning so that good policies are put in place to ensure it is implemented effectively. These policies could also be effective and used to cater for online learning as it has been witnessed during Covid-19 pandemic.

## **LITERATURE REVIEW**

### **Learners' and lecturers' Attitude Toward the Use of E-learning in Educational Practices**

One of the key goals of technology in education is to promote technological literacy of an encompassing and broad nature Garrison et al, (2013). In order to meet this goal, technology education need to prepare students to understand, control, and use technology. There is need for students to learn how to adopt and utilize technology and how to handle forces that impact their lives and have the potential to influence their future. The past few years have seen the paradigms for teaching technology education change. There are a number of instructional approaches that have been recommended by curriculum experts and technological education teachers. They include self-paced modules, problem solving, and interdisciplinary methodology. All these approaches aim at informing students about technology and show its effects on society (Govindasamy, 2001). Of importance to note is that these approaches come with merits and demerits. According to Steeples, Jones, & Goodyear (2002), the self-paced modular instruction is a good approach as it tends to accommodate diversity in both learning levels and learning styles. Sun, Tsai, Finger, Chen, and Yeh (2008) suggests that technology is interrelated to other disciplines and therefore, there is need for learners to see the connection between technology and other disciplines like mathematics, English, and science. This means that teachers need to use interdisciplinary instruction. On the other hand, Sife et al., (2007) plead the case for problem-centered instruction as it is seen to be authentic especially when it comes to the development of the cognitive skills of the learner.

According to Bates (2005), research done has substantiated the benefits of educational technology in enhancing learning environments. In addition, it has the potential of boosting the learning outcomes of students. This is owed to the active engagement of students, collaborative learning, immediate and frequent feedback, and real-time learning contexts. On top of this, the use of Information Communication and Technology tends to enhance high order thinking among learners and it impacts on their motivation, attitudes, social competencies and self-esteem. Nevertheless, the extent to which technology facilitates and enhances teaching and learning will depend on the attitude of learners towards new technologies.

Wagner et al. (2008) argues that the integration of technology into teaching and learning process is an

effective way of widening educational opportunities, but it is yet to be fully exploited by teachers as an instructional system of delivering education. Alexander (2001) found out that some teachers had high skills in regard to use of technology but they were not good at integrating the same consistently in learning and teaching process, reason being the attitude of learners towards it. Many learners think that the use of technology in delivering higher education is a bit challenging. Wanjala et al. (2011) indicate that at the start, teachers may want to use technology and they have adequate skills to do so, but they lack knowledge on how to do so. It is worth noting that technology integration is a process that needs cooperation from different stakeholders in the education sector. For it to be done effectively, teachers and learners need to have same skills and have positive attitude towards it. These stakeholders need to know how and why to use technology in the process of teaching and learning.

Research done has shown that there is a significant link between beliefs and attitudes and links between behaviors and attitudes. It is good to note that attitude is what forms the foundation of one's belief that in return influences behavior. When people have a favorable attitude towards a given technology, then they are likely to use it. In addition, people can get influenced by subjective norms i.e. one's perception when it comes to significant of a particular technology that is likely to discourage or encourage one from utilizing such technology. Universities across the world are adding learning programs to meet the needs of growing numbers of students that want to seek the convenience of online courses and remain competitive in the ever-changing educational field. E-learning offers a good opportunity for learning institutions to create environments where teachers and students can exchange knowledge. Therefore, it is very crucial to design an efficient e-learning platform for resources, teaching, learning, and administration for higher education (Aixia & Wang, 2011).

### **Effects of E-learning in Education Practices**

E-learning comes with both merits and demerits. It is good to understand both, especially when considering making learning and instructional decisions. It is good that both the pros and cons are considered in equal measure. Many institutions and organizations offer different forms of instruction and training to their learners. Basically, they provide the needed training by offering training class and providing manuals. E-learning is one of the forms of learning that is now being preferred by many as compared to traditional training (Garrison & Kanuka, 2004). According to Alexander (2001) e-learning is beneficial in that class work can be arranged around professional and personal work. This clearly indicates that e-learning is a flexible method of learning. It is cheap; hence reduced time and cost of travelling to and from learning institutions. On top of this, the learners will have the option to select learning materials that meet their interest and knowledge. It is a good learning approach since it gives learners chance to study whenever they are free and have access to internet. It is a self-paced form of learning that will allow learners to do their studies at their own pace. Wagner et al. (2008) notes that e-learning is good in that it is malleable and can allow classmates to meet remotely in chat rooms where they can actively engage in discussions and exchange ideas. Through e-learning, different learning styles will be addressed and facilitation of learning will take place using different activities. The internet and computers that are used in e-learning can be transferred to other facets of the learners' lives. Through e-learning, learners are able to build self-confidence, self-knowledge and self-confidence as they take responsibility for their learning.

According to Elina Kar, Saha and Mondal, (2014), e-learning empowers students to engage in taking part in the process of learning in regard to their personal education. Anywhere, anytime students will have an opportunity to access internet-based tool that are necessary to encourage them learn more effectively through exploring the world around them and collaborate with each other. E-learning is necessary to encourage learners when in class and beyond. It gives learners an opportunity to collaborate with each other. It is worth noting that e-learning is a flexible mode of learning for those students who may be busy doing their own things. For instance, for those people who are working, then it will be easy for them to do their

studies at the same time. This useful method will benefit them.

In the modern world, ICT has brought in many benefits for the younger generation. For instance, for students who work part-time, they can also find time to engage in their studies. On top of this, most of the time students tend to use word processing on their computers to edit their work easily and quickly. This will in return boost their presentation using ICT. Through e-learning, students can access knowledge and ICT that can help them learn online. One of the good things about e-learning is that it helps in improving behavior management by better tracking of learners. It helps learners to gain an understanding and analytical skills that include boosting their comprehension skills and knowledge. For instance, through reading on journals, the students are able to improve their understanding of given subjects. Moreover, students are able to become a bit fluent and original in their studies Crisolo, (2018).

E-learning also offers educators a chance to transform the way learning occurs and enable students to develop. It offers a wide number of tools that lecturers and teachers use to present their teaching and help educators get in touch with their student and engage them in a more meaningful way. E-learning has become a good avenue through which lecturers can deliver knowledge at their own convenience. Huynh, Umesh & Valacich, (2003) argue that even though many people still take traditional universities as the main way through which knowledge can be achieved, online learning is a great option. It offers students chance to study at their own convenient times and for free. It is a great way through which students can study in a number of fields and boost their level of self-motivation. E-learning is so effective owed to the fact that students can be in a position to finish their homework quickly and still have enough time for their hobbies or jobs. This mode of learning offers access to all resources under one channel, something that helps learners to learn wherever they are hence, giving them freedom to choose time for study. All one needs is basically an internet connection and a computer and they will be good to attend their classes. In addition, E-learning helps in promoting self-discipline and responsibility of students.

### **Challenges Hindering E-learning in Educational Delivery and Its Implementation**

In spite of the increasingly widespread adoption of technologies in every aspect of education, there are significant challenges that are preventing its smooth and effective implementation. According to Huynh, Umesh & Valacich, (2003), some of these challenges are systemic while others are related to technologies that are being used. It is worth to note that amidst these challenges, education leaders and teachers share the blame. In the past, most of these constraints were centered on reluctance of the teachers and administrators, lack of funding or support, and lack of preparedness. One of these challenges is professional development Salmon, (2005). Key among all challenges hindering the use of technology is lack of enough and ongoing professional development among lecturers who are expected to integrate new technologies into classrooms yet they are unable or unprepared to understand how new technologies work. Often, when institutions of higher learning mandate the use of technology, lecturers are left without tool to effectively integrate the new technologies into their teaching techniques. In cases where institutions of higher learning have invested in new technologies, they are underutilized, not used at all, or used partially in a way that mimics the old teaching methods rather than being used innovatively in a way that engages the students in an active way.

According to Sife et al. (2007), resistance to change is another challenge that has hindered the adoption and use of technology in educational delivery in higher institutions of learning. In this case, resistance to technology can be in many forms, but the most notable one is the comfort with the status quo. In most cases, lecturers and administrators tend to see technological training and use to be outside the scope of their job description. Competition between traditional models of delivering educational services and new ones is what has hindered the adoption of technology. The old generations of lecturers do not see any need to have technology. For this reason, they keep using the old methods of teaching (Rennie & Morrison, 2013). Delivering informal learning is another challenge that has hindered the adoption of technology in education. Garrison, (2011) notes that rigid lecture and test models of learning are failing to challenge students to experiment and engage in formal learning where technology is used.

Failures of personalized learning are also another reason why technology has not been implemented fully in the delivery of educational services. There is a wide gap in the vision of delivering personalized instruction to learners in different colleges and it is technologies that can make this possible. So, while in real case personalized education seems to be the solution to this gap, the lecturers have not been given tools they need to meet this need adequately. According to Salmon (2005), education is a sector that has always been slow to adopt change, and therefore technology use in schools is no an exception. Historically, many schools and learning institutions have rejected technologies that have been proved to be transformative or revolutionary. From research done, it has been proved that the introduction of technology does not change teaching; instead, technology serves as a tool of change which gives teachers a license to experiment (Sandholtz, Ringstaff, & Dwyer, 1997). Thus, many institutions of higher learning have computers and other technologies that are only used by a small percentage of learners. Even with the best training and technologies, the misinterpretation regarding how long it will take for technology to become part of the institutions of higher learning creates some difficulties. The idea of using technology effectively in higher institutions of learning is something that will need a step-by-step strategy and it will not be effective immediately. Most of lecturers think that when technology is installed and the lecturers and administrators are trained, then there will be good results (Heinich et al., 2002).

Inadequate infrastructure in ICT and e-learning is a great challenge hindering the educational delivery and even the implementation of e-learning. According to Tarus, Gichoya and Mumbo (2015), Infrastructure plays a crucial role in the delivery of e-learning education. The inadequacy of technological infrastructures like computer labs, computers, network, and internet connection are some of the infrastructure related challenges. Annika (2009), students need technological confidence. By simply having access to technology is not enough, students need proper computer skills (practical) to feel confidence in using computers. Void of experience with computers is a huge challenge in e-learning especially for students entirely new to computers. Therefore, the delivery and access to the e-learning education and resources cannot be achieved in an environment where the essential ICT infrastructure lacks.

Inadequacy of funds is a challenge that needs to be sorted. Huynh (2003), states that budgetary allocations are a major concern pertaining the delivery of e-learning. For an average institution, delivery of e-learning is a big challenge due to insufficient funds. Most institutions at their startup stages find it difficult to deliver due to the factors of finance. However, various countries more so the developing ones allocate finances to e-learning institutions, it has always been evident that the finances are inadequate and thus cannot sustain and meet the needs of e-learners. Important e-learning activities cannot be achieved with the meager financial resources available. Training of staff on ICT and e-learning, maintenance, the development of e-learning content, internet bandwidth and all the e-learning related issues require sufficient finances to enhance the delivery of quality e-learning education. Most institutions offering e-learning education mostly depend on donor funds to run their e-learning related projects. The delivery of the e-learning education suffers a major setback when these donors withdraw their funding. According to Annika (2009), the students' economy is a determiner and a good predictor of a student's performance and withdrawal. A stable financial stamina helps boost a student's academic confidence and it is a factor in the e-learning courses.

Lack of interest and commitment among a majority of e-tutors in the use of e-learning in their teaching negatively affects the delivery of e-education. Khan, Hassan and Clement (2012), argues that if e-teachers need to successfully deliver e-education and use technology without hindrances in their classes, all they need is to possess a positive attitude to the use of technology. Lack of interest and commitment mostly comes from the lack of motivation among the teaching staff who views the conversion of their courses to e-content as an extra work that does not reflect in their pay. (Khan, Hassan and Clement (2012), assert that most e-teachers have low ICT and e-education delivery knowledge required. This was because most of them were trained in the absence of ICT environment, therefore, making it difficult for them to deliver effectively in the e-learning field. Lack of relevant technical e-learning and e-content development by the tutors is a challenge hindering the delivery of e-education. Most of the e-teachers need adequate training in ICT to

allow them to deliver the e-learning skills to their learners. By simply acquiring basic computer literacy skills, it might not be easy to deliver accordingly in e-learning hence, they need further training.

### Satisfaction in Online Education

Opinions on what constitutes student satisfaction vary across the discipline. Lee (2010) claimed that timely feedback from instructors is essential to student satisfaction in an online learning environment. Social presence is another factor emphasized as leading to higher student satisfaction in online education (Abdous & Yen, 2010; Richardson & Swan, 2003). Support services have also been characterized as a predictor for student satisfaction in online courses (Lee, 2010). Lee, (2010) indicated that student satisfaction is affected by the flexibility in a course, social presence, technical support, and course technology. Lorenzo and Moore (2002) declared that student satisfaction is a product of responsive, timely, personalized services and support; high-quality learning outcomes; academic and administrative support services; and learner interaction and collaboration.

## RESEARCH METHODOLOGY

This study used survey research design. The term “survey” is used in research design and involves asking questions and collecting and using tools to analyze data. This involves strategies for conducting research that utilize a set of questions (contained in a questionnaire) to gain specific information from participants about their opinions, perceptions, reactions, knowledge, beliefs, values, or behaviors. The current study collected data from respondents to inform the attitude, perceptions, challenges and satisfaction of students and lecturers about the use of e-learning, (Punch, 2009, Gay, Mills & Airasian, 2006, Mertler & Charles, 2005). The target population was used to generalize the results of the study (Mugenda and Mugenda, 2013). The study targeted 195 learners from the 13 departments in Baraton University and 26 lecturers from these departments. The study used of purposive sampling in determining the study area. A purposive sample simply refers to a non- probability sample that is selected based on characteristics of a population and the objective of the study. The questionnaires were developed into two parts. One part will comprise of bio information while the other sought to answer questions regarding the objectives of the study. The questionnaire comprised of measures of the following variables: Attitudes towards e-learning, perceived effects of e-learning on educational practices, challenges facing implementation of e-learning and the satisfaction. Descriptive statistics (means and standard deviations) was used to analyze the data addressing research questions 1, 2, 3, and 4. The research questions 5 and 6 was analyzed using independent sample T-test.

## RESULTS AND DISCUSSIONS

### Demographic Information

For the researcher to obtain demographic information on the respondents for this study, the researcher sought to know the gender, designation and duration of the respondents in the institution.

### Gender

Table 1: Gender of the Respondents

	Frequency	Percentage
Male	115	55.0
Female	94	45.0
<b>Total</b>	<b>209</b>	<b>100.0</b>

As presented in table 1 above, 115 (55%) of the respondents were male while 94 (45%) were female.

## Designation of the Respondents

**Table 2: Designation of the Respondents**

	Frequency	Percentage
Student	157	75.1
Lecturer	52	24.9
<b>Total</b>	<b>209</b>	<b>100.0</b>

As indicated in table 2 157 (75%) of the respondents were students while 52 (25%) of the respondents were lecturers.

## Duration of Respondents in the Institution

**Table 3: Duration of Respondents in the Institution**

Duration in Years	Frequency	Percentage
0-2 years	39	18.7
2-4 years	100	47.8
4-6 years	29	13.9
Over 6 years	41	19.6
<b>Total</b>	<b>209</b>	<b>100</b>

As indicated in table 3 above, 100 (47.8%) of the respondents had stayed between 2-4 years in the institution, 41 (19.6%) had stayed for over 6 years in the institution, 39 (18.7%) had stayed less than 2 years in the institution and 29 (13.9%) had stayed between 4-6 years in the institution.

## Attitude of Learners and Lecturers Towards the use of e-learning in Baraton University

The study sought to examine the attitudes of learners and Lecturers towards the use of e-learning in Baraton University. Respondents were asked to indicate their level of agreement on a scale of 1 to 4 with 1 representing disagree, 2 representing tend to disagree, 3 representing tend to agree and 4 representing agree. The mean scale (attitude) was interpreted in a range of 1-4 where 1.00 – 1.49 represented disagree (highly negative attitude), 1.50 – 2.49 represented tend to disagree (negative attitude), 2.50 – 3.49 represented tend to disagree (positive attitude) and 3.50 – 4.00 represented agree (highly positive attitude).

**Table 4: Attitude of Learners and Lecturers**

Descriptive Statistics			
Attitude of Learners and Lecturers	N	Mean	Std. Deviation
It is worth to use e-learning in institutions	209	3.57	.886
E-learning has many benefits to students	209	3.41	.792
E-learning is better compared to traditional classroom learning	209	3.28	1.025
<b>Average</b>	<b>209</b>	<b>3.42</b>	<b>.901</b>

From table 4 above, respondents tended to agree that it is worth to use e-learning in institutions, e-learning has many benefits to students and e-learning is better compared to traditional classroom learning with a means of 3.57, 3.41, 3.28 and standard deviations of 0.886, 0.792 and 1.025 respectively. On average, the



findings yielded a mean of 3.42 and a standard deviation of 0.901 which is a low standard deviation indicating that the individual response tends to be very close to the mean. This means that the attitude of learners and lecturers towards the use of e-learning in Baraton University was positive (2.50 – 3.49 positive attitude). This could be due to the many benefits that it comes along with. This finding is supported by (Steeple, Jones & Goodyear, 2020) who claims that times have changed as many students are getting involved in technology learning environments.

### Effects of e-learning to Learners and Lecturers in Educational Practices in Baraton University

When examining the effects of e-learning to lecturers and students in educational practice in Baraton University, respondents were asked to indicate their level of agreement on a scale of 1 to 4, with 1 representing disagree, 2 representing tend to disagree, 3 representing tend to agree and 4 representing agree. The mean scale (effects of e-learning) was interpreted in a range of 1-4 where 1.00 – 1.49 represented disagree (low effects), 1.50 – 2.49 represented tend to disagree (medium effects), 2.50 – 3.49 represented tend to agree (high effects) and 3.50 – 4.00 represented agree (extreme effects).

**Table 5: Effects of e-learning to Learners and Lecturers in Educational Practices**

<b>Descriptive Statistics</b>			
<b>Effects of e-learning to Learners and Lecturers in Educational Practices</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
E-learning is efficient and fast	209	3.37	.938
E-learning has boosted capacity of educational delivery	209	3.44	.733
E-learning has enhanced retention capacity among learners	209	3.36	.962
E-learning has led to improved performance of students	209	3.37	.890
E-learning has enhanced speed of educational delivery	209	3.49	.844
E-learning has given students more time to do their studies	209	3.51	.872
<b>Average</b>	<b>209</b>	<b>3.42</b>	<b>.873</b>

All the statements had a mean ranging from 3.36 to 3.51 and standard deviation ranging from 0.733 to 0.962. The findings yielded a mean of 3.42 and a standard deviation of 0.873 on average which is a low standard deviation indicating that the response tends to be very close to the mean. This means that the e-learning had high effects on to learners and lecturer’s educational practices (2.50 – 3.49 high effect). From the study results, it comes out clear that e-learning plays a crucial role when it comes to educational practices. This mode of learning has provided a platform on which learners can access education efficiently and in a fast manner. Bates (2004; Gantau, 2020; Zare et al., 2016)) argue that through e-learning, those students who are disadvantaged, disabled, or exceptionally gifted have been able to have a learning opportunity. It has helped students to be self-directed independent, something that has in return boosted their performance.

### Challenges Hindering the Implementation of e-learning in Baraton University

When examining the challenges hindering implementation of e-learning in Baraton University, respondents were asked to indicate their level of agreement on a scale of 1 to 4, with 1 representing tend to disagree, 2 representing disagree, 3 representing tend to agree and 4 representing agree. The mean scale (challenges) was interpreted in a range of 1-4 where 1.00 – 1.49 represented disagree (insignificant challenge), 1.50 – 2.49 represented tend to disagree (minor challenge), 2.50 – 3.49 represented tend to agree (moderate challenge) and 3.50 – 4.00 represented agree (major challenge).

**Table 6: Challenges Hindering the Implementation of e-learning**

<b>Descriptive Statistics</b>			
<b>Challenges Hindering the Implementation of e-learning</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Lack of resources is key hindrance to e-learning implementation	209	3.44	.989
Lack of lecturer training hinders e-learning implementation	209	3.28	.957
Lack of computer skills among students hinders implementation of e-learning	209	3.44	.908
The fact that the university has not given priority to e-learning mode hinders its implementation	209	3.33	.991
The fact that the university has not prepared enough modules to be used for e-learning hinders its implementation	209	3.30	1.019
<b>Average</b>	<b>209</b>	<b>3.36</b>	<b>.923</b>

All the statements had a mean ranging from 3.30 to 3.44 and standard deviation ranging from 0.908 to 1.019. The findings yielded a mean of 3.36 and a standard deviation of 0.923 on average which is a low standard deviation indicating that the response tends to be very close to the mean. This means that the challenges hindering implementation of e-learning were moderate challenges (2.50 – 3.49 moderate challenge).

### **Lack of Resources**

From the results, it is clear that lack of resources is one of the major factors that have delayed implementation of e-learning in institutions of higher learning in Baraton University. In this case, lack of basic ICT facilities like computers, internet, e-learning modules, and computer laboratories have seen the implementation of e-learning delayed. Therefore, in order to ensure this mode of learning is implemented and used in institutions of higher learning; the institution should invest in resources that will facilitate implementation of e-learning.

### **Lack of lecturers Training**

According to Salmon (2005), key among all challenges hindering the use of technology is lack of enough and ongoing professional development among lecturers who are expected to integrate new technologies into classrooms yet they are unable or unprepared to understand how new technologies work. Most of the time, when institutions of higher learning mandate the use of technology, lecturers are left without tools to effectively integrate the new technologies into their teaching techniques. From the study, a good number of respondents agreed that lack of training among lecturers hinders e-learning implementation in Baraton University. This confirms a study by Somayeh, et al., (2016) who laments that one reasons for this is lack of resources like money, qualified trainers, facilities, that can be used in training lecturers on the need to embrace technology. In return, this has hindered the implementation of e-learning.

### **Lack of Computer skills among students**

In order to have smooth implementation of e-learning, students should have excellent computer skills. This is because e-learning takes online and a computer is a key resource to facilitate learning. Nevertheless, in a case where these learners do not have the skills, then e-learning implementation is a challenge. Results from the study show that lack of computer skills among learners has led to delayed implementation of e-learning in Baraton University. This is in line with Samir (2020) who argues that institutions of higher education have faced challenges of training and gaining necessary technology skills for their students.

Even though it can be viewed that the university has not given priority to e-learning mode. On the other hand, the University has realized that job skills rather than degrees will determine success in the workplace of the future. The University has the chance right now to help students find fulfilling careers and broaden the workforce. The University has learned that within the next ten years, technology will significantly alter the majority of services and business processes. These include computer-based instruction and learning, both of which must function flawlessly to maintain a smooth learning environment. The university has made investments in the tools that instructors and students use to learn. The system must be kept up and operating all year long by the IT team.

Even though the university is investing a lot towards the implementation of the e-learning, much priority is still focused on the traditional method of learning. This has lowered the pace at which the university is implementing the e-learning programs. To ensure full implementation, the university needs to float most of the art-based courses from certificate, diploma, undergraduate and PhD to be purely offered through distanced learning to strengthen the use of e-learning. This has been a challenge even in most universities in Kenya and even globally. The findings of this study support the preliminary report by Tarus (2011), who posits that implementation of e-learning is still at the infancy stage in most Kenyan public universities due to many challenges related to implementation. These challenges range from technological, organizational and pedagogical challenges.

### Lack of enough e-learning Modules

One of the major requirements for e-learning to be effective is the need to have enough modules that lecturers can share with students online. The fact that this mode of learning does not entail physical learning in class means that lecturers have to prepare modules of different courses. However, from this study, it came out clear that even though Baraton University tried to invest on the e-learning modules they are still not enough due to demand at hand.

### Level of Satisfaction of Learners and Lecturers Towards the use of e-learning in Baraton University

When examining the level of satisfaction of lecturers and students towards the use of e-learning in Baraton University, respondents were asked to indicate their level of agreement on a scale of 1 to 4, with 1 representing disagree, 2 representing tend to disagree, 3 representing tend to agree and 4 representing agree. The mean scale (level of satisfaction) was interpreted in a range of 1-4 where 1.00 – 1.49 represented disagree (very dissatisfied), 1.50 – 2.49 represented tend to disagree (dissatisfied), 2.50 – 3.49 represented tend to agree (satisfied) and 3.50 – 4.00 represented agree (very satisfied).

**Table 7: Level of Satisfaction of Learners and Lecturers Towards the use of e-learning**

<b>Descriptive Statistics</b>			
<b>Level of Satisfaction of Learners and Lecturers Towards the use of e-learning</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
The amount of course interaction with other students for this online course was helpful in reaching the course objectives	209	3.42	.907
I find it important to be provided with course technology that enhances learning during a course	209	3.51	.773
The course instructor for this online course interacted with me in a timely fashion	209	3.33	.951
<b>Valid N (listwise)</b>	<b>209</b>	<b>3.42</b>	<b>.877</b>

From table 7 above, respondents tended to agree that the amount of course interaction with other students for online courses was helpful in reaching the course objectives, they find it important to be provided with

course technology that enhances learning during a course and the course instructor for the online courses interacted with them in a timely fashion with means of 3.42, 3.51, 3.33 and standard deviations of 0.907, 0.778 and 0.951 respectively. The findings yielded a mean of 3.42 and a standard deviation of 0.877 on average which is a low standard deviation indicating that the response tends to be very close to the mean. This means that learners and lecturers were satisfied towards the use of e-learning (2.50 – 3.49 satisfied).

### Resource Adequacy

When examining the resource of e-learning in Baraton University, respondents were asked to indicate the adequacy of computer laboratory, internet connectivity and e-learning modules.

**Table 8: Resource Adequacy**

Resource	Frequency	Percentage
<b>Computer Laboratories</b>		
Adequate	81	38.8%
Inadequate	128	61.2%
<b>Internet Connectivity</b>		
Adequate	63	30.1%
Inadequate	146	69.9%
<b>E-learning modules</b>		
Adequate	85	40.7%
Inadequate	124	59.3%

As indicated in table 8 above, 128 (61.2%) of respondents indicated that there were inadequate computer laboratories, 146 (69.9%) of the respondents indicated that there were inadequate internet connectivity and 124 (59.3%) indicated that there were inadequate e-learning modules. However, 81 (38.8%), 63 (30.1%) and 85 (40.7%) of the respondents indicated that there is adequacy of computer laboratories, internet connectivity and e-learning modules respectively.

### Significant Difference between the Attitudes of Learners and Lecturers Towards the use of e-learning

For the study to examine if there is a significant difference between the attitudes of learners and lecturers towards the use of e-learning, an independent sample T-test was used.

**Table 9: Group Statistics**

Group Statistics					
	What is your designation in the college	N	Mean	Std. Deviation	Std. Error Mean
It is worth to use e-learning in institutions	Student	157	3.57	.921	.074
	Lecturer	52	3.58	.776	.108
E-learning has many benefits to students	Student	157	3.38	.844	.067
	Lecturer	52	3.50	.610	.085
E-learning is better compared to traditional classroom learning	Student	157	3.22	1.088	.087
	Lecturer	52	3.48	.779	.108

As indicated in table 9 above, lecturers had the highest mean response for all the statements on attitude as compared to the students mean.

**Table 11: Independent Sample T-test**

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
It is worth to use e-learning in institutions	Equal variances assumed	0.636	0.426	-0.026	207	0.979	-0.004	0.142	-0.284	0.276
	Equal variances not assumed			-.089	120.248	0.278	-0.118	0.108	-0.332	0.096
E-learning has many benefits to students	Equal variances assumed	4.472	0.036	- 0.929	207	0.354	-0.118	0.127	-0.368	0.132
	Equal variances not assumed			- 1.089	120.248	0.278	-0.118	0.108	-0.332	0.096
E-learning is better compared to traditional classroom learning	Equal variances assumed	8.155	0.005	- 1.618	207	0.107	-0.264	0.163	-0.586	0.058
	Equal variances not assumed			- 1.906	121.517	0.059	-0.264	0.139	-0.539	0.01

Table 11 above presents the test of statistical significant difference between the mean response of attitude of learners and lecturers in Baraton University. Statistical significant difference was determined at 0.05 level. The table indicates that there is no significant difference in mean score of learners and lecturers in Baraton University (Sig. 2-tailed greater than 0.05). The results of this study imply that lecturers and learners both have similar attitude towards the use of e-learning in Baraton University.

**Significant Difference in Levels Satisfaction Between Learners and Lecturers Towards the use of e-learning**

For the study to examine if there is a significant difference between the level of satisfaction between learners and lecturers towards the use of e-learning, an independent sample T-test was used.

**Table 12: Group Statistics**

Group Statistics					
	What is your designation in the college	N	Mean	Std. Deviation	Std. Error Mean
The amount of course interaction with other students for this online course was helpful in reaching the course objectives	Student	157	3.35	.953	.076
	Lecturer	52	3.63	.715	.099
I find it important to be provided with course technology that enhances learning during a course	Student	157	3.51	.829	.066
	Lecturer	52	3.52	.577	.080
The course instructor for this online course interacted with me in a timely fashion	Student	157	3.23	.999	.080
	Lecturer	52	3.63	.715	.099

As indicated in table 12 above, lecturers had the highest mean response for all the statements on satisfaction as compared to the students mean response.

**Table 13: Independent Sample T-test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
The amount of course interaction with other students for this online course was helpful in reaching the course objectives	Equal variances assumed	9.2	0.003	-1.974	207	0.05	-0.284	0.144	-0.568	0
	Equal variances not assumed			-2.275	115.649	0.025	-0.284	0.125	-0.532	-0.037
I find it important to be provided with course technology that enhances learning during a course	Equal variances assumed	3.178	0.076	-0.078	207	0.938	-0.01	0.124	-0.254	0.235
	Equal variances not assumed			-0.093	125.422	0.926	-0.01	0.104	-0.215	0.196
The course instructor for this online course interacted with me in a timely fashion	Equal variances assumed	11.35	0.001	-2.703	207	0.007	-0.405	0.15	-0.701	-0.11
	Equal variances not assumed			-3.186	121.708	0.002	-0.405	0.127	-0.657	-0.153

Table 13 above presents the test of statistical significant difference between the mean response of levels satisfaction between learners and lecturers towards the use of e-learning in Baraton University. Statistical significant difference was determined at 0.05 level. The table indicates that there is a significant difference in mean response on the amount of course interaction with other students for the online course was helpful in reaching the course objectives and the course instructor for this online course interacted with them in a timely fashion between learners and lecturers in Baraton University (Sig. 2-tailed less than 0.05). The results of this study imply that lecturers and learners have different levels of satisfaction towards the use of e-learning in Baraton University. As indicated, lecturers have high mean response as compared to learners.

## CONCLUSIONS

With reference to the results of the study, the researcher concludes that:

1. Lecturers and Learners have a positive attitude towards the use of e-learning in Baraton University.
2. E-learning has high effects on learners and lecturers educational practices in Baraton University.
3. There are moderate challenges hindering implementation of e-learning in Baraton University.
4. Learners and lecturers are satisfied towards the use of e-learning in Baraton University.
5. Lecturers and learners both have similar attitude towards the use of e-learning in Baraton University.
6. Lecturers and learners have different levels of satisfaction towards the use of e-learning in Baraton University where lecturers have high mean response as compared to learners.

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