

# Health, Medicine and Nursing Practice

(IJHMNP)

INSTITUTIONAL FACTORS AFFECTING UPTAKE BLENDED LEARNING AMONG  
STUDENTS IN KENYA MEDICAL TRAINING COLLEGE



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## INSTITUTIONAL FACTORS AFFECTING UPTAKE BLENDED LEARNING AMONG STUDENTS IN KENYA MEDICAL TRAINING COLLEGE

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### Abstract

**Purpose:** The objective was to determine the institutional factors affecting uptake blended learning among students in Kenya Medical Training College

**Methodology:** A cross-sectional descriptive study was done. In the KMTC campuses the average student population is thirty thousand (30,000). The research used simple random sampling in the selected campuses. The sample size was 384. Primary data was collected using questionnaires and Quantitative data was analyzed using descriptive statistics whereas qualitative data was analyzed using content analysis. Qualitative data was transformed into themes and analyzed with the helped of SPSS version 25. Collected data was edited, sorted, cleaned and coded for data analysis.

**Findings:** The study found that at 5% significance level, there is no association between student's awareness of the existence of WIFI within the campus to aid in e-learning and attending virtual classes,  $\chi^2 (1, N= 396) = 1.720, p = 0.190$ . At 5% level of significance, there is no association between the stability of the campus WIFI network and the percentage of attending virtual classes,  $\chi^2 (1, N= 230) = 18.408, p = .104$

**Unique contribution to Theory, Practice and Policy:** The study recommends that the institutions should providing information communication and technological support to students on E learning platform. The study also recommends the government to support the transition to blended learning of Kenya Medical Training College through funding.

**Keywords:** *Institutional Factors, Blended Learning, Students, Kenya Medical Training College.*



## INTRODUCTION

Blended learning is an approach to education that combines online educational materials and opportunities for teacher/ student interaction, with the traditional face-to-face classroom methods (Seaman *et al.*, 2018). Blended learning was introduced in the United States in late 1960s. It advanced rapidly and in 1970s Television (TV)-Based Technology to Support Live Training was commonly used in most of the trainings. During this time blended learning started with companies that began using video networks to train their employees. The instructor no longer had to be physically on-site in order to train staff members. In blended learning, learners are able to communicate with their peers, watch the lecturers and even address any questions or concerns by sending them messages (Ginder *et al.*, 2019).

Globally blended education is one of the fastest growing segments of higher education and the demand continues to rise (Seaman, Allen, & Seaman, 2018; Ginder *et al.*, 2019). Despite growing importance and demand for blended method of study, there is very little data on the scale and scope of blended learning (Seaman, Allen & Seaman 2018). In the United States of America Department of Education, there were more than 3.1 million students enrolled in fully online education as at 2017 and this represented only 15% of all students enrolled in United States. Colleges and universities (Ginder *et al.*, 2019).

In sub-Saharan Africa, Ghana is rated as one of the best countries for blended learning though its online education is still in its infancy (Togoe, 2012.) In Ghana 5 out of every 10 students have internet and most universities have 24-hour access to the internet. Though people have access to the internet, the online education in Ghanaian universities is still not fully embraced and most students prefer traditional systems to e-education (Togoe, 2012). Statistics shown by UNESCO in indicate that e-learning was improving in Ghana, though for the whole of Sub Saharan Africa the program was a huge challenge because of lack of infrastructure facilities such as computers and network in most universities to adopt the blended programs successfully (Togoe, 2012).

In Kenya, blended learning method of study was started in 2005 and is still in use at Jomo Kenyatta University of Agriculture and Technology (Tarus *et.al* 2015). Most institutions of higher learning in Kenya after the closure of all learning institutions in March 2020 have resorted to the blended learning. There are a number of surveys that have been carried out in both developed and developing countries and existing literature has identified several critical success factors in implementing blended learning programs and also a number of studies have pointed out different challenges and issues in implementing blended learning. Blended learning has many benefits to include widening access so as to reach many learners in a flexible manner, improving the effectiveness of learning and teaching via technology, reducing public spending in education and training and increasing the quality of research among others (Arkorful *et al.*, 2014). However, despite the numerous blended learning benefits, promises and opportunities for e-learning initiatives in institutions of higher learning in Kenya are faced by a number of challenges that leave stake holders dissatisfied when they fail to meet their expectations (Wright, 2016). A study by Nyerere *et al.*, (2012) on the delivery of open distance and e-learning in Kenya revealed that most of the learners 90.8% were dissatisfied with the delivery of e-learning and 85.6% of the e-tutors indicated that they were demotivated in executing their e-learning responsibilities. The drawbacks in turn have led to a slow uptake of the blended learning in institutions of higher learning in Kenya

(Nyerere, 2016). Following the global pandemic of COVID-19, on March 15, 2020, the Kenyan government abruptly closed all schools and colleges nationwide in response to the COVID-19. This measure disrupted nearly 17 million learners countrywide. Universities and institutions of higher learning have adopted e-learning in the former face to face approach as a new strategy to teaching and learning.

Blended learning provides flexibility in learning for both students and teachers. Integration of the virtual and physical landscapes enables both instructors and students to become learners, but this is most effective when there is institutional support through the provision of professional learning and the opportunity for redesigning courses for the most appropriate blend (Bliuc, 2007).

In most organizations, management often agrees that blended learning is the correct direction for training initiatives, but it fails to understand that this is a complex process that needs thought beyond an individual programme. Challenges within the organizations include; overcoming the idea that blended learning is not as effective as traditional classroom training; redefining the role of the facilitator; managing and monitoring participant progress (Hofmann, 2011).

For e-learning to be successfully adopted in a school, teachers and head teachers should be involved in the decision making processes (Cox, 2010). Leadership and support from senior management are identified as critical factors for successful implementation (Birch & Burnett, 2009; Browne *et al.*, 2010). Gunawardena (2005) points out that for e-learning to succeed in the developing world, it needs to build on another important pillar: the existence of infrastructure, along with connectivity. Developing countries like Kenya still face a lot of challenges while implementing e-learning which requires advanced level of technological infrastructure and heavy investment of resources especially at the initial stages. Most of the Kenyan public colleges rely on government exchequer for funding which has been dwindling in the recent years. According to Zake (2009), poverty is one of the most important barriers, especially due to the fact that ICT is important and therefore relatively more expensive in Africa than in developed countries. Therefore, most of the Kenyan institutions of higher learning have opted for blended learning as a starting point since it's a cheaper option in terms of implementation and requirements.

Despite the existence of a considerable body of research demonstrating the value of blended approaches to tele-collaboration (Dooly, 2008; O'Dowd, 2007), a preliminary research study carried out by O'Dowd (2010) revealed that the activity remains relatively peripheral in nature and has yet to be taken up by a significant number of university educators. With this in mind, in 2011 the INTENT (Integrating Tele-Collaborative Networks in Higher Education) project group carried out a large scale quantitative and qualitative study on tele-collaborative activity in European higher education which involved a survey of over 300 university lecturers and students and the collection of seven case studies of representative tele collaborative exchanges which involve universities in many European and non-European contexts. The study set out to explore what types of tele-collaborative practices were being undertaken by European university educators. The principal results are outlined in detail in Guth *et al.*, (2012).

According to Chambers *et al.*, (2006), factors necessary to achieve normalization of Computer Assisted Language Learning (CALL) activities were identified to be certain criteria which are dependent on the institutions involved and others which relate to the educators themselves. Factors which depend on institutional policy include the integration of CALL facilities into 'normal'

teaching space, the provision of additional time to teachers for preparation and planning of CALL activities and a conducive attitude on the part of management to the integration of new technologies. It also involves ensuring the integration of CALL activities into the syllabus and the provision of both technical support and pedagogical training for teachers in their technological activities. The factors related to educators included teachers feeling sufficiently confident to use the new technologies, having a realistic understanding of both the strengths and limitations of the technological practice in question, and the willingness of experienced practitioners to engage in training and collaboration with novice colleagues.

According to Kashorda and Waema (2014) in their E-readiness Survey of Kenyan Universities (2013) Report, the networked PCs available per 100 student's ratio was 3.8 in Kenyan universities, which was considered quite low. The e-readiness survey also indicated that 16,174 student lab computers were available for 423,664 students at the 30 universities and only 17% of students accessed computers from their campuses. On the other hand, 53% of students owned over 200,000 laptop computers in the 30 universities. It was therefore recommended in the report that universities should invest in student computer labs to serve the students who are unable to purchase laptop computers or those who may not wish to carry their laptop computers to university campuses. The e-readiness survey further revealed that universities in 2013 achieved Internet bandwidth of 4.0 Mb/s per 1,000 students compared to only 0.431Mb/s per 1,000 students in 2008.

In Kenya, institutions emphasized the provision of infrastructure, investment in human capital required to operate those ICTs has almost been ignored (Kenya ICT Authority, 2014). Additionally, there is a challenge of discrepancies in computers owned by the school. The findings have shown that the number of computers in schools varies widely from one school to another. Statistically, 17.9% of schools (10) had less than 5 computers. 46.4% of schools had 20 or less schools while 62.5% had 130 or fewer computers, which lead to a big student computer ratio and school still do not afford enough funds to purchase computers. Some of the schools (25.9%) have to outsource maintenance services while 3.7% use CFSK supports. Majority of schools (58.9%) examined lack Internet connectivity (Oloo, 2009).

### **Problem Statement**

World Health Organization recognized the spread of COVID-19 as a pandemic on 11 March 2020 as Italy, Iran, South Korea, and Japan reported rapidly increasing numbers of the COVID-19 cases. (WHO, 2020) Following the global spread of the virus in many countries in the world Kenya included, there was then an immediate and sudden suspension of schools, colleges, universities and other government institutions as a strategy to contain the pandemic. Most institutions of higher learning in Kenya including KMTC have resorted to the blended learning. However, the implementation challenges faced by these universities have continued to impact negatively on the effective utilization of the blended learning (Tarus *et al.*, 2015). Therefore, this research seeks to determine the challenges of blended learning among students in Kenya Medical Training College

### **METHODOLOGY**

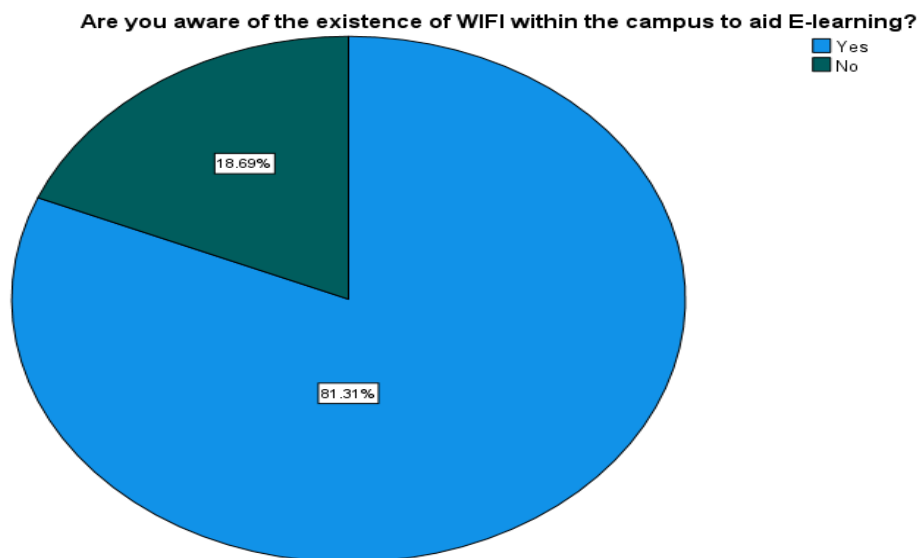
The specific objectives are to find out individual challenges, find out social economic challenges and institutional challenges. A cross-sectional descriptive study will be done. In the KMTC campuses the average student population is thirty thousand (30,000). The research will use simple

random sampling in the selected campuses. The sample size will be 384. Primary data will be collected using questionnaires and Quantitative data will be analyzed using descriptive statistics whereas qualitative data will be analyzed using content analysis. Qualitative data will be transformed into themes and analyzed with the helped of SPSS version 25. Collected data will be edited, sorted, cleaned and coded for data analysis.

## RESULTS

### Institutional challenges

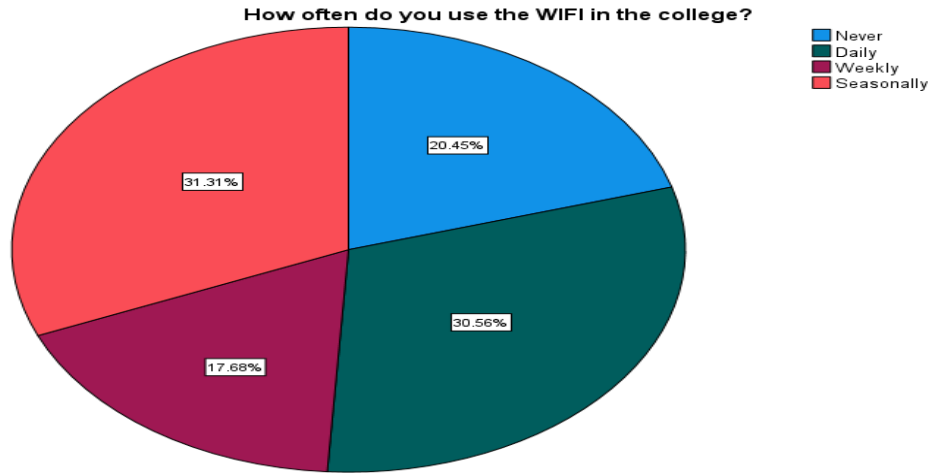
#### Availability of WIFI



*Figure 1: Are you aware of the existence of WIFI within the campus to aid E-learning?*

From the figure above, it is evident that 81.3% of the students are aware of the existence of the WIFI while 18.7% are not.

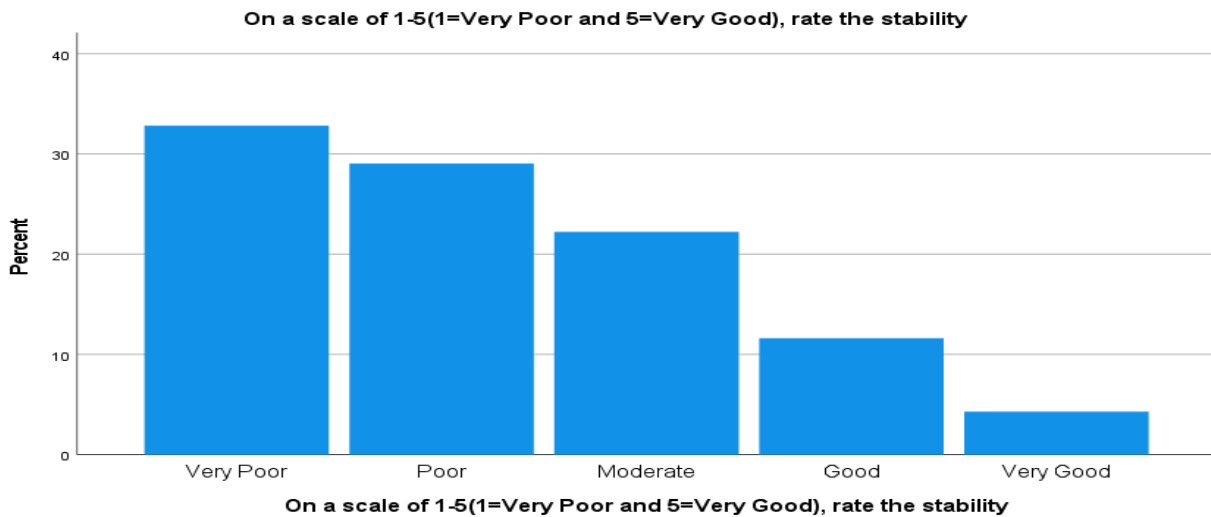
**WIFI usage**



*Figure 2: How often do you use the WIFI in the college?*

31.3% of the students use the college WIFI seasonally, 30.6% daily, 17.7% weekly while 20.5% have never used the college WIFI. The pie chart of the frequency of usage of college WIFI is presented above.

**Stability of WIFI**



*Figure 3: Network Stability*

Clearly, most of the students (32.8%) indicated that the stability of the network is very poor, 29% reports that the stability of poor, 22.2% indicated that the stability is moderate. However, only 11.6% and 4.3% reported that the stability is good and very good respectively

### Support on E learning

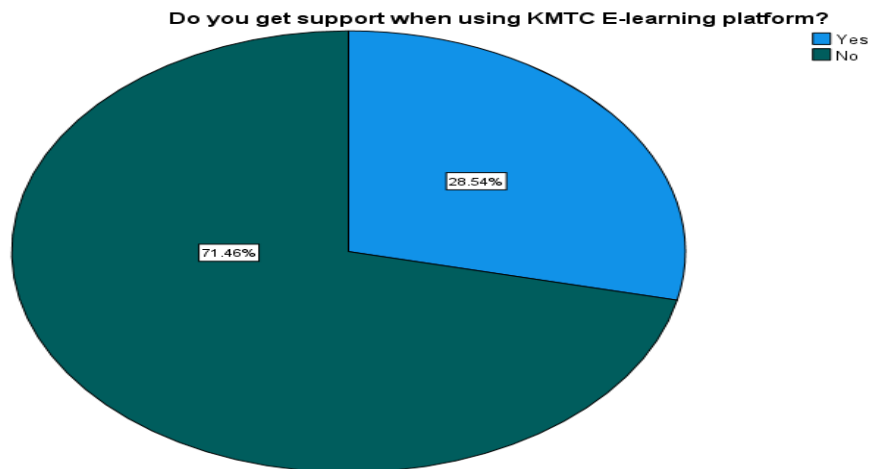


Figure 4: Do you get support when using KMTC E-learning platform?

Among the surveyed students, 71.5% reported that they do not get any support when using the e-learning platform of the college while 28.5% get support when using the platform.

### Examinations on E learning platform

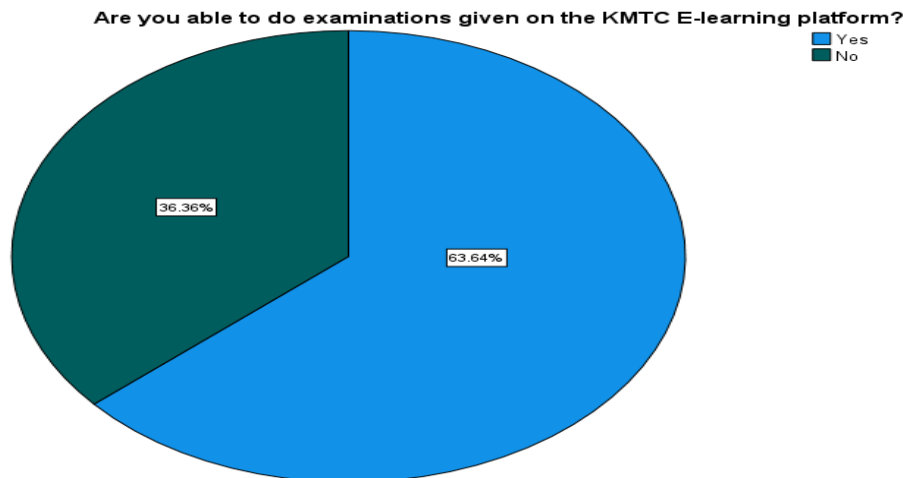


Figure 5: Are you able to do examinations given on the KMTC E-learning platform?

63.6% of the surveyed students indicated that they are able to do examinations given on the college's e-learning platform while 36.4% said they are not.

At 5% significance level, there is no association between student's awareness of the existence of WIFI within the campus to aid in e-learning and attending virtual classes,  $\chi^2(1, N=396) = 1.720$ ,



$p = 0.190$ . At 5% level of significance, there is no association between the stability of the campus WIFI network and the percentage of attending virtual classes,  $\chi^2 (1, N= 230) = 18.408, p = .104$

### **Conclusions**

The study concluded that Institutional support is a challenge when it comes to achievement of blended learning. The study also concluded that students used the college WIFI seasonally, there was stability of the network is very poor and that they do not get any support when using the e-learning platform of the college.

### **Recommendations**

The study recommends that the institutions should providing information communication and technological support to students on E learning platform. The study also recommends the government to support the transition to blended learning of Kenya Medical Training College through funding.

## REFERENCES

- Bliuc, A. G. (2007). Research focus and methodological choices in studies into. In Internet and Higher Education, 10, 31-244. E-Learning resources. (2012). Retrieved July 31, 2012 from [http://www.grayharriman.com/blended\\_learning.htm](http://www.grayharriman.com/blended_learning.htm)
- Cox M.J. (2010). The changing nature of researching information technology in education. In Researching IT in education: Theory, practice and future directions (Eds. A. McDougall, J. Murnane, A. Jones & N. Reynolds), pp. 11–24. Routledge: Taylor and Francis Group, Abingdon, England.
- Hofmann, J. (2011). Soapbox: Top 10 challenges of blended learning. Retrieved July 31, 2012 from <http://www.trainingmag.com/article/soapbox-top-10-challenges-blended-learning>
- Kashorda, M., & Waema, T. (2014). E-Readiness survey of Kenyan Universities (2013) report. Nairobi: Kenya Education Network.
- Oloo, L. M. (2009). Baseline survey report for ICT in secondary schools in selected parts of Kenya. Maseno.
- Touray, A., Salminen, A. and Mursu, A. (2013). ICT barriers and critical success factors in developing countries. The Electronic Journal on Information Systems in Developing Countries, 56(7), 1-17
- Vázquez-Cano, E.; León Urrutia, M.; Parra-González, M.E.; López Meneses, E. Analysis of Interpersonal Competences in the Use of ICT in the Spanish University Context. Sustainability 2020, 12, 476. [CrossRef]
- Zake, J. (2009), Challenges to e-learning in developing communities of Africa. Available at: <http://digitallearning.in> (Accessed on August 28, 2013).