



UNIVERSITY OF EMBU

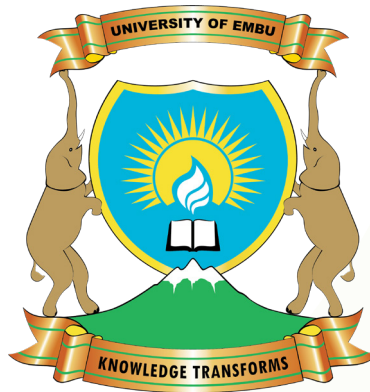
UNIVERSITY OF EMBU E-LEARNING CONFERENCE 2023

BOOK OF ABSTRACTS

DATES: 2ND - 3RD NOVEMBER, 2023

THEME

**Quality Teaching & Learning, Assessment, Technology
and Innovativeness in Virtual Environments**



UNIVERSITY OF EMBU

E-LEARNING CONFERENCE 2023 BOOK OF ABSTRACTS

DATE:

2ND – 3RD NOVEMBER 2023

VENUE:

VIRTUAL

(ZOOM WEB CONFERENCING PLATFORM)

THEME:

QUALITY TEACHING & LEARNING, ASSESSMENT, TECHNOLOGY AND
INNOVATIVENESS IN VIRTUAL ENVIRONMENTS



Fundamental Statements

FUNDAMENTAL STATEMENTS

Our Vision

A dynamic epicentre of excellence in training and research for service to humanity.

Our Mission

To generate, advance and disseminate knowledge through training, research and innovation for the development of humanity.

Philosophy

Enhancing human capacity for societal development.

Our Core Values

Integrity
Innovativeness
Professionalism
Customer focus
Teamwork



ACKNOWLEDGEMENTS

CONFERENCE COMMITTEE MEMBERS

1. Prof. Speranza Ndege	Chairperson
2. Dr. Salome Migose	Member
3. Dr. Elizabeth Obura	Member
4. Dr. Josephine Ngunjiri	Member
5. Dr. Paul Mugambi	Member
6. Dr. Consolata Kirigia	Member
7. Dr. Peter Kariuki	Member
8. Dr. Steve Wakhu	Member
9. Dr. Milcah Nyaga	Member
10. Dr. Victoria Mukami	Member
11. Dr. Wilson Ngigi	Member
12. Dr. Patrick Kimani	Member
13. Dr. Florence Kaumi	Member
14. Dr. Mark Kimani	Member
15. Mr. Maurice Murimi	Member
16. Ms. Tecla Murugi	Secretariat
17. Mr. Paul Githinji	Secretariat
18. Ms. Martex Moraa	Secretariat
19. Ms. Maurine Jeruto	Secretariat

GRAPHIC DESIGNERS

1. Mr. John Ngugi	Graphic Designer
2. Mr. Brian Miheso	Graphic Designer

TECHICAL SUPPORT

1. Mr. Maurice Murimi	ICT
2. Mr. Jeff Kimanga	ICT
3. Mr. Paul Githinji	ICT
4. Ms. Martex Moraa	ICT



TABLE OF CONTENTS

1. Title Page.....	i
2. Fundamental statements.....	ii
3. Acknowledgements.....	iii
4. Table of Contents.....	iv
5. Message from the Vice Chancellor.....	1
6. Remarks from the Deputy Vice Chancellor, ARE.....	5
7. Remarks from the Registrar, ARE.....	6
8. Remarks from the Chairman, Conference Organizing Committee.....	7
9. Guest Speaker.....	9
10. KeyNoteSpeakers.....	11
11. Conference Programme.....	34
12. Abstracts	44





MESSAGE FROM THE VICE CHANCELLOR



Prof. Daniel Mugendi Njiru, Ph.D EBS
Vice-Chancellor, University of Embu.

I take this opportunity to warmly welcome you to this e-Learning Conference. Thank you all for sparing time in your busy schedules to attend this important conference. We also appreciate the institutions represented here by experts in e-Learning from West, Central and Eastern Africa. We have come together because we have a common interest. The next two days will be busy for us all as we follow the proceedings and deliberate on various topical and emerging issues in e-Learning. I believe that each one of us will benefit immensely by way of interacting, networking, exchanging ideas and sharing knowledge. I am glad that this conference is happening virtually, which to me, is a testimony of our willingness to embrace modern technology. In today's rapidly evolving technological landscape, embracing digital technology is imperative for anyone seeking to remain competitive. The digital age presents exciting opportunities for innovation by individual researchers and policy makers, as well as institutions of higher learning. By harnessing the power of e-Learning to transform the educational and research landscape, we can help in revolutionizing our training activities and stay ahead in a dynamic marketplace, thereby driving sustainable growth.

We recognize one special organization. The Association of Commonwealth Universities (ACU) represented here today by Ms. Fiona Khandoker, for the great support we have received in building the e-learning capacity in our University. Ms. Khandoker serves as the Senior Programme Manager for the Association of Commonwealth Universities, where she is responsible for monitoring interconnected work streams, formulating strategies and defining objectives for the Partnership for Enhanced and Blended Learning (PEBL) projects in East and West Africa. Thank you very much Ms. Khandoker and feel most welcome.

We also recognize Makerere University, represented here today by our Keynote Speaker, Prof. Paul Muyinda, for actualizing the ACU support. On two occasions (February-March 2021), and (December, 2021-February 2022), a team of experts from Makerere University spent days at the University of Embu imparting e-Learning knowledge and skills to our academic staff through workshops and seminars. e-Learning has now become a reality in our University, thanks to Professor Muyinda for your untiring efforts.



May I also take this opportunity to recognize and appreciate Prof. Ezra Maritim. I have known Professor for many years. He is a scholar and an expert, who has done so much in the area of Open, Distance and e-Learning. Professor Maritim has worked at the University of South Africa and the Open University of Tanzania. He was a Vice-Chancellor at Egerton University, and has also served as Deputy Secretary, Commission for Higher Education (CHE). Recently, Prof. Maritim chaired the Technical Working Committee on the Operationalization of the Open University of Kenya. His good work in this area speaks for itself and we are privileged to have him as our Keynote Speaker today. Welcome Professor Ezra Maritim.

We are also privileged to have Dr. Rebecca Wambua as one of our Keynote Speakers today. Dr. Wambua is the Chairperson of Distance, Open and e-Learning Practitioners' Association of East Africa, and also the Chairperson of Distance Open and e-Learning Practitioners' Association of Kenya. She is a Distance Education expert and also a Senior Lecturer at Nazarene University. We are honored to have Dr. Wambua in our midst and I believe that her presentation will be an eye-opener to us all.

The theme of this Conference is: "Quality Teaching and Learning, Assessment, Technology and Innovativeness in Virtual Environments".

I believe everyone has an experience to share on this theme, whether you will be making a presentation or participating in the plenary sessions. I would like to start by sharing with you some of our experiences with e-Learning at the University of Embu.

As you are aware, the term 'e-Learning' was first used in a professional context in November 1999, when Elliott Masie, an American expert in educational technology, coined this word at his TechLearn Conference at Disneyworld. According to him, the 'e' in e-Learning had multiple meanings, namely: "E" for Everywhere Learning; "E" for Engaging Learning; "E" for Evidence and Research on Learning; "E" for Everyone as Learners, "E" for Experiences and "E" for Effective Curation. So here we are in this Conference, working to give meaning to Elliott Masie's many 'E's.

The experience of the University of Embu is that, when we reflect back at where we were in 2020 when the Covid-19 Pandemic forced us out of our physical institutions, this is when we appreciate the importance of embracing e-learning and the efforts our teaching staff expended to ensure that learning continued through blended and e-learning modes of delivery. Integrating teaching and learning with technology is not easy. We decided to do it right from the onset to ensure that the University lived up to the regulators' and stakeholders' expectations, and the University statutes on the other hand.

We started by identifying the gaps that needed to be addressed, especially in empowering our staff and students. Our academic staff required two major skills: Development of Interactive Modules and how to facilitate courses in the virtual environments. So we invested 'time' training on the two skills, so that our staff would develop quality course content as well as interact with students online efficiently and effectively. On the other hand, the gap identified in the students was training in computer literacy and navigation of the Learning Management System (LMS). This was done very fast and successfully, so our students and staff were ready to move to the blended learning modes.

We found the blended learning approach most suitable because it provides flexibility when working in virtual environments, while at the same time creating convenience for both the learner and the teacher. The complex topics, practicals and demonstrations are delivered face-to-face in the classroom, while the more theoretical



subjects are delivered through the online platforms.

Training our academic staff has yielded positive results. To-date, 98% of the units taught in the University have facilitator notes, while 79% have complete modules with e-tivities. The training on development of quality interactive modules is continuous, while 97% of our full-time lecturers have been trained in online facilitation skills. Every month, we monitor and record the performance of teaching staff in development and uploading of interactive modules on the Learning Management System. We have also come to realize that the teaching staff who develop quality modules complete with e-tivities, have an upper hand in dealing with students in virtual environments. The training of trainers has made our facilitators more effective and efficient because:

1. They understand the role of the Online Facilitator better;
2. They can easily understand the strengths and weaknesses of the online learner;
3. Many facilitators are now comfortably engaging and interacting with students online; and
4. Students enrolled in units which have very active facilitators are benefiting immensely from the constant online interaction.

As already mentioned, our students are well trained in computer literacy skills and navigation of the LMS in preparation for effective online learning. They not only access the interactive modules, but also the thousands of open educational resources provided by our digital library. Further, the Information, Communication and Technology (ICT) Department has a Student Support Service Unit that addresses students' technology-associated challenges. What this means, ladies and gentlemen, is that, for effective learning to take place, both the teacher and the student must get the relevant skills to teach and to learn online. It is clearly evident that only the technology-empowered teacher can comfortably engage in online teaching and learning with the ability to attend to the fast and slow learner equally well.

From our experience, the technology empowered teacher usually combines various educational tools (audio and visual), and other e-Learning materials that suit the virtual classroom. Nowadays, it is not uncommon to hear students requesting the teacher to facilitate the class online rather than have it face-to-face.

The University of Embu has invested heavily in ICT infrastructure which includes Internet Bandwidth that caters for the high speed required to teach and learn online. We have invested in new high end servers and computers to stream videos and support the heavy traffic of staff and students logging into our website, the ERP as well as accessing the e-Library. May I take this opportunity to recognize our partner, Kenya Educational Networks (KENET) who hosts our LMS, for the success that we have recorded at the University in as far as online learning is concerned.

The LMS we are using currently is Moodle, because of its simple and friendly features that encourage collaboration and teamwork, through its interactive features, such as discussions forums, chats and messaging tools. For students with disabilities, the University has identified their needs and provided assistive devices to help them navigate the online space with ease. The University is constantly keeping abreast with the new technologies that are friendly, and we shall keep investing in and upgrading our systems and facilities to cater for this category of students.

There are many experiences we can share. I have just cited a few, but because of time, I will not dwell so much on it. I must say that this Conference marks another important milestone in the University of Embu e-Learning conference series. I am happy to note that from this conference, we expect to share our experiences and get to learn new trends from our colleagues, experts and players who have been in the e-learning sector for a longer



time. This will help sharpen our skills and help us improve our service delivery in the online teaching and learning space.

In closing, let me congratulate the Conference Organizing Team led by Prof. Speranza Ndege, Director, ODeL for successfully planning this Conference. Your commitment to promoting e-Learning as a key mode of study in our institutions of higher learning is commendable, and will be rewarded accordingly. I thank all of you, the delegates and facilitators for your contribution, and I look forward to benefitting a lot from this conference. The essence of e-learning is sharing without being limited by time or space. I am sure that we shall all benefit from this special form of interaction, sharing of experiences, expertise and ideas, thanks to modern technology.

I am happy to see the presence of many experts in the fields of e-learning and open learning, from across Africa in the areas of education, human resource development and IT. To all our delegates, I wish you a fruitful time, and I hope that this will be an exciting and a memorable conference, where you will make new friends and partners in the field. I am sure we shall all learn best practices as well as new emerging trends in e-Learning. Thank you and God bless you.

Prof. Daniel Mugendi,
Vice-Chancellor, University of Embu.



REMARKS FROM THE DEPUTY VICE-CHANCELLOR (ACADEMICS, RESEARCH AND EXTENSION)



Prof. Kiplagat Kotut,
Deputy Vice-Chancellor, (Academics, Research and Extension)

I wish to begin by acknowledging the participants here; the Guest Speaker, Ms. Fiona Khandoker, keynote speakers; Prof. Ezra Maritim, Prof. Paul Muyinda and Dr. Rebecca Wambua; members of University of Embu management who have joined in, all the conference participants, delegates from different parts of the continent, colleagues from other universities who have joined us as conference participants and students.

I wish to mention a few observations for us to reflect on: we are all aware that nowadays there is excessive knowledge with us in the world along with numerous experts who most of them in reality are business people. Consequently, in the midst of all the excessive knowledge and expertise research is thus indispensable.

Hence, the reason for the conference is to approach issues we have always perceived about from an evidence-based basis. Our gathering is to distill from the huge volume of information whatever works in terms of e-learning.

The questions we ought to ask ourselves include; what is the way forward? What have we achieved? What works best? I am happy that we shall be listening to experts enlightening us from their dedicated work what is good for students, lecturers, what is working and which way forward as far as the e-learning space is concerned. My request to those attending this conference is that that; you interrogate critically the information shared by experts because we need this information, to work with it and to focus on the presentations in spite of the Conference being virtual.

Thank you.

Prof. Kiplagat Kotut,
Deputy Vice-Chancellor, (Academics, Research and Extension)



REMARKS FROM THE REGISTRAR (ACADEMICS, RESEARCH AND EXTENSION)

When we first coined this idea of having the conference, my first question was, are we going to have it in person, online or as a distance conference? However, the organizers were clear and have put their words into action presumably because we need to foster the virtual interaction. Universities have conducted so much research and training, in the areas of education but mainly concentrating around the face-to-face classroom mode of learning. Very little has been given to the online learning, distance learning and electronic learning. Therefore, as we participate in this conference, it is important to rethink about ODEL and engage with each other in the advances we have made, either as a consequence of research or demand for online and distance learning.

Most advanced universities will always have ODEL as one of the key factors of their content delivery modes but we know that largely in Africa, we are still relying on the face-to-face classroom set-up. This has really disadvantaged us in the essence that we are confined to the local communities attending our Higher Education. The few universities that have embraced ODEL face a lot of challenges but with this conference, its time for sharing and implementing the advances an institution has made.

I am happy to note that we have international participants some of whom that have excellent e-learning platforms. Some of the countries benchmarked in terms of advances in e-Learning include institutions in South Africa and Uganda, especially Makerere University.

We acknowledge that certainly western countries are far ahead and have covered much ground to the point where they are able to tap student population in Africa to fill their ODEL capacities. The institutions that take advantage of ODEL and its research have a higher student enrolment via the virtual platforms. Some of the challenges faced in African countries include the technology issues, capacity issues and infrastructure. These challenges cannot be conquered if we do not do research and implement the systems currently.

I am happy to note that on looking at presentations list, it is clear that institutions are ready to implement e-Learning. I therefore, urge us all to collaborate with institutions who have already done it. A majority of the presentations are actual real-life experiences from our own institutions. It is even more interesting that we are going to have experiences from other advanced international institutions. This gives us very good impetus for the Conference.

Further, the default outlook is always to go to the face-to-face mode of study and interrogate whether the same requirements, objectives and quality envisaged would be met in an e-Learning set-up. However, having participated in ODeL and Blended Teaching and Learning, I am strongly convinced it is possible despite the fact that it calls for a lot of commitment and research work into it.

Consequently, this is the right time for participants in this Conference to discuss the advances together and how to implement ODeL. Additionally, let this not be a one-time conference to attend or organize, but have such conferences countless times to advance the ODeL mode of content delivery in our institutions.

Thank you.

Prof. Jackson Muthengia,
Registrar, (Academics, Research and Extension)



Prof. Jackson Muthengia,
Registrar,
(Academics, Research and Extension)



REMARKS FROM THE CHAIRPERSON, CONFERENCE ORGANISING COMMITTEE AND DIRECTOR, OPEN, DISTANCE & e-LEARNING (ODeL)



Prof. Speranza Ndege

Chairperson: Conference Organizing
Committee and Director,
Open, Distance and e-Learning
(ODeL)

It gives me much pleasure to see so many delegates joining us today from different countries for this virtual e-Learning Conference.

This event today takes me back to 1997 when the first virtual certificate courses were streamed live from Comsat in Massachusetts to Africa via Satellite. This were the World Bank sponsored programmes offered by African Virtual University in liaison with institutions in Africa.

Thus, selected institutions in 23 Anglophone countries and 17 Francophone countries experienced interludes of live virtual learning on specific days. In actual fact, most lectures were pre-recorded. In Nov. 2005, the Ministry of Education, Kenya, sponsored 3 people to attend the ICWE Conference in Berlin, Germany. I was among the 3 and in a roundtable with Ms. Rebecca Stromeyer Founder of e-Learning Africa, the 1st e-Learning Conference for Africa was discussed. This Conference was planned, and in 2006, it was held in Addis Ababa. The 2nd e-Learning Conference was held in 2007 at Safari Park Hotel, Nairobi. Later, other countries such as Rwanda, Ghana and Senegal hosted e-Learning conferences after learning of the successes of these e-Learning-Africa conferences. Soon it became a tradition for countries in Africa to host e-Learning Conferences upon request by the organizers.

Universities that sent delegates to these e-Learning Conferences have gained confidence overtime to host e-Learning conferences in their institutions. This year, it is the turn of University of Embu to host its first e-Learning Conference. There is a wise saying among the Meru community that says, 'a man who has not eaten in someone else's house thinks the mother is the best cook.' Indeed, colleagues from the University of Embu have joined this Conference to hear best practices in e-Learning by experts from other institutions. There are 12 presentations in the Conference Programme from the University of Embu. They too will share their experiences.

Finally, allow me to thank colleagues from various universities who submitted Abstracts. Both the Book of Abstracts' and Certificates will be shared Conference participants through a link (to be shared later). This Conference was organized by a Committee; the members will be introduced during the Conference official closing ceremony.

Thank you very much for responding to our Conference.

Prof. Speranza Ndege

Chairperson: Conference Organizing Committee and Director,
Open, Distance and e-Learning (ODeL)



GUEST SPEAKER



GUEST SPEAKER



MS. FIONA KHANDOKER

SENIOR PROGRAMME MANAGER,
THE ASSOCIATION OF COMMONWEALTH UNIVERSITIES

PROFILE

Ms. Fiona Khandoker has been implementing higher and further education programs in Asia and Africa for 7+ years. She currently serves as Senior Programme Manager for The Association of Commonwealth Universities, where she is responsible for monitoring interconnected work streams, formulating strategies and defining objectives for the Partnership for Enhanced and Blended Learning (PEBL) projects in East and West Africa. In this role, she manages all aspects of the capacity strengthening initiatives to facilitate the development, delivery and sharing of blended learning courses.

SPEECH BY GUEST SPEAKER:

Prof. Daniel Mugendi, VC at the University of Embu.

Prof. Kiplagat Kotut, Deputy Vice-Chancellor, Academics, Research and Extension at the University of Embu.

Prof. Speranza Ndege, Director, ODeL and Chairperson, Conference Organizing committee, University of Embu.

Members of the Organising Committee

Distinguished Guests

Conference Presenters

Ladies and Gentlemen,

Welcome to Day 2 of University of Embu's E-Learning Conference 2023. I would like to extend my warm welcome and heartfelt thanks to all guests from universities, international organizations, and online education



institutions who are with us today.

My name is Fiona Khandoker and I led the Partnership for Enhanced and Blended Learning Initiative from 2018 to 2021, during which I had the great opportunity to closely engage with the highly competent e-learning team at the University of Embu.

The theme of today's conference is "Quality Teaching and Learning, Assessment, Technology and Innovativeness in Virtual Environments" which could not have been more timely, given that the need to incorporate innovative technologies into teaching and learning has become more important than ever before. There is a strong need to revise education delivery models, in the face of increasing numbers of tertiary student enrolments, high costs of expanding higher education institutions and the influence and impact of new technologies and AI. Despite this urgency, most universities globally, not just in sub-Saharan Africa, continue to be largely driven by traditional approaches and are yet to fully integrate e-learning.

E-Learning promises an education system with content delivery and learning efficiencies of unprecedented proportions. Universities are able to efficiently deliver content to a large number of learners, while these learners are able to continue to be in education while balancing their jobs and other personal commitments. E-Learning is the best possible solution for democratizing higher education in Africa and ensuring that access to quality higher education is not limited by geographical location, tuition fees, or lack of access to academic resources.

However, as you are all aware, there remain some serious challenges, one of which is unequal access. According to the UNESCO, 89% of students in sub-Saharan Africa do not have access to household computers or laptops. One immediate consequence of this is that the full interactive potential of e-learning cannot be utilized to the same degree by all students. Some are able to reap the benefits of e-learning, while many others were unable to effectively engage with the content.

82% of students (across all levels) in Sub-Saharan Africa lack internet access. While mobile phones can enable learners access learning materials, connect with their teachers and with one another, about 56 million learners live in locations not served by mobile networks, almost half in sub-Saharan Africa. Most public university students in Sub-Saharan universities, about 7 million young people, could not access meaningful education for several months during the Covid-19 pandemic. There are stark differences in ICT infrastructure between and within countries. Kenya for example, is much better connected than Rwanda and Uganda. Within each country, urban centres enjoy better access compared to semi-urban and rural areas.

In addition to the above, there exists the issue of steep costs. People in African countries pay some of the highest rates in the world for internet access as a proportion of income, with some countries being much more expensive (such as Kenya) compared to others (such as Tanzania). While smartphone penetration has spiked over the past decade, progress in reducing the cost of accessing the internet has not been as rapid.

Significant investments needed to be made by government agencies to enhance and strengthen ICT infrastructure in semi-urban and rural areas. Policymakers need to prioritise access for students and teachers, especially those who live in semi-urban, rural and/or remote locations. Policymakers need to create an enabling policy environment to encourage private sector telecommunication firms to provide effective and affordable internet services and will need to consider subsidies to universities and students to enhance access.

And with those remarks, I welcome you all to this conference and trust that it will provide a platform for practitioners of the sector to openly share knowledge, learnings, tools and frameworks and I strongly encourage all of you to derive the maximum benefit from this useful engagement.



KEYNOTE SPEAKER 1



PROF. EZRA MARITIM

COUNCIL CHAIRMAN, OPEN UNIVERSITY OF KENYA

PROFILE

Prof Ezra Maritim earned a Bachelor of Arts degree from University of Nairobi in 1973. Upon graduation that year, he was awarded University of Nairobi staff development scholarship under the sponsorship of the Carnegie Foundation of New York for postgraduate studies at Harvard University and subsequently earned Master of Education and Doctor of Education degrees from Harvard University in 1975 and 1979, respectively.

Prof Maritim spent many years at Kenyatta University both as a teacher and administrator. He served as University Secretary and Deputy Vice-Chancellor (Finance, Planning, and Development & Administration). Between 1983 and 1990 he was seconded to serve as a Deputy Secretary, Kenya National Examinations Council. Other administrative positions he has held in higher education landscape include being a Deputy Coordinator, World Bank supported University Investment Project; Deputy Secretary, Commission for Higher Education and the Vice-Chancellor, Egerton University. His policy and community participation activities have involved being:

- Chair: Technical Working Committee on the Operationalisation of the Open University of Kenya
- Director: School of Distance Learning, Egerton University
- Chair: Commission for Higher Education
- Member: Board of Trustees, International Council for Distance Education, Oslo, Norway
- Member: Board of Trustees, Moi African Institute
- Member: Board of Directors, African Virtual University
- Member: Rift Valley Water Catchment Advisory Committee
- Chair: Rift Valley Water Services Board



- Secretary General: African Council for Distance Education
- Chair: Board of Governors, Rift Valley Institute of Science and Technology
- Member: Kabarak University Council
- Member: National Environmental Tribunal
- Chair: School Board of Governors, Kaplong Boys Secondary School
- Member: Commission for Higher Education
- Discussant: Constitution Review Process

At the regional level, Prof Maritim served as UNESCO and UNDP consultant on the development of Kigali Institute of Education (currently University of Rwanda-Kigali College of Education) in 1998 and 1999 and the development of education programs to be offered through distance learning; taught as a Visiting Professor at the University of South Africa and the Open University of Tanzania and served as the Coordinator of the Southern African Development Community Centre of Specialisation in Open and Distance Learning (Teacher Education), Dar es Salaam.



KEYNOTE ADDRESS BY KEYNOTE SPEAKER 1:

I am happy to be with you in this e-learning conference. OUK shares with you the initiative of embracing e-learning in our institutions of higher learning. As I share with you issues around the adoption and adaption of e-learning in our institutions of higher learning, I will base this sharing on my mixture of experiences, namely:

- i. Teaching in conventional and dual institutions - Kenyatta University and Egerton University
- ii. Teaching in a single mode distance learning institutions - UNISA and OUT.
- iii. Managing a regional ODL capacity building centre: The Southern African Development Community (SADC) Centre of Specialization in ODL (Teacher Education) (Dar-es-Salaam, TZ).
- iv. Managing an ODL unit in a dual mode public university.
- v. Leading a team on the operationalization of the OUK and what we conceptualized as the best practices in e-learning.

As OUK, we are looking forward for the presentations from this Conference to help us learn new ideas for the improvement of our e-learning approach. Since OUK was chartered, we are in a learning spree mood.

Ladies and gentlemen, “What do you know about OUK?”

1. Operationalization of OUK involved programs design and development, module development and review, and digitization.
2. At OUK e-learning is our primary mode of delivery of instructions and we have set ourselves to have 61,000 students on this mode by 2027. The current population of learners taking at least one course online globally is approximately 5 million.
3. OUK sees e-learning as the sole vehicle for scaling up access and inclusivity in higher education.
4. We at OUK recognize prior learning for admission and hence down grade the concept of drop out in education.
5. The design and development of 8 programs and digitization of courses costed approximately Kshs. 270 million-based on DSA alone. If consultancy fees were to be included the figure would have been approximately Kshs. 400 million. This gives you an idea of cost implications of migration of your programs to e-learning mode or development of programs to be delivery through an e-learning platform.
6. OUK first cohort of learners are reporting on November 30, 2023.
7. With high use of technology, we do not see the need for Learning or Regional Centres, a practice that is associated with ODL institutions with low level of technology use. **Note similarity:** Local universities established physical campuses because of low technology use and finally collapsed for being unsustainable.

PART 1: CONTEXTUAL CONVERSATION

Ladies and gentlemen, before we go into real discussion on the theme of this Conference, we need a conversation on our background situation, barriers and enablers towards e-learning at both macro and micro levels. These conversations are on:

- Demystification of e-learning
- Being Innovative Universities
- Learning from Others
- Academic Staff Preparedness



First, We Need to demystify E-learning

Ladies and gentlemen, how do we increase e-learning acceptability through demystifying e-learning?

This conference is on e-learning and therefore as a relatively new mode of learning in the country, the public and potential applicants are bound to hold erroneous misconceptions about e-learning. It is important for us as policy makers at all levels and e-learning promoters to rectify these fallacies so that they do not hamper the progress of e-learning development and acceptance in our institutions and in the country.

One recent misconception about e-learning in this country that was posted in the mass media that I want to bring to your attention is:

Misconception: Online examination is a useless measure of academic achievement-a student is able to google answers and paste them for marking (Serem Kipkosgei, Daily Nation, May 1, 2023, p. 20).

Fact: The outcomes of online examinations are as good as those of examinations administered under physical invigilation. Anti-cheating mechanisms are inbuilt in the LMS for purposes of checking of cheating on submitted assignments such as projects, take home assignments and AI is inbuilt into final proctored assessment/examination.

There are many others like Serem including those leading higher learning institutions who are yet to embrace e-learning and see e-learning as a disruptive technology with respect to depersonalization of teacher- learner interaction.

Ladies and gentlemen, despite isolated misconceptions, I believe acceptance of e-learning is no longer facing the challenges of 1990s when the country lacked e-learning champions. The acceptance level of e-learning is now being enhanced by such situations as government policies such as e-citizen, e-procurement, e-passport, e-banking, last mile connectivity of internet services, etc, institutional policies, and Covid 19 among other driving forces. These are our enablers.

Our Second Level of Conversation is the Need for Innovation

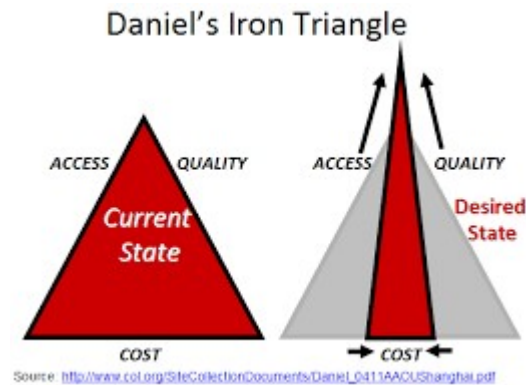
Ladies and gentlemen, it is only through being innovative universities that e-learning will take root in our institutions. Ladies and gentlemen, “**Are we ripe for innovation?**”

The answer is in affirmative. What are the indicators of the need for innovation? What are the things we need to fix? Innovations implies finding solutions to the following challenges that have direct bearing on e-learning impact.

1. Financial status

- Media reports portrait a picture of govt fighting its own institutions. “Universities on Sale for being unsustainable”
- Govt envisages chopping university budget
- Parents paying more – direct and indirect costs

Place of e-learning? -Scalability of numbers and economies of scale leading to tuition reduction or stability. Sir Daniel's Iron Triangle applies here.



2. Learner support services

- E- Learning students finding hard to access lecturers. Why?
- Who are the recipients of student complaints?

Place of e-learning? Facilitators' adoption of techno-culture otherwise up to 80% failure rate.

3. Technology Choice

- Is missing marks phenomena a technological or human issue?
- Delay in processing transcripts
- The place of ERP- admission, tuition payments, lecturers' work load
- Instructional technology that inbuild pedagogical soundness.

Place of e-learning? Technology that provides or integrates Learning Analytics

4. Programs

- Addressing employability
- Micro credentials
- Tracer studies of past graduates

Place of e-Learning? Ability to make programs attractive and capture diverse population of learners.

5. Admission

- Exclusivity vs inclusivity
- Place of prior learning and non-traditional population
- Scalability of numbers

Place of e-Learning? Flexibility

6. Export of education and regional connectedness

- Inability to attract international and regional students (UIB, 2006; PWPER, 2023).



- Current mode of teaching and learning is not favorable to international and regional students.
- AU has recognized Kiswahili as a continental language. How are we going to offer it in a cost-effective way?
- The previous WTO driven method of moving to another country and setting up a campus is out of date.
- Global status:
 - Ⓞ UNISA- 10% of students come from outside SA
 - Ⓞ Open University of United Kingdom- 5% are foreign students

7. Attracting International and regional students

Difficult for dual mode institutions to attract international students through e-learning mode for full study programs. Yes, only courses.

Place of e-Learning? E-learning being the vehicle for achieving global visibility.

8. The Globe Emerging 21st Century Learning Technologies

- As a baseline, I ask myself, having crissed-crossed technological advances: What happened to Olympia Typewriter technology of 1970s and Gestetner? What happened to the 80-column variable punched card for data entry?
- Where is our institutional ranking globally?
- What goes into this global ranking? Research publications only? No. A number of things including: adoption and adaptation of emerging learning technologies

Our Third Level of Conversation is Learning from Others

Ladies and gentlemen, as we embark on the road to full scale e-learning, let us learn from the successes and failures of other institutions that have travelled on this similar road. Locally, **what did we learn from AVU?**

- Being a fully online institution is possible.
- E-learning was not new delivery mode prior to COVID19.
- Heavy investment from World Bank and African Development Bank.
- Delivered programs across the African continent.
- Developed over 1,600 OERs.
- Collapsed in 2021 after 22 years in existence due to lack financial support from donors and the 19 African governments that signed AVU charter, including Kenya
- Low impact on Kenya's university institutions. Why?

Ladies and gentlemen, these are the lessons we can learn from AVU:

1. As institutions of higher learning, we were not ready to fully adopt e-learning technologies though ODeL Centres were set up and equipped in some AVU partner institutions.
2. E-learning investment/startup cost is extremely high.



Our Fourth Level of Conversation is Academic Staff Preparedness

Ladies and gentlemen, let not see e-learning as if it is only anchored on technology, human elements require serious consideration and hence academic staff are central. The question is: **“How prepared are your teaching and other learner support staff?”**

The core pillar of any university, whether conventional, open or virtual is the academic staff. While all are required to have accredited and advanced qualifications in their subject areas, e-learning because of its nature and requirements requires a different staff trait including:

→ **Readiness for re-training:**

- If **technophiles** they are more likely to be younger and ‘digital natives’ and hence comfortable with technology.
- If **technophobes** they are likely to be older and unfamiliar with technology and are ‘digital migrants’ and hence requires institutional consensus-building.

→ **Believers** in distance learning philosophy and practice

→ **Timeliness** e.g. module development and learner support [to cite 2019 and 2020 experience on EPSC 228]

PART II: E-LEARNING TEACHING/FACILITATION ARCHITECTURE

Ladies and gentlemen, sometimes a perception is created that e-learning is so remote or even unlike any teaching we all went through at our high or university days. Principles of good teaching apply to all situations. Ladies and gentlemen:

- Good teaching is good teaching irrespective of whether an old or a new platform is used.
- Ineffective teaching is ineffective teaching irrespective of the environment (classroom or online)

What are the known best practices of teaching and learning in face-to-face set up that have been identified in teaching literature vs online teaching and learning?

Face-to-face (simple technology assisted) (Nilson & Goodson, 2021)	E-learning: blended/ hybrid, hyflex, and fully online
1. Interaction between learners and teachers	(same) using variety of media
2. Developing cooperation among students	(Same) through group assignments; projects; group tasks
3. Encouraging active learning	(Same) chats and discussion forums
4. Giving prompt feedback	(Same)- Synchronous communication
5. Audible teacher’s voice	(Same) audio and video, animations /simulations
6. Emphasizing time on task	(same) submission dates provided in LMS
7. Communication of expectations	(same) through sign posting and rubrics
8. Recognizing diverse talents and ways of learning-cognitive styles.	(Same) Howard Gardner’s multiple intelligence captured through use variety of media





9. Assessment derived from learning outcomes	(Same) but varied methods plus self- assessment and reflections
10. Preventing cheating through traditional physical invigilation	(same) AI assisted proctored assessment

Ladies and gentlemen, this comparison brings out one thing: Online approach is richer on the use of various instructional technologies and learning resources.

Infrastructure Required to Deliver Effective E-Learning Teaching

Ladies and gentlemen, e-learning is not wholly driven by technology.

1. Human resource:

- Tutors need to be considered as part of infrastructure. Without adequate training on online teaching technology will be ineffective.

2. Consideration for the Choice of Technology:

An LMS: Using Data Stored in LMS

- An emerging learning technology-a pillar of e-learning.
- That which most ODL institutions use.
- Avoidance of proprietary source-costly and contractual constraints.
- Ability to track learners' activities and progress and hence provision of learning and learning analytics such as:
 - Amount of time spent online (ref. CUE)
 - Times of logging in and out.
 - The time of accessing particular resources or activities, and duration.
 - Frequency of access.
 - Number and content of discussion posts generated by a learner.
 - Assessment submission timestamps.
- Ability to record all student and tutor communication, track learner support service provision, identify failure points or risks and provide intervention through LA.
- Ability to provide peer to peer dialogue and collaborations through discussion boards.
- Ability to provide fair measure of evaluating tutors' performance daily, weekly and monthly through LA.
- Ability to refute learner's claim of late-submission penalty (hence no missing marks).



- LMS that incorporates multimedia required for effective teaching including: Text, Video, Visual, Sounds, Graphics, Animations, Images, and Charts.

Digital/e-library

- E-books, e-journals
- Remote access facility
- Increasing learning resources

Enterprise Resource Planning (ERP)

- Capturing learner profile at admission
- Capturing tutors' information

Where are We with Current Learning Technologies?

Ladies and gentlemen, “Where are We with Current Learning Technologies?”

- Ref. LMS as the host.
- The following current learning technologies have enabled us to teach online:
 1. Use of PowerPoint:
 - First generation of learning technologies
 - Most common current online practice
 - Defect: Lacks learner-course content interactivity
 2. Use OERs:
 - Reason for Adaption-Low cost of learning resources
 - Diverse academic needs of learners (internationalization of program)
 3. Use of Case Studies
 - Has been integrated into online teaching and learning
 4. Communicative and collaborative technologies
 - Engaging tutors and learners through effective communication and collaboration through discussion forums, wikis, blogs, and video presentations.

Where are We with Emerging Learning Technologies?

Ladies and gentlemen, “Where are We with Emerging Learning Technologies?”

New types of emerging learning technologies or innovations include:

1. Application of AI based tools:
 - Being the 21st century tool it is worth considering and adapting AI based Text-to-Speech assistive technology in e-learning.
 - Can effectively be used for:



- Signposting
- Rubrics
- OUK adapting AI
 - Appears to arouse learners' attention because it's human-like nature.

2. Learning Analytic-Based Learning Technology

These are the technologies we need to embrace in e-learning in order to understand our learners and areas of review in a course with respect to:

- Improving learner's course achievement;
- Identifying failure points or risks through predictive analytics,
- Tracking course progression or trajectory through formative analytics, and
- Evaluating course performance through summative analytics

Effectively being used at Purdue University and Georgia State University.

The summative analytics play the role of what we know in measurement and evaluation as Item Analysis.

CHALLENGES OF ONLINE TEACHING/FACILITATION

Ladies and gentlemen, let us look at where we have come from or where we are and the challenges, we need to avoid in order to make e-learning a success in our institutions.

In the case of dual mode institutions, e-learning teaching/facilitation has suffered from:

1. Duality of lecturer/facilitator assignment. -Lecturers are allocated to teach both on-campus and e-learning learners leading to tutors giving preference to on-campus learners. What should institutions do to correct this situation for effective delivery of facilitation of e-learning?
2. Poor allocation of resources to e-learning units.
3. Peripheral nature of e-learning units in the university.
4. Low learner support services to online learners.
 - Learners finding access to lecturers hard.
 - Rampant case of missing marks and delayed marking of scripts.
5. Lecturers' participation in online teaching on part-time basis not 24/7.
6. Conventional practices that are applicable to on-campus learners are extended to online learners such examination time-table; deferment.
7. Leadership of e-campus/e-learning units by non-believers of distance learning/e-learning mode and philosophy.
8. Tutors resorting to zoom, if allowed, will defeat the concept of learner-centred learning and thus disadvantaging working class learners and being costly to the institution.
9. If course delivery is not fully online, it curtails flexibility. Learners will not be able to have the options of being in residence/university one semester and study at home next semester.



Ladies and gentlemen,

- These are issues that have made e-learning ineffective in dual mode universities.
- E-learning facilitation is more demanding than the conventional. This has been underestimated by the management of dual mode institutions.

PART III: THE LEARNING ARCHITECTURE OF E-LEARNING

Ladies and gentlemen, “What is the learning architecture of e-learning mode that we need to consider? During the OUK induction course to program designers and developers, we found it useful to make them know that the development of e-learning programs is rooted in the same principles as those of non-online programs.

Though I have discussed teaching earlier in this presentation as if it is a standalone entity, in e-learning, learning is intertwined with teaching and hence what matters in learning is good teaching or facilitation through provision of relevant learning experiences and learning resources to learners.

The learning architecture in an e-learning mode of delivery is guided and anchored like in any learning context by two pillars:

1. Theories of learning drawn from the learning science of psychology
2. Program and course learning outcomes and objectives

Ladies and gentlemen, we know learning takes place in the following ways:

- Observation of the phenomena
- Participation- hands on; activities; experimentation
- Seeing the instructor/facilitator/learner
- Hearing the instructor/facilitator/learner
- Recognition and incorporation of cognitive styles
- Learner’s interaction with these situations

Ladies and gentlemen, if all these are situated in a learning environment, whether conventional or virtual environment, we are sure that learning will take place any time and any place.

So, **ladies and gentlemen,** are these not what we provide in a virtual learning environment? If yes, we are in the right track to delivery of e-learning buttressed by richer array of:

- Activities (individual and group)
- Links
- Multimedia
- Digital objects
- Availability of course materials online



PART IV: ASSESSMENT ARCHITECTURE AND TECHNOLOGY

Ladies and gentlemen, assessment is a controversial issue not only in e-learning. As a teacher of tests and measurement in education, I used to tell my students that the controversy around assessment may be attributed to:

- Human story originating from the Garden of Eden where Adam and Eve were alleged to have cheated. Though there was no technology to verify their alleged cheating, their fearful behavior was used as evidence of cheating.
- The Bible is a book full of tests and the sanctions.
- Mistrust of the integrity of individual doing examination alone in a private environment.
- That integrity of testing is only achieved when somebody else is keeping an eye on the behavior of the candidate.

Ladies and gentlemen, to this day as it has been in human history, the major challenge surrounding assessment is integrity in uncontrolled private space, assessment technology and efficiency. How do replace human presence with a trustworthy mechanism/technology?

Ladies and gentlemen, the challenges the members of public want to be addressed in order to build confidence in e-learning assessment is not the assessment tasks we provide but the means in which we ascertain integrity.

Ladies and gentlemen, our inability to move fully to online assessment is making the assessment costly. It makes no sense to put learners online on coursework and bring them to campus for final assessment. This is unsustainable.

Ladies and gentlemen, we cannot continue to deny that old assessment methods have serious limitations, when we move to e-learning space.

Ladies and gentlemen, the emerging AI supported proctored assessment enables us to carry out mass assessment across the continents and time zones. This brings in efficiency in terms of provision of real time scoring.

CONCLUSION

E-learning is a journey that has come to stay with us in this 21st century. We have to embrace it in our institutions of higher learning.

THANKS



KEYNOTE SPEAKER 2



PROF. PAUL MUYINDA

DIRECTOR, INSTITUTE OF OPEN, DISTANCE AND ELEARNING AT MAKERERE UNIVERSITY.

PROFILE

Prof. Muyinda, is an Associate Professor of Open, Distance and eLearning (*ODEL*) and the Director of the Institute of Open, Distance and eLearning at Makerere University. He is the former Deputy Principal of College of Education and External Studies at the same University. He is also the former Dean, School of Distance and Lifelong Learning and former Head, Department of Open and Distance Learning. He is an accomplished researcher, practitioner, academician in the field of open, distance and e-learning. He is the Convenor of the first ever online learning programmes at Makerere University - *Bachelor of Youth Development Work* and the Master of Instructional Design and Technology. He founded the Mobile Research Supervision Initiative (MRSI); Mobile Learning Object Deployment and Utilisation Framework (*MoLODUF*) and the Cooperative and Collaborative Mobile Learning System. He is a Certified Blended Learning developer who has been named by Bob Little as being among the top 100 movers and shakers of online corporate education in Africa. Prof. Muyinda is the Chairperson of the taskforce for fast tracking online learning implementation at Makerere University. His taskforce enabled Makerere University to successfully transit into online teaching, learning and examination during the COVID-19 pandemic times. He is presently undertaking a research and innovation project on '*Enhancing the Behavioural Change of Boda-Boda Riders in Uganda Using Mobile Learning*'. He consults for the Commonwealth of Learning on *ODEL* policy and strategy development and quality assurance systems.

KEYNOTE ADDRESS BY KEY NOTE SPEAKER 2:

TOPIC: "Guidelines for Quality Assuring Open and Distance Learning (ODL) programmes in Commonwealth countries."

I am happy to learn that a lot has and is happening in terms of e-Learning in the University of Embu (UoEm) since we were learning together with them during the Covid-19 pandemic. I also Congratulate Kenya for having an Open University. Hitherto, I have had a number of engagements in commonwealth countries trying to formulate strategies and policies for quality assurance framework for ODL.



A. OUTLINE

- Setting the stage with some definitions.
- Demystify ODL.
- ODL QA standards and guidelines (criteria)
- Conclusion

Definitions of;

- i. Quality assurance
- ii. Guidelines
- iii. Open distance/ education
- iv. Distance education /learning

B. DEMYSTIFYING OPEN, DISTANCE LEARNING

- Open, Distance Education is a multi-dimensional concept aimed at bridging the time, geographical, economic, social, educational and communication distance between student and institution, student and academics, student and courseware and student and peers. Open distance learning focuses on removing barriers to access learning flexibility of learning provision, student- centeredness, supporting students and constructing learning programmes with the expectation that students can succeed.
- Open, Distance Education encompasses teaching and learning modalities and may take on any of these or a blend of:
 - Open Education/learning
 - Distance Education/ learning
 - Electronic learning(e-learning)
 - Online education/ learning
 - Mobile learning (m-learning)
 - Flipped classroom
 - Blended education/ learning

C. ODL GENERATIONS

- **First generation:** correspondence model that used print materials.
- **Second generation:** multimedia model. Included print materials, audio tapes, video tapes, computer based learning as well as interactive videos.
- **Third generation:** tele-learning model.
This included audio teleconferencing, video conferencing, audio graphic communication, broadcast TV/ Radio and audioconferencing.
- **Fourth generation:** Flexible Learning Model

This includes interactive multimedia, (IMM) online, internet based access to WWW resources, computer-mediated communications using automated response systems, campus portal access to institutional processes and resources.



D. ODL AFFORDANCES

The perceived and actual properties of the thing primarily those fundamental properties that determine just how the thing could possibly be used.

E. ODL AFFORDANCE AND QUALITY ASSURANCE

To some:

- ODL is for enhancing enrollment
- ODL is for enhancing institutions resource envelop.
- Enhancing to flexible and affordable education opportunities.
- To leverage upon the pedagogical affordances of emerging education technologies.
- For having national or global presence.

F. NEED FOR GUIDANCE FOR ODL QUALITY ASSURANCE

- i. Purposes;
 - Set up quality ODL systems and processes.
 - Evaluating the quality of existing ODL systems and processes.
 - Monitoring ODL provision.
- ii. QA guidelines as a tool for setting up quality ODL systems and process.
 - Implement the dictates in each criterion in each identified quality assurance standard.
- iii. QA guidelines as a tool for evaluating the quality of ODL systems and processes.
 - The level of performance for each criterion based on provided or observed evidence, is rated.
- iv. QA guidelines as a tool for monitoring ODL systems and processes.
 - Measuring the effectiveness of ODL
 - Account to the ODL stakeholders that the right thing is being done.
 - Drawing lessons for improvement from the implementation of ODL.

G. ODL QA PARAMETERS: QUALITY IS ASSURED BY SETTING MINIMUM STANDARDS FOR KEY PARAMETERS.

- i. Parameter 1 ; ODL programme/ curriculum Design and review
- ii. Parameter 2; ODL programme delivery
- iii. Parameter 3; ODL learner recruitment and selection
- iv. Parameter 4; ODL learner support
- v. Parameter 5; ODL material/ content development
- vi. Parameter 6; ODL learner assessment
- vii. Parameter 7; ODL infrastructures and facilities
- viii. Parameter 8; ODL staffing
- ix. Parameter 9; ODL systems and structures
- x. Parameter 10; ODL funding
- xi. Parameter 11; inclusivity in ODL



H. ODL PROGRAMME / CURRICULUM DESIGN AND REVIEW

Standard: academic programmes are flexible and relevant to the needs of the economy and those of prospective learners and employers; are responsive to the changing environments; provide appropriate articulation; and have assessment strategies that are effective and in line with relevant learning outcomes.

I. ODL PROGRAMME DELIVERY

Standard: ODL programmes are delivered flexibly and conveniently permitting enrolled learners from different economic backgrounds, learners with special needs and disadvantaged women and men located in different areas of aboard to access quality education in disciplines of their choices.

J. ODL LEARNER RECRUITMENT AND SELECTION

Standard: learner recruitment and selection process abides by the minimum recruitment and selection standard of the institution and regulatory agency. The institution has put in place bridging programmes to support learners with low grades matriculate to gain admissions requirements onto ODL programmes of their choices.

K. ODL LEARNER SUPPORT

Standard: There is a wide range of learner support mechanisms that cater for a variety of learners with different needs. Learner support takes care of both academics and non- academic needs of learners: makes use of learner data to enable timely provision of support where needed; makes effective use of appropriate technology; and puts learner success at the center. The institution provides pre-, on- and post-programme learner support.

L. ODL MATERIALS/ CONTENT DEVELOPMENT

Standard: learning materials in ODL programmes are in appropriate formats that allow for easy access by different learners; there is coherence between learning materials and learning outcomes, course content and assessment. Learning materials teach coherently, engage learners, and promote the development of problem-solving and critical-thinking skills. Learning materials are evaluated and updated regularly.

M. ODL LEARNER ASSESSMENT

Standard: the institution has an effective assessment strategy that is valid and reliable. Appropriate security and quality assurance measures are in place to ensure the integrity of assessment processes. There is a policy on student appeals and turn-around times for such appeals that is clearly defined and followed in practice.

N. ODL INFRASTRUCTURE AND PAINTING

Standard; the institution has basic infrastructure and facilities that are commensurate with student numbers to facilitate the effective rolling out of ODL programmes. Institutional facilities take into account the dispersed nature of student body in both ODL and e-learning. Where the institution has arrangements with other stakeholders to allow students to have access to their facilities, the responsibility for the quality provision of such services still lies with the institution in question.

O. ODL STAFFING

Standard; the institution has an appropriate staffing structure and its ODL programmes are supported by enough administrative, academic, technical and other support staff with appropriate qualifications and experience in ODL. Their responsibility and job descriptions are clearly defined. There is systematic development of staff to ensure that they are kept up to date with developments in ODL. Staff perform their duties effectively.

P. ODL SYSTEMS AND STRUCTURES

Standard; the institution has appropriate ODL structure that make it possible to provide effective support to ODL learners and staff. These systems and structures take into account the peculiarities of the mode(s) of provision used and the needs of the student on board.



Q. ODL FUNDING

Standard; the institution has adequate funding for the development and running of ODL programmes. The institution receives subsidies and subventions from the government and elsewhere to fund ODL activities. The staff are actively involved in developing proposals and strategies for attracting funding to ODL programmes. All funding for ODL is ring-fenced and given a separate budget vote and account.

R. INCLUSIVITY OF ODL

Standard; ODL programmes are flexible and inclusive enough for; women and men, learners with special needs, learners with different learning abilities; learners from different socio-economic background and disadvantaged learners. The programmes address all inequalities in gender and access to teaching and learning facilities and infrastructure. They address the inclusiveness and diversity of all stakeholders, including persons with disabilities, women and vulnerable persons in disadvantaged communities. They provide friendly teaching and learning environments for all walks of learners.

CONCLUSION:

- The guidelines shared represent a general framework aimed at ensuring the quality of ODL programmes and practices at HEIs (Higher Educational institutions). The eleven quality standards cover every aspect of ODL, from programme design to inclusivity. The significance of these guidelines lies in the trio purpose as a blueprint for establishing robust ODL systems and processes, as a tool and a MEAL tool.
- By providing clear criteria and rating systems, these guidelines enable a HEI to systematically assess and improve its ODL offerings. Additionally, the guidelines underscore the importance of evidence-based evaluation, emphasizing reviews and data analysis to gauge the performance of each standard. This approach with the broader concept of quality assurance, which involves continuous monitoring and enhancement to ensure that ODL programmes remain accessible, effective and learner-centered.
- Ultimately, these guidelines contribute to the institution's commitment to offering high quality ODL opportunities that are flexible, inclusive, and aligned with international standards.



KEYNOTE SPEAKER 3



DR. REBECCA WAMBUA

CHAIRPERSON, DISTANCE, OPEN & E-LEARNING PRACTITIONERS ASSOCIATION OF KENYA
(DOLPAK)

PROFILE

Dr. Rebecca Wambua holds a PhD in Distance Education from the University of Nairobi. She has served in the education sector for over 32 years. She is the current Chairperson of Distance Open and e-Learning Practitioners' Association of East Africa and also the Chairperson of Distance Open and e-Learning Practitioners' Association of Kenya. She has served in different leadership positions at the university level including being, the Director of the Institute of Open, Distance and e-Learning at Africa Nazarene University, the Coordinator for Education and Counselling Programmes at Kenya Methodist University, the School Based Coordinator and the Head of Distance Education and e-Learning in Kenya Methodist University. Dr. Wambua has keen interest in Distance Learning and has co-authored several peer reviewed articles. She has published 4 books, co-authored 4 instructional manuals and edited 12 instructional manuals for African Virtual University. She serves in the community as a motivational speaker and she is the Head of Counseling Department CITAM Rongai. Dr. Wambua is the current Chairperson of the Board of Management, CITAM Schools, Rongai.

KEYNOTE ADDRESS BY KEY NOTE SPEAKER 3:

STRENGTHENING THE PROVISION OF OPEN, DISTANCE AND e-LEARNING IN KENYA THROUGH DISTANCE, OPEN AND e-LEARNING PRACTITIONERS' ASSOCIATION OF KENYA (DOLPAK)

Open, Distance and e-Learning (ODEL) is an acceptable and indispensable mode of study in both developed and developing countries. The mode of study has various benefits. First, it is cost effective to both the institution and the learners. Secondly, it offers high quality and cost-effective professional development at the place of work which is beneficial to employers. Thirdly, for governments, it helps in increasing access, equity and cost effectiveness of education and training systems and enhancement of quality. In addition, Open, Distance and e-Learning (ODEL) mode of study provides the means by which lifelong learning is achieved.



This mode of study is a universally accepted approach for knowledge acquisition in institutions of learning due to the limitations of the conventional mode of study in addressing the issues of access, equity and quality in education. Open, Distance and e-Learning (ODeL) mode is considered to be 50% cheaper than conventional learning mode of study. It is a flexible mode of learning to students and it addresses the increasing demand for access to education. It widens opportunities to study, makes education and training more accessible, enhances self-paced learning, continued skills upgrading, and, increases participation in both basic and higher education. ODeL enables expansion of education without limits of time, pace or space.

The importance of ODeL, has led to establishment of Open Universities such as University of South Africa, National Open University of Nigeria, The Open University of Tanzania, Botswana Open University, Laweh Open University in Ghana, and Open University of Kenya, among others. However, despite these strides, in Africa, ODeL faces a number of challenges such as, the need for robust infrastructure, the need to provide training to staff in institutions, lack of professionals in ODeL and lack of national distance education policies to provide a framework for education in ODeL, minimal learner support and disparities in programme delivery across geographical regions. There is over-reliance on staff who facilitate residential mode of delivery. There is also lack of adequate e-Learning policies and lack of collaboration among Open, Distance and e-Learning practitioners. The challenges experienced while implementing ODeL programmes in institutions inhibit the realization of the benefits of ODeL and opportunities that arise from its adoption.

It is against this backdrop that national associations involved in ODeL have been formed. The **NATIONAL ASSOCIATION OF DISTANCE EDUCATION AND OPEN LEARNING IN SOUTH AFRICA (NADEOSA)** was established 1996 to promote access to lifelong learning of high quality. Nadeosa is determined to lend a voice to ODeL practitioners in South Africa in order to impact practice and influence policy. It consists of public and private higher education providers. South African Institute of Distance Education (*Saide*) is the secretariat and backbone organization that coordinates a diversity of stakeholders to achieve a common goal. Nadeosa is a forum for collaboration on technology-enhanced distance education and open learning in the post-school education and training sector in both public and private institutions in South Africa.

IN KENYA, DISTANCE, OPEN AND E-LEARNING PRACTITIONERS' ASSOCIATION OF KENYA (DOLPAK) was registered in 2022 as an inclusive civil society association that provides a forum for Kenyan institutions and individuals who are interested and/or involved in Open and/or Distance Learning (ODeL) to promote and support quality open, distance and e-learning (ODeL) in Kenya.

OBJECTIVES AND FUNCTIONS OF DOLPAK

The objectives and functions of DOLPAK are to:

1. License individuals involved or interested in distance education methods and/or open e-learning principles in Kenya;
2. Facilitate collaboration among individuals involved or interested in distance education methods and/or open learning principles in Kenya;
3. Promote awareness, understanding and application of distance education methods and open learning principles amongst policy makers, practitioners and learners;
4. Promote research and evaluation on all aspects of distance education, open learning and related topics in Kenya;



5. Exert influence with regard to adequate policy (including financial support) for distance education and open learning;
6. Advance the professional interests of distance education and open learning practitioners;
7. Promote and enhance quality assurance in distance education and open learning;
8. Support professional development for distance education and open learning as far as is possible within the constraints of its nature as a voluntary association;
9. The association is non-political and non-profitable;
10. encouraging networking and communication between relevant individuals, organisations and programmes;
11. Organising workshops, discussions and conferences and creating a forum for debate;
12. Disseminating information among members and appropriate parties;
13. Encouraging the sharing of expertise amongst members and appropriate parties;
14. Making joint submissions regarding distance education, open learning and matters ancillary;
15. Promoting and coordinating joint research projects among members and appropriate parties;
16. Cooperating with governmental and other bodies concerned with distance education and open learning;
17. Promoting the rationalisation and consolidation, where appropriate, of educational, academic and administrative activities, while promoting the optimum use of both private and public resources in distance education, open learning and related activities;
18. Promotion and approval of scholarships and grants for capacity building for members in Kenya and abroad for the promotion of distance education methods and open learning principles;
19. Participating in consultancies
20. Acting, where appropriate, as a representative of distance education and open learning organisations to regional and international associations; and
21. Performing any other tasks ancillary hereto and which may enhance distance education and open learning in Kenya

MEMBERSHIP

1. Institutions, Educationists and individuals directly involved or indirectly involved, or supports open, distance and e-Learning and generally the objectives of DOLPAK, can be admitted as a member with voting rights;
2. Notwithstanding clause .1 above, membership for natural persons shall only be open to persons above the age of eighteen;



SUBSCRIPTIONS

1. The Membership Fees shall be Kes. 68,000 for institutions, Kes. 3,000.00 For professionals and Kes. 1,500.00 For Students. Membership fees shall be levied on an annual basis. To register one needs to pay by MPESA, Paybill 247247 Account number 028381.
2. Membership fee will be reviewed every year in an AGM based on inflation and other costs. The Executive Committee reserves the right to propose additional increases to Council at an annual general meeting when deemed necessary;
3. Membership fees shall be payable on the anniversary of the date upon which the member became a Member;

MANAGEMENT

1. The Council of DOLPAK shall be responsible for the management of the affairs of DOLPAK, and may make rules to give effect to its decisions.
2. The Council shall consist of all voting delegates
3. At a general meeting the Council shall elect:
 - i. a Chairman,
 - ii. a Vice-Chairman, who shall perform the functions of the Chairman when he/she is unable to do so; and
 - iii. an executive committee for a period of three years. Members may subsequently be re-elected.

COMMITTEES

Apart from the executive committee, there are other committees with specific terms of references. They include;

1. Distance, Open and e-Learning Education Committee

The purpose of the Open, Distance, and E-learning Education Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is to advance the quality, accessibility, and innovation of Open, Distance and e-learning education in Kenya. The committee's scope includes promoting best practices, Professional development, collaboration, and advocacy within the field of distance, open, and e-learning.

2. Community Service Committee

The purpose of the Community Service Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is to contribute positively to the well-being and development of local communities through meaningful service initiatives. The committee's scope includes identifying community needs, planning projects, coordinating volunteer efforts, and fostering partnerships with relevant stakeholders.

3. Research and Grants Committee

The purpose of the Research and Grants Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is to foster research excellence, innovation, and knowledge dissemination within the field of distance, open, and e-learning. The committee's scope includes identifying research



opportunities, facilitating grant applications, promoting research collaboration, and supporting the dissemination of research findings.

4. Partnership and Collaboration Committee

The Partnership and Collaboration Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) aims at fostering partnerships, alliances, and cooperation among educators, institutions, and stakeholders involved in distance, open, and e-learning. The committee's scope includes identifying collaboration opportunities, promoting knowledge exchange, and facilitating joint initiatives to advance the field.

5. Communication and Public Relations

The Communication and Public Relations Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is responsible for managing internal and external communication, promoting the association's activities, and enhancing its visibility. The committee's scope includes communication strategy development, content creation, media relations, and brand management.

6. Membership and engagement committee

The Membership and engagement Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is dedicated towards enhancing the experience and engagement of DOLPAK members by providing valuable services, support, and resources. The committee's scope includes developing membership benefits, addressing member needs, and fostering a strong sense of community.

7. Licensing and Quality Assurance Committee

The licensing and quality assurance Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is responsible for upholding and promoting high ethical standards, quality assurance, and licensing in the field of distance, open, and e-learning. The committee's scope includes establishing ethical guidelines, reviewing licensing processes, and ensuring adherence to quality standards.

8. Strategic Planning Committee

The Strategic Planning Committee for the Distance, Open, and E-Learning Practitioners Association of Kenya (DOLPAK) is responsible for developing, implementing, and monitoring strategic initiatives that align with the association's long-term goals and vision. The committee's scope includes strategic planning, goal setting, performance measurement, and adaptation to changing circumstances.

COLLABORATION WITH COMMISSION FOR UNIVERSITY EDUCATION (CUE)

Both CUE and DOLPAK agreed on 2nd October, 2023 to work together in:

- Policy and guideline Development
- Conferences
- Creating awareness to stakeholders about Quality practices in ODeL



- Retooling Lecturers
- Implementations of quality assurance mechanisms and audit
- Research
- Capacity Building

FREE OF CHARGE WEBINARS

DOLPAK has organized 3 free of charge webinars on the following topics:

1. Online Pedagogy
2. E-Content Development and Design
3. Design and Development of Instructional videos

The DOLPAK webinars have created opportunities for ODeL professionals to:

- Collaborate online on matters related to distance learning
- Promote application of distance education methods and open learning principles
- advance professional interests in distance education
- Promote and enhance quality assurance in distance education and open learning
- Encourage networking and communication between individuals and institutions
- Share expertise amongst members and other participants
- Create awareness about the existence of DOLPAK

DEVELOPMENT OF ODEL CENTRE GUIDELINES

DOLPAK has come up with ODeL Centre guidelines which stipulate the key elements to be considered when implementing e-learning programmes. The elements include;

- Vision, Mission, Planning
- Design and development of ODeL programmes
- Course design and development
- Learner support and progression
- Assessment and evaluation
- Human resource development
- Consultancy, research and community service

THE NATIONAL ODEL FRAMEWORK

DOLPAK has developed The National, Open, Distance and e-Learning Framework, a recommendation that provides guidance, promotes shared standards and provides a structure for the development and management of Open, Distance and e-Learning Programmes in Kenya.

REGISTRATION OF DISTANCE, OPEN AND e-LEARNING PRACTITIONERS' ASSOCIATION OF EAST AFRICA (DOLPA-EA)

We are in the process of registering DOLPA-EA whose objectives are similar to those of DOLPAK but at the East African Level. DOLPA-EA consists of members from Kenya, Tanzania, South Sudan, Burundi, Rwanda, Uganda and Democratic Republic of Congo.



FULL CONFERENCE PROGRAMME



UNIVERSITY OF EMBU



PROGRAMME

for the
e-Learning Conference 2023

THEME: “Quality Teaching and Learning, Assessment,
Technology and Innovativeness in Virtual Environments”

DATE: Thursday, 2nd to Friday 3rd November, 2023

VENUE: Virtual (Zoom Web Conferencing)

CO-ORDINATION OF THE CONFERENCE: Prof Speranza Ndege

TECHNICAL SUPPORT: Mr. Maurice Murimi

PROGRAMME CO-ORDINATOR: Dr. Hezron Mogaka

Assisted by: Dr. David Mugo

CHIEF RAPPORTEUR: Dr. Salome Migose

Assisted by: Dr. Victoria Mukami



UNIVERSITY OF EMBU



UNIVERSITY OF EMBU

OUR VISION

A dynamic epicenter of excellence in training and research for service to humanity.

OUR MISSION

To generate, advance and disseminate knowledge through training, research and innovation for the development of humanity.

PHILOSOPHY

Enhancing human capacity for societal development

OUR CORE VALUES

Integrity
Innovativeness
Professionalism
Customer focus
Teamwork

KNOWLEDGE TRANSFORMS



UNIVERSITY OF EMBU

DAY ONE: 2ND NOVEMBER 2023

VENUE: VIRTUAL (ZOOM WEB CONFERENCING)

TIME	MORNING SESSION	SESSION CHAIR	RAPORTEUR
8.00 - 9.00	Participants Log in to the Zoom Web Conferencing Platform	Dr. Ciriaka Gitonga	Dr. Milcah Nyaga Dr. Timothy Kinoti
9.00 - 11.00	OFFICIAL OPENING CEREMONY		
	Opening Prayer by Rev. Dr. Mary Nkari , University Chaplain		
	Virtual Entertainment		
	Remarks by Prof. Speranza Ndege , Director, ODeL and Chairperson, Conference Organizing committee, University of Embu.		
	Remarks by Prof. Jackson Muthengia , Registrar (Academics, Research and Extension (ARE), University of Embu.		
	Introductory Remarks by Prof. Kiplagat Kotut , Deputy Vice-Chancellor (Academics, Research and Extension (ARE), University of Embu.		
	Welcoming Remarks by Prof. Daniel Mugendi Njiru , Vice-Chancellor, University of Embu.		
Speech and Official Opening of the e-Learning 2023 Conference by the Chief Guest, Ms. Fiona Khandoker , Senior Programme Manager, The Association of Commonwealth Universities.			
11.00 - 11.15	PHOTO SESSION & HEALTH BREAK	SESSION CHAIR	RAPORTEUR
11.15 - 11.35	Keynote Speech ¹ : Prof. Ezra Maritim , Council Chairman, Open University of Kenya.	Dr. Joanne Ogunah	Dr. Lilian Omoke Dr. Simon Karuku
11.35 - 11.55	Key Note Speech ² : Prof. Paul Muyinda , Deputy Principal, College of External Education and External studies, Makerere University.		
11.55 - 12.15	Keynote Speech ³ : Dr. Rebecca Wambua , Chairperson, Distance, Open & E-Learning Practitioners Association of Kenya (DOLPAK).		
12.15 - 12.45	Question and Answer Session		
12.45 - 14.00	LUNCH BREAK		



UNIVERSITY OF EMBU



TIME	AFTERNOON SESSION	SESSION CHAIR	
14.00 - 14.45	A DEMONSTRATION BY MAKERERE UNIVERSITY (A Session for all Participants) Eva Mirembe, Richard Kajumbula, Godfrey Mayende, Paul B. Muyinda: Data Driven Visualization for Enhanced Strategic e-Learning Decisions Support.	Dr. Josephine Ngunjiri	Dr. Marilyn Ronoh Dr. Zachariah Mburu
14.45 - 15.00	Question and Answer Session		
PRESENTATION (BREAK-AWAY ROOM 1)			
15.00 - 15.20	Dr. Moses Nthiga: Establishment and Accreditation of Open Distance and e-Learning (ODEL) Centers: A Case Study of Kabarak University, Kenya.		
15.20 - 15.40	Dr. Moses Mutua: Standards for Evaluating The Quality Of Undergraduate Nursing e-Learning Programme in Low- and Middle-Income Countries: A Modified Delphi Study.		
15.40 - 16.00	Dr. Joseph Kithinji: A study of bandwidth Management Techniques for Improved Quality of service in Internet protocol Storage Area Networks used for Online Learning.		
16.00 - 16.20	Eunice Karatu: Influence of Strategic Agility on Performance of Medical Employees in County Referral Hospitals in Central Region Economic Bloc, Kenya.		
16.20 - 16.40	Dr. Ciriaka Gitonga: Reflections on the Digitalized 21st Century Classroom: Implications for the Teacher Education Programmes in East Africa.		
16.40 - 17.00	Question and Answer Session		
HEALTH BREAK			



UNIVERSITY OF EMBU



PRESENTATION (BREAK-AWAY ROOM 2)		SESSION CHAIR	RAPPORTEUR
15.00 -15.20	Joseph Watuleke, Paul Birevu Muyinda, David Onen: Enhancing Blended Learning Courses with e-tivities and Active Learning Strategies: A Pedagogical Exploration Using the BLC Model.	Prof. Nancy Budambula	Dr. Consolata Gakii Dr. Karambu Kiende
15.20 - 15.40	Etobe Eliane Teclaire: The Challenge of e-Learning is to Succeed in Putting Pedagogy as a Prerequisite: The Experience of The Catholic University of Central Africa / Yaoundé Catholic Institute (CUCA-YCI).		
15.40 - 16.00	Dr. Waziri Bala: The Effectiveness of Various Teacher Training Programmes Aimed at Enhancing Their Proficiency in Using Online Tools and Platforms for Education.		
16.00 - 16.20	Gloria Nishimwe, Eden Gatesi, Sam Kamali: Assessing the Perceptions and Preferences between Online and In-Person Classroom Learning.		
16.20 - 16.40	Dr. Moses Mutua: Standards for Undergraduate Nursing e-Learning Programmes in Low Resource Settings: A Feasibility Study.		
16.40 - 17.00	Question and Answer Session		
HEALTH BREAK			
PRESENTATION (BREAK-AWAY ROOM 3)		SESSION CHAIR	RAPPORTEUR
15.00 - 15.20	Dr. J. K. S. Makokha: Cultivating Literature and Criticism: The role of Online Literary Journals in the Digital Age.	Dr. Gladys Sitati	Dr. Paul Mugambi Ms. Diana Mawia
15.20 - 15.40	Onyango Evans Odhiambo: Coping Strategies on Visually Impaired Learners on e-Learning platforms.		
15.40 - 16.00	Dr. Timothy Bariu, Dr. Francis Kirimi: Implication of e-Mentoring on Academic Performance and Attainment of University Students in Selected Kenyan Universities.		
16.00 - 16:20	Dr. Josephine Ngunjiri: High Quality Online Scored Assessment Tools in Blended Learning and e-Learning in Institutions Of Higher Learning.		
16.20 - 16.40	Prof. Speranza Ndege: Adopting Blended Learning as a Mode of Learning in Institutions of Higher Learning: The Case of University of Embu.		
16.40 - 17.00	Question and Answer Session		
HEALTH BREAK			



UNIVERSITY OF EMBU



8.15 - 8.30	Participants Log in to the Zoom Web Conferencing Platform	SESSION CHAIR	RAPPORTEUR
8.30 - 9.00	PREVIOUS DAY'S RECAP by Chief Rapporteur (Session for all Participants)	Dr. Mark Otieno	Dr. Charles Onyari Dr. John Kiratu
PRESENTATION (BREAK-AWAY ROOM 1)			
9.00 - 9.20	Amina Mohammed: Applying University Administrators Management Capacity as a Predictor of Quality Assurance in e-Learning in Federal Universities in North East Geo-Political Zone, Nigeria.		
9:20 - 09.40	Marion K. Amukuzi, Isaac Oyuga: The Transformative Impact of Audiobooks on Higher Education: A Qualitative Assessment of the Gaps and Opportunities.		
9.40 - 10.00	Dr. Kishabale Bashir: E-Learning Content Quality for Student Learning Effectiveness and Retention.		
10.00 - 10.20	Dr. Hezron Mogaka, Dr. Franklin Mairura, Dr. Florence Kaumi and Lydia N. Muriithi: Does Online Attendance Matter? Investigating the Link Between Student Attendance and Academic Performance.		
10.20 - 10.40	Joseph Watuleke, Sasha Atukunda and Paul Birevu Muyinda: Exploring Adult Learners' Perspectives on Integrating Mobile Phones for English Language Instruction.		
10.40 - 11.00	Question and Answer Session		
11.00 - 11.20	HEALTH BREAK		
PRESENTATION (BREAK-AWAY ROOM 2)		SESSION CHAIR	RAPPORTEUR
9.00 - 9.20	Dr. Faith Mueni: Building a Simulated Mentorship Platform for Online Learning programme.	Dr. George Nyamato	Dr. John Wanyama Dr. Genson Muriithi
9.20 - 09.40	Dr. Boniface Ngari, Dr. Collins Wagumba, Dr. Gladys Nyachio and Dr. Mary Kiveu: Digital Inclusion: Developing an Interactive Content for an Online Learning Course.		
9.40 - 10.00	Dr. Elizabeth A. Owino, Dr. Rose Ruto-Korir: Experiences, Challenges and Perceptions: Reflections of Converted Moi University e-Learning Teachers.		
10.00 - 10.20	Aisha Ahmad Hamman: Challenges of Integrating Information and Communication Technology (ICT) in Teacher Education Programmes.		
10.20 - 10:40	Richard Kajumbula, Felix Bwire, Abigail Inapat, Eva Mirembe: Analytics by Post as Predictors of Academic Performance of Distance Learners in a Blended Learning Course.		
10.40 - 11.00	Question and Answer Session		



UNIVERSITY OF EMBU



11.00 - 11.20		HEALTH BREAK	
PRESENTATION (BREAK-AWAY ROOM 3)		SESSION CHAIR	
9.00 - 9.20	Igado Ian, Thuku David, Dr. Faith Mueni and Dr. Consolata Gakii: Profiling of Learners Characteristics in e-Learning Platforms Using Association Rule Mining.	Dr. Mukami Nthiga	Dr. Johnson Masinde Dr. Samuel Gitonga
9.20 - 09.40	Susan Wairimu Chege: Effect of Role Culture Implementation Approach on Universities Performance in Kenya.		
9.40 - 10.00	Gladys Wagura, Bernard Mwangi: The Effectiveness of Lecturer-Students Engagement in Blended Learning Courses in Universities in Kenya.		
10.00 - 10.20	Prof. Speranza Ndege: Structures and Building Blocks: UoEm's Journey Towards Online and Blended Learning.		
10.20 - 10:40	Eunice Karatu: Influence of Strategic Communication on Medical Employees' Performance of County Referral Hospitals in Central Region Economic Bloc, Kenya.		
10.40 - 11.00	Question and Answer Session		
11.00 - 11.20		HEALTH BREAK	
PRESENTATION (BREAK-AWAY ROOM 1)		SESSION CHAIR	RAPPORTEUR
11.20 - 11.40	Dr. Julius K. Koech, B. Aloo, W. Maiyo, J. Bitok and B. Bullut: Teaching Practical, Mathematical, and Statistical Courses with Lengthy Expressions Via Online Platforms at the Department of Mathematics and Computer Science, University of Eldoret. Reflecting on Insights Gained.	Dr. Dominic Kitavi	Dr. Patrick Kimani Dr. Madrine King'endo
11.40 - 12.00	Dr. Kangangi Wanja Eunice: Digital Folklore Narratives: 'The Seen Story' and 'The Told Story in Selected Songs of John De Mathew'.		
12.00 - 12.20	Dr. Fredrick Omogah: Online Education in the Midst of a World's Pandemic - A Potential Academic Integrity Cyber Risks (AICR).		
12.20 - 12.40	Question and Answer Session		
12.40 - 14:30	LUNCH BREAK		



PRESENTATION (BREAK-AWAY ROOM 2)		SESSION CHAIR	
11.20 - 11.40	Susan Wairimu Chege, Prof Evangeline Gichunge and Dr. Wilson Muema: Clan Culture Implementation Plan and Performance of Kenyan Universities.	Dr. Zachary Njagi	Dr. Wanja Kangangi Ms. Anne Waruita
11.40 - 12.00	Ruth Wairimu: Influence of E-Learning on Academic Performance Among Students at the Outspan Medical College Nyeri County, Kenya.		
12.00 - 12.20	Susan Nduta, Consolata Gakii Victoria Mukami and Boaz Too: Utilizing Artificial Intelligence for Learner Engagement in a Virtual Class.		
12.20 - 12.40	Question and Answer Session		
12.40 - 14:30	LUNCH BREAK		
PRESENTATION (BREAK-AWAY ROOM 3)		SESSION CHAIR	RAPPORTEUR
11.20 - 11.40	Ogbaga Nwoyibe, Nweke N. E, Nnamani C.V, Afiukwa C. A: Exploring the Impact of Learner-Centered and Self-Directed Learning Approaches in the Lives of 21st Century Students.	Dr. Duncan Mugambi	Dr. Moses Mwito Ms. Consolata Kirigia
11.40 - 12.00	Dr. Milcah Nyaga: Pedagogy of Teaching Large Online Classes.		
12.00 - 12.20	Nyongesa Lumuli Charles, Osborne Wafula Opicho and Dr. Godfrey Wakoli Murunga: Assessing the Effectiveness of Experiential Learning in Developing Digital Skills Among TVET Trainers: A Case Study of Selected Institutions in Western Kenya.		
12.20 - 12.40	Question and Answer Session		
12.40 - 14:30	LUNCH BREAK		
OFFICIAL CLOSING CEREMONY		SESSION CHAIR	RAPPORTEUR
14.30 - 14.35	Virtual Entertainment	Prof. Fredrick Njoka	Dr. Faith Mueni Mr. Abel Nyangemi
14.35 - 14.50	Conference Recap by Dr. Salome Migose (Chief Rapporteur)		
14.50 - 15.00	Closing Remarks by Prof. Kiplagat Kotut (Deputy Vice-Chancellor - Academics, Research and Extension), University of Embu.		
15.00 - 15.10	Closing Remarks by Prof. Daniel Mugendi (Vice-Chancellor), University of Embu.		
15.10 - 15.15	Vote of Thanks by Dr. Peter Rugano (Chairman, Education Department.), University of Embu.		
15.15	Closing Prayer by Rev. Dr. Mary Nkari (University Chaplain), University of Embu.		
CONFERENCE PARTICIPANTS LOG OUT AT OWN PLEASURE			



UNIVERSITY OF EMBU

E-LEARNING CONFERENCE 2023 BOOK OF ABSTRACTS

Theme: Quality Teaching & Learning, Assessment, Technology
And Innovativeness In Virtual Environments



UNIVERSITY OF EMBU



**P.O. BOX 6 - 60100
EMBU, KENYA
TEL: (+254-20) 2444136
EMAIL: vc@embuni.ac.ke, info@embuni.ac.ke
WEBSITE: www.embuni.ac.ke**



ABSTRACTS



ABSTRACTS

Data Driven Visualization for Enhanced Strategic e-Learning Decisions Support

Authors: Eva Mirembe, Richard Kajumbula, Godfrey Mayende, Paul B. Muyinda

Makerere University

Abstract

Supporting and promoting effective learning using Learning Management Systems (LMS) needs university administrators, sent in time and in a way that can enable it to be interpreted with ease. This paper presents results of design-based research with a Learning Analytics Visualization Tool developed to extract and analyze data from the Makerere University E-Learning Environment (MUELE), a Moodle based platform. The tool provides customized reports about the status of courses with in MUELE, focusing on module attributes including activities and resources within each course at both college and school level. The tool utilizes data extraction techniques to retrieve frequency of resources access and forum posts from existing module level data to inform both the lecturers' and students' performance on the platform and students-lecturer interaction per course. By employing data driven insights, this tool empowers the Institute of Open Distance and E-Learning (IODeL) to provide management timely information that enables taking actionable data-based decisions to optimize course delivery, identify effective online teaching practices and potential areas of improvement.university and all its stakeholders, information regarding effective utilisation of eLearning resource has to be lecturers or faculty and the technical team members to rely on data generated from the e-Learning process in order to make data-based informed decisions. Being that management is engaged in strategic decisions affecting the entire.

.....



Establishing and Accreditation of Open Distance and e-Learning (ODEL) Centers: A Study of Kabarak University

Moses M Thiga

mthiga@kabarak.ac.ke
Kabarak University

Abstract

The need to harness the potential of Information and Communication Technologies (ICTs) for teaching and learning has led to efforts to establish Open Distance and E-Learning (ODEL) Centers in many institutions of higher learning over the years. There was slow progress on the African continent until the COVID-19 pandemic accelerated the appreciation of e-learning among all stakeholders: students, sponsors, faculty, regulators, and government. What followed was Emergency Remote Teaching (ERT) in most institutions during and immediately after the pandemic. In the post-pandemic period, institutions and regulators needed to consolidate the gains and lessons learned during the ERT through the formal establishment of ODEL centers and accreditation of this mode of teaching and learning. In the case of Kenya, the Commission for University Education (CUE) very quickly and collaboratively developed clear guidelines to guide the accreditation process. These guidelines stipulate expectations for institutions to have requisite structures, infrastructure, policies, procedures, guidelines, infrastructure, human resources, content development, assessment and examination strategies, quality assurance, academic integrity, research, community outreach, and provisions for special needs. The guidelines for accreditation notwithstanding, establishing these centers and getting accreditation continues to be challenging for most institutions. These challenges are occasioned, in part, by the need for a guideline for establishing ODEL Centers. This case study documents the process followed by Kabarak University before, during, and after COVID-19 that led to the full accreditation of its ODEL center to offer blended and fully online programs. With the benefit of hindsight, it further makes recommendations on how institutions can establish these centers in a post-COVID-19 era where there is no ‘emergency’ to accelerate the process.

Keywords: Open Distance and E-learning (ODEL), Emergency Remote Teaching (ERT), e-learning, accreditation, guidelines,

.....



A study of bandwidth Management Techniques for Improved Quality of service in Internet protocol Storage Area Networks used for Online Learning

*Kithinji Joseph¹, *, David Mugo² & Victoria Mukami³*

¹Department of Computing and I.T, University of Embu

² Department of Computing and I.T, University of Embu

³ Department of Computing and I.T, University of Embu

Speaker: Dr. Joseph Kithinji

joskithinji2014@gmail.com

Abstract

Storage as a Service (STaaS) can play a significant role in the field of e-learning by providing a flexible and scalable solution for managing and storing digital educational content. STaaS uses the Internet Protocol, which creates a mix of traffic that can affect the Quality of Service (QoS). In the realm of online learning, ensuring a seamless and enriching educational experience has become increasingly crucial. Bandwidth management emerges as a pivotal solution to enhance the Quality of Service (QoS) for both educators and learners. An application's and service's quality of service (QoS) is determined by the overall satisfaction and perception of performance that users make while using different network applications and services. Bandwidth management in this context involves the strategic allocation and prioritization of network resources to accommodate various educational activities such as video conferencing, multimedia content delivery, and real-time interactions. By intelligently managing bandwidth, educational institutions can overcome challenges related to connectivity, latency, and disruptions, which are pivotal for fostering an engaging learning atmosphere. The aim of this study is to identify methods of managing bandwidth and to investigate how these bandwidth management methods can be used to provide a QoS. The scope of the study is limited to networks using both Ethernet technology and the Internet Protocol (IP). The study is significant because it addresses current problems confronted by network managers. The TCP/IP is chosen as the preferred framework for investigating bandwidth management because it is more practical than the alternative Open Systems Interconnection Reference Model (OSI model) which is a reference model. Suggestions are given as to how some of these bandwidth management methods are, or can be used within current QoS architectures. The results show that. Network access layer techniques are easy to implement, however they are costly.

Key words: *Quality of Service (QoS), Cloud Computing, Storage as a Service (STaaS) and Bandwidth Management*

.....



Influence of Strategic Agility on Performance of Medical Employees in County Referral Hospitals in Central Region Economic Bloc, Kenya.

Eunice Nkatha Karatu

Email address: blessednkatha@gmail.com

Abstract

The demand for high-quality health care from patients and other stakeholders has grown over time while hospitals have failed in delivery of quality healthcare services. The purpose of the study was to determine the influence of strategic agility on medical employees’ performance in county referral hospitals in the central region economic bloc, Kenya. Explanatory research design was used to collect data from a target population of 10 referral hospitals in Tharaka Nithi, Embu, Nyeri, Meru, Kiambu, Murang’a, Nakuru, Nyandarua, Laikipia, and Kirinyaga. The sample size were 327, medical employees including medical officers, doctors, nurses, pharmacists, specialists, and therapists. A sample size of 327 medical staff was selected using a simple random method, open-ended and closed questionnaires were issued. Data was descriptively analyzed, statistics such as frequencies and percentages, mean, and standard deviation. Inferential statistic like Pearson Correlation was determined and the results presented using tables and explanations. The study highlighted the significant impact of effective management practices, including e-learning, in fostering a culture of innovation and enhancing organizational adaptability. This approach involved rewarding employees and investing in promising opportunities like e-learning, demonstrating a keen awareness of change dynamics, and readily adjusting existing plans. Consequently, the study’s conclusion underscores the critical importance of hospital leadership in prioritizing strategic agility and nurturing a culture of innovation within their organizations, with e-learning playing a pivotal role. This approach can empower hospitals to remain agile, responsive, and competitive in the dynamic healthcare landscape, ultimately improving patient care and organizational performance.

Keywords: *Strategic Agility, Performance, Medical Employees, County Referral Hospitals, Central Region Economic Bloc, e-learning.*

.....



Reflections on the Digitalized 21st Century Classroom: Implications for the Teacher Education Programmes in East Africa

*Dr. Ciriaka Gitonga
Dean School of Education and Social Sciences
University of Embu, Kenya*

Abstract

Globally, teacher educators in the mid-1900s could not probably have predicted that the world would encounter the myriad of challenges being witnessed across the social, economic, and political divides, ranging from wars, political upheavals, terrorism and radicalization, marketization of education, poverty, feminism, rise in activism movements, digitalization of world economies, the emergence of social media, pandemics and digitalization of learning among others. Responses to these challenges affect how the teacher education curriculum is designed and implemented. Since teaching is the profession from which all the other professions are created, teacher education must be reimagined to answer the question, “What skills do the teacher trainees need to equip their learners with the 21st-century skills?”. This paper argues that the 21st-century teacher educator needs to reflect on the elements of teacher education that need adjustments to respond to the challenges the 21st-century teacher faces and will face as they recreate the learning environment.

.....



Enhancing Blended Learning Courses with e-tivities and Active Learning Strategies: A Pedagogical Exploration Using the Blended Learning Curriculum Design Model

*Joseph Watuleke, Makerere University, Uganda
Ph.D. student, Email: joseph.watuleke@yahoo.com
Paul Birevu Muyinda, Makerere University, Uganda
Associate Professor, Email: mpbirevu2013@gmail.com
David Onen, Makerere University, Uganda
Senior Lecturer, Email: donenotoo@yahoo.com*

Abstract

Blended learning has gained prominence in higher education, combining face-to-face instruction with online elements. To optimize this approach, innovative teaching methodologies that promote learner engagement and meaningful interactions with course content are essential. This qualitative research explores innovative pedagogical methods using the Blended Learning Curriculum (BLC) Design model to enhance blended learning courses through E-tivities and active learning. Conducted at Makerere University, the study includes a document review of 19 blended learning courses spanning diverse academic disciplines, undergraduate and graduate programs. It also involves 11 in-depth interviews, engaging course developers and key informants experienced in blended course design.

The findings stress aligning resources with learning objectives to enhance student engagement. Course developers emphasized integrating weekly E-tivities, authentic learning activities bringing in real world experiences, and use of diverse resources for interactive learning. These courses featured various assessments, including project-based assignments, reflective tasks, peer reviews, interactive simulations, alongside traditional exams. Synthesizing document reviews and interviews, this research highlights the benefits of blending E-tivities and active learning. It underscores accessibility and effective communication’s role in creating an inclusive, supportive learning environment. Providing practical, real-world scenarios, this approach applies theoretical knowledge effectively, boosting its relevance and knowledge retention. In essence, the study reveals effective pedagogical strategies for optimizing blended learning by aligning resources with objectives and fostering robust learner engagement in a nurturing, inclusive environment. These findings offer insights to educators and institutions seeking to enhance their blended learning experiences.

Keywords: *Blended Learning, E-tivities, Active Learning Strategies, Blended Learning Curriculum (BLC), Pedagogy, Higher Education, Document Review, Learner Engagement, Accessibility.*

.....



The Challenge of E-Learning is to Succeed in Putting Pedagogy as a Prerequisite: The Experience of The Catholic University of Central Africa / Yaoundé Catholic Institute (CUCA-YCI)

ETOBE ELIANE TECLAIRE

Techno pedagogue

Graduate in design of distance learning system

Project manager for the implementation of a distance learning system at CUCA-YCI

Head of the E-learning department at CUCA-YCI

etelte@yahoo.fr / etetobe@gmail.com

Abstract

The management of the lockdown imposed by the corona virus pandemic has forced UCAC-ICY to take a closer interest in E-learning. In 2021, an E-learning service was created to think about the future system in which E-learning can be easily displayed. In the process of setting up a pilot training course that will measure the university’s ability to manage distance learning via information and communication technologies (ICT), an important step is the support of teachers, who have already experimented teaching with a synchronous communication tool called “Zoom”, to convert their face-to-face course into an E-learning format course. There have already been three training sessions in E-learning pedagogy for teachers, two concerned teachers already recruited and in activity and one concerned teachers being recruited at the new Moundou site in Chad. The adhesion of teachers during these training sessions is mixed: if the teachers being recruited have massively subscribed to the training, the teachers already recruited do not see the need for such an exercise and continue to use the synchronous communication “Zoom” to deliver their course in distance learning. How to get teachers to understand that E-learning starts with transforming their face-to-face course into an E-learning format and ensuring quality teaching. E-learning is first and foremost a matter of pedagogy, before being a matter of technology. If the pedagogical aspects are not properly taken into account, we will easily shift from training to information and generations of students will inherit surface education. How to put pedagogy at the centre of E-learning? The best media tool does not guarantee quality training.

Key Words: *E-learning – Pedagogy – ICT – Competencies - CUCA*

.....





Assessing the Perceptions and Preferences Between Online and In-Person Classroom Learning Among University Students in Rwanda

Gloria Nishimwe^{1}, Sam Kamali¹, Eden Gatesi¹, Rex Wong^{2, 3}*

¹School of Medicine, University of Global Health Equity, Butaro, Rwanda.

²Bill and Joyce Cummings Institute of Global Health, University of Global Health Equity, Butaro, Rwanda.

³School of Public Health, Yale University, New Haven, USA.

Abstract

The COVID-19 pandemic has resulted in many schools rapidly rolled out online learning due to school closure or lockdown. This study assessed the online learning experience of 193 students in different universities of Rwanda during COVID-19. The reported main advantages of online learning revolved around the comfortability and self-responsibility in their studies. However, internet access and stability remained the biggest challenges. Respondents reported that online learning was not stimulating, lacked interactions with other students and with instructors, and they were distracted easily and had difficulty to maintain their discipline. Many students indicated they prefer in-person classes over online learning. Investment to provide students stable internet access and to training instructors to design more interactive and engaging online learning materials according to best practices could improve the students' online experience. The use of blended online and in-person classroom learnings to maximize students learning experiences and outcomes should be explored.

Keywords: Online learning, E-learning; higher education, Rwanda, students, Covid-19

.....



Cultivating Literature and Criticism: The Role of Online Literary Journals in the Digital Age

Dr. Justus. K. S. Makokha

Senior Lecturer,

Department of Literature, Linguistics and Foreign languages

Kenyatta University

Abstract

In an era characterized by rapid technological advancement, online literary journals, such as Lolwe, Kwani, Going Down River Road, and Jalada Africa, have emerged as pivotal platforms that transform the landscape of literature and criticism. These digital literary platforms transcend geographical boundaries and offer a space for writers, scholars, and enthusiasts to interact, innovate, and critically engage with literature. Through their contributions to fiction, poetry, essays, and critiques, these journals stimulate creative expression and scholarly discourse in the African literary scene, enhancing the democratization of literary voices, providing accessibility, and fostering diversity in literature and criticism. This paper aims to shed light on how technology enables the democratization of literary voices, provides accessibility, and fosters diversity in literature and criticism. By showcasing the transformative power of online literary journals, this article seeks to inspire educators, writers, and literary enthusiasts to harness the potential of digital platforms for enhancing literary education and nurturing literary culture.

.....



Implication of e-Mentoring on Academic Performance of University Students in Selected Public Universities in Kenya

Presenters

1. Name: Dr. Timothy Bariu
Email: tbariu493@yahoo.com
Affiliation: University of Embu

2. Name: Dr. Francis Kirimi
Email: kirimi.francis@ku.ac.ke
Affiliation: Kenyatta University

Abstract

The unending gains of e-mentoring in innovative technological driven education cannot be overemphasied. E-mentoring combines benefits of technology and traditional models to fortify mentoring to cater for diverse needs of mentees in various university programs of learning which makes it ideal for all levels of learning. There has long been an interest in the effects of mentors on mentee career outcomes, and with scholars now beginning to examine mentoring across national boundaries. Nevertheless, few studies have been done to evaluate efficacy of e-mentoring on utility of performance and time take to complete the studies among university students in public universities in Kenya. The objective of the study was to find out efficacy of e-mentoring programs in public universities in Kenya. This study explores impact of e-mentoring supports postgraduate students' programs at universities in Kenya. The study adopted descriptive survey where online questionnaires and interviews involving 100 mentees from 3 leading public universities in kenya, were analyzed using descriptive statistical analysis method, data was triangulated to describe how online mentoring supports academic rigor among university students. The findings indicated e-mentoring programs face lot of challenges. Analyses showed that mentees have qualitatively different conceptualizations of the mentoring process, the role of the mentor, and the transformative potential of these professional relationships. A model of transformative experiences was thus created to describe the various cycles through which professional development in an online faculty mentoring program may evolve beyond generic implications, the particular dimension of how physical distance impedes mentors' authenticity in mentoring has been identified. Innovative findings may be used to fine tune e-mentoring services to enhance efficacy in learning outcomes in CBC era.

Key words: *Academic performance, E-mentoring, Innovative knowledge-sharing, University programs, Transformative potential.*

.....



High Quality Online Scored Assessment Tools in Blended Learning and e-Learning in Institutions of Higher Learning

Dr. Josephine Ngunjiri
Biological Sciences, University of Embu.

Abstract

Assessment is key in the learning process regardless of mode of content delivery. The purposes of assessment include student progression, certification, and feedback to the various stakeholders. Formative and summative assessments are used in both blended and e-learning. Formulation of high quality scored online tools has been a challenge to some of the e-learning facilitators. A high-quality tool should inspire confidence to the learner, facilitator, and other stakeholders that the acquired the knowledge and skills were as per intended learning outcomes. In five online courses with more than 30 modules formative and summative assessments were provide in form of non-scored and scored multiple-choice questions. The formulation of the questions integrated various levels of learning as described in the Bloom's taxonomy. All summative assessment tools were scored and the pass mark for more than 90% of the modules was 80%, and three retakes were allowed. Each retake would randomize the answers. Most of the questions had one correct answer. However, some of the questions had more than one correct answer, and to score in that question all the possible answers must have been identified. In some of the modules, the questions involved use of supplementary materials before attempting the questions. In conclusion, high-quality scored assessment tools discourage rote learning. It is thus, important to adopt closed and open-ended questions in blended and e-learning to promote learning and high-quality assessment.

.....



Adopting Blended Learning as a Mode of Learning in Institutions of Higher Learning: The Case of University of Embu

*Prof Speranza Ndege,
Associate Professor, Humanities Department
&
Director, Open Distance & e-Learning, University of Embu
Email: ndege.speranza@embuni.ac.ke*

Abstract

Blended learning provides flexibility of learning to students to juggle between physical traditional face-to-face classes and online classes. The Covid-19 pandemic led to many world institutions of higher learning adopting online or blended learning as a mode of teaching and learning to cope with the ‘new norm’. The choice of models of blended learning to adopt varied from one institution to the other depending on their preferences. University of Embu was one such University that adopted blended learning and actualized it among staff and students. The institution exposed students to three models of blended learning namely: the a La Carte model of blended learning, rotation model of blended learning (flipped classroom) and enriched virtual model of blended learning. There is no policy on the model of blended learning a facilitator is supposed to adopt. Rather it is left at his/her discretion to choose the model that works best for the class.

The research study was qualitative. Data was collected from students using an instrument which was administered to all third and fourth year Literature students pursuing a degree in Education (Bed, Arts). The study explores the state of preparedness by students to study online or via blended learning. During Covid-19 Pandemic, the model adopted was A La Carte which entailed students to study both online and face-to face. The semester had specific dates allocated to cover 50% of semester work to online learning and another 50% study some units online at certain prescribed periods during the Semester. The Enriched Virtual Model, is practiced by some teaching staff. In this instance, learning is divided between online and offline components. The students are required to attend face-to-face classes with their teacher then do assignments online later. On the other hand, Rotation Model of blended learning (Flipped Classroom) is practiced by some teaching staff. The Model takes place on Campus with the teacher playing both roles of a lecturer and a facilitator. It is the situation where the lecturer in the face-face-to-face classroom pauses at intervals to refer students to course content online. The facilitators are at liberty to choose their preferred models so as they achieve their objectives.

This study presents the findings from research conducted among undergraduate students studying through the blended learning in the University of Embu (UoEm). It captures their views and proves that students are able to log in the Learning Management System (LMS) and access the interactive course content; interact with each other and their Facilitator through the various tools embedded in the LMS, complete their assignments. The flexibility enables the students to rearrange their schedules to fit in their online and offline.

Key Words: *Blended Learning, Online Learning, La Carte, Rotation Model, Face-Face*

.....



Applying University Administrators Management Capacity as a Predictor of Quality Assurance in e-Learning in Federal Universities in North East Geo-Political Zone, Nigeria

Amina Mohammed, Ph.D

aminafcey@gmail.com

Department of Educational Foundation

School of General Education

Federal College of Education, Yola, Adamawa State, Nigeria

Abstract

COVID-19 is a deadly virus that originated in Wuhan, China in December, 2019. The virus attacks the economy and the education system as it lockdown people globally leading to the closure of schools affecting about 99.9% of students as of April, 2020. In Nigeria, about 40 million learners were affected. University systems were not excluded from the devastating blow from this virus. International Association of Universities (IAU (2020) revealed that more than 1.5 billion students and youths globally have been affected by the closures of schools and universities due to COVID-19 pandemic. Quality in education becomes affected; university administrators' management capacity of university resources becomes paramount for internal quality assurance to be realized. Based on this, this study used the result obtained from a study conducted on university Administrators management capacity in federal universities in North-East Geo-Political Zone, Nigeria to determine how it can be applied to quality assurance in E-Learning in the universities. The objective of the study is to apply university administrators planning, organizing, directing, coordinating and controlling capacity as it predicts the level of internal quality assurance in Federal Universities in North East Geo-Political Zone, Nigeria to E-Learning. The population is 3,417 Academic Staff from the six federal universities in the zone from which 683 were sampled for the study. Mean and standard deviation were used to answer the research question while multiple regressions and one way ANOVA statistics was used to test hypothesis. The result reveals that the management capacity explained 99.1% of the variance in internal quality assurance and is therefore significant predictor of internal quality assurance in the universities. The study therefore recommends that; University administrator should use their management capacity to enhance E-Learning in the universities and equally encourage and motivate academic staff to be more dedicated in enhancing E-Learning in the universities.

Keywords: *University Administrators, Management Capacity, Quality Assurance, E-Learning.*

.....



The Transformative Impact of Audiobooks on Higher Education: A Qualitative Assessment of the Gaps and Opportunities

1. Marion Amukuzi- Riara University
mamukuzi@riarauniversity.ac.ke
2. Isaac Oyuga- Pan Africa Christian University
isaacoyuga@gmail.com

Abstract

The fast emergence of audiobooks in recent years has piqued the interest of educators and scholars, encouraging them to study their potential revolutionary impact on the learning landscape. This study provides a qualitative analysis that digs into the many features of audiobooks in higher education, with an emphasis on their increasing popularity, effective integration, and influence on traditional written text. This qualitative study includes a varied sample of higher education students, educators, and academic professionals from selected universities in Kenya. A blend of in-depth interviews and focus group discussions were used to capture participants' attitudes, usage habits, and perceived benefits and gaps of utilizing audiobooks in academic content access. Preliminary findings reveal that audiobooks have experienced a meteoric rise in higher education due to their accessibility, flexibility, and alignment with diverse learning preferences. Students and educators are increasingly utilizing audiobooks as supplementary and core learning materials, embracing their potential to enhance engagement and comprehension in the educational process. Challenges also arise, including the inability to present graphics and images in audio texts among others.

Key words: *Audio books, higher education, traditional written text*

.....



“Does Online Attendance Matter?” Investigating the Link between Student Attendance and Academic Performance

Dr. Mogaka Hezron, Dr. Franklin Mairura, Dr Florence Kaumi & Lydia N. Muriithi (University of Embu, School of Agriculture)

Abstract

The COVID-19 pandemic and changing technology demands in delivering higher learning has necessitated the implementation of online learning systems. However, little is known about the effectiveness of online learning environments in Kenya. This study aimed at evaluating online learning effectiveness by relating student attendance in terms of learning hours and learning outcomes. Learning outcomes were defined by total student performance that included CATs (continuous assessment tests) and final semester examinations for a common unit and cross-cutting course (i.e. Fundamentals of Development) that is offered to first year students at the University of Embu, Kenya for 1 semester constituting at least 8 lectures in the 2021-2022 academic year. The student attendance data was collected in the online learning system using device log-in data from a population of 557 students that were distributed in 8 different degree programs that included Agriculture, Commerce, Finance, Criminology, Economics, and Law specializations. Student attendance data was matched with their total examination result data (concatenated student names and admission numbers) using the fuzzy lookup add-in for Microsoft Excel allowing upto 10 different matches. Class attendance was significantly associated with increased student performance, with students who attended 0-25% of online classes scoring a mean of 18% in the final score. Other score were as follows 26-50% attendance (44%), 51-75% attendance (62%) and 76-100% (80%). There were also significant differences in the common unit performance by different courses. The preliminary results indicated that students who attended longer online hours during the semester performed better in the final exams, compared to students who attended less lecture hours. Analysis by gender did not reveal significant differences. The study concludes and recommends that online learning systems can facilitate learning transfer, thus the systems should be developed to enhance and support student learning. Improved data collection by minimizing errors in student log-in data and monitoring within online learning systems is necessary to enhance student performance.

.....





Examining Adult Learners’ Perspectives on Integrating Mobile Phones for English Language Instruction: Insights from the Makerere University Andragogy Lab

*Joseph Watuleke, Makerere University, Uganda
Ph.D. student, Email: joseph.watuleke@yahoo.com
Sasha Atukunda, Makerere University, Uganda
Undergraduate student, Email: sashakundah6@gmail.com
Paul Birevu Muyinda, Makerere University, Uganda
Associate Professor, Email: mpbirevu2013@gmail.com*

Abstract

This qualitative study explores adult learners’ perspectives on integrating mobile phones as a method of English language instruction at the Makerere University Andragogy Lab. The study investigates adult learners’ perceptions, identifies potential benefits and challenges of mobile phone integration, and provides recommendations for effective implementation. A purposive sampling technique selected 10 adult learners enrolled in English for Adults course at Makerere University Andragogy Lab. Data were collected through semi-structured interviews and analyzed thematically. Findings indicate that adult learners hold positive perceptions towards integrating mobile phones for English language instruction. Learners appreciate the portability and convenience of mobile devices, enabling them to study on the go and access learning resources outside the classroom. The use of mobile phones in instruction was perceived as engaging and interactive, fostering motivation and interest in language learning. However, challenges related to technical issues, including limited internet connectivity and device compatibility, were identified as potential barriers to seamless mobile learning experiences. Learners also expressed concerns about potential distractions and the importance of effective time management while using mobile phones for educational purposes, considering varying levels of English proficiency among learners, as many come from non-English speaking countries. Based on the findings, recommendations are provided. Faculty members are encouraged to design mobile-friendly course content, ensuring compatibility across devices and incorporating multimedia and interactive elements. Additionally, improving internet infrastructure is recommended to facilitate smooth access to online learning resources via mobile devices. Learners should receive guidance on managing distractions and developing self-regulation skills to optimize mobile learning experiences. This study highlights the significance of integrating mobile phones as a method of English language instruction for adult learners at the Makerere University Andragogy Lab. It contributes to the ongoing discourse on mobile-assisted language learning, emphasizing thoughtful integration to maximize the potential of mobile technology for enhanced language learning experiences.

Keywords: *Mobile-assisted language learning, English language instruction, adult learners, mobile devices, perceptions, challenges, recommendations, Makerere University Andragogy Lab.*

.....



Building a Simulated Mentorship Platform for Online Learning Programs: A case of University of Embu

*Dr. Faith Mueni,
University of Embu
mueni.faith@embuni.ac.ke*

Abstract

In the wake of the COVID-19 pandemic, online learning has emerged as a new norm. While it represents an innovative approach to education, it has gained remarkable grip, predominantly within the African context. Both students and educators have readily embraced this approach due to its flexibility of letting learners to study from the comfort of their environs, around the clock. However, this drastic shift to online learning has not been deprived of challenges. The nature of personalized learning, lack of direct instructor control, mutual peer supervision of course-mates, and interpersonal interaction, has presented hurdles. When faced with challenges, learners often lack physical peers to interact and collaborate. These challenges, come a long with long-term consequences such as poor academic performance, declining social interactions, poor time management, and enfeebled senses of responsibility. This paper presents a proposal for building a simulated mentorship platform designed to motivate active learner engagement and address the above-mentioned challenges in online learning. The proposed platform aims to lessen the sense of isolation among learners and increase course completion rates. Moreover, it endeavors to equip learners with the required skills needed beyond graduation. The projection of this platform is to benefit learners from enhanced interactions, guidance, and mentorship support, fostering a more inspiring learning experience. The future outcome is not only to improve on course completion rate but also to prepare learners for the post-graduation phase.

Keywords: *Mentorship, Simulated mentorship, simulated environment, online learning*

.....



Digital Inclusion: Developing an Interactive Content for an Online Learning Course

Bonface Ngari Ireri¹, PhD., Collins Wagumba², PhD., Gladys Nyachio³, PhD., Mary Kiveu⁴, PhD..

1,2,3,4 Multimedia University of Kenya (MMU)

Speaker: Dr. Bonface Ngari Ireri, contact: bngari@mmu.ac.ke;

Abstract

When Covid-19 pandemic emerged, the government abruptly closed all learning institutions as a way to control the spread of the virus. Institutions were not ready to adopt digital learning due to lack of skilled manpower amongst other impediments. The few that started online classes dumped notes in the learning management system and expected the students to read on their own. Little attention was paid to students facing challenges of access, lack of digital devices or students who came from places that have no adequate mobile signal to support online connections. The hurry to introduce online mode of teaching and learning raised issues of quality due to many unresolved challenges that coupled the teaching and learning process. This paper shares data, processes and experiences from a team of lecturers during a capacity building project dubbed Skills for Prosperity Kenya organized by the ministry of education. The team created an interactive learning module for a university common unit on communication skills. The feedback from students compared the course when taught online without interactive e-content and online with interactive e-content. The interactive course was perceived to significantly promote learning better than when content is not interactive. To overcome challenges, e-content developers are encouraged to design digitally inclusive content/assessments, asynchronous delivery mode and use of easily accessible technologies. The presentation will be in person and will include the story of developers in the form of video.

Keywords: *Access, Digital Inclusion, Technology Adoption, e-content, Interactivity*

.....



‘Retrospect & Prospects: Faculty Post -Covid Reflections on e-Learning Perceptions, Experiences, and Challenges’

*Corresponding author: Elizabeth A. Owino, PhD, Moi University, Kenya.
Email: akinyiliz2012@gmail.com*

*Rose Ruto-Korir, PhD, Koitalel Samoie University College, Kenya
Email: cheptookorir@ksu.ac.ke*

Abstract

Before COVID-19 struck, e-learning was a remotely known method of teaching and learning in Kenya. Most Higher Education Institutions (HEI) used the face to face (FtF) approach. Two years down the line, the popularity of e-learning cannot be disputed as majority of HEI institutions now embrace it in almost all aspects of teaching and learning including examinations and graduation. There is no doubt that effective use of technology has the potential to improve learning. However, like with all innovations, there is need to step back and reflect. The proposed phenomenological qualitative study seeks to examine the reflections of converted e learning teachers from Moi University, Eldoret, Kenya. Moi University is the largest university in the Rift and Western part of Kenya The study will be guided by three research questions: What was been your experience with regard to e-learning before and after COVID-19; What are the challenges you have had to deal with? What is your perception with regard to e-learning? The study will target teachers from all the departments of Moi University with a range of experiences with e-learning. In-depth interviews and open ended questionnaires will be used to gather rich, detailed narratives on experiences, challenges and perceptions with regard to e-learning. Data will be analyzed using phenomenological coding to identify and analyze patterns within the data. Emerging themes that capture the core aspects of teachers’ experiences, challenges and perceptions will be recorded to provide rich and nuanced understanding of their lived experiences.

Key words: *Converted teachers; Higher Education; Innovations; Reflections*

.....



Challenges of Integrating Information and Communication Technology (ICT) Tools in Teacher Education Programmes

*Aisha Ahmad Hamman
Department of Curriculum and Instruction
Federal College of Education, Yola
School of General Education
E-mail: hammanaisha74@gmail.com*

Abstract

The integration of Information and Communication Technology (ICT) tools in teaching and learning especially in the developing world like Nigeria has been a subject of discourse among educational stakeholders. As the world becomes a global village, teachers are encouraged to integrate ICT tools in the classrooms; however, most of them are skeptical about utilizing the ICT fully in the classrooms, especially in developing countries like Nigeria. The import of integrating ICT tools in teacher education programme to improve the standard and quality of educational delivery cannot be overemphasized. Despite the relevance of ICT in enhancing quality education delivery, data has shown that lot of challenges are encountered in the total integration of ICT tools in the classroom. This paper is aimed at examining the challenges hindering the integration of ICT in teacher education which include unfamiliar technology and resistance to change, lack of infrastructure, internet connectivity and evaluation and credibility of degrees. Relevance of integrating ICT in teacher education is examined and recommendations were made on how to overcome the challenges such as, provision of adequate infrastructure, provision of internet connectivity and equipping teachers with quality ICT knowledge and skills. It was concluded that ICT has the potential of promoting quality teacher education if properly utilized.

Keywords: *Challenges; Integration; ICT Tools; Teacher Education Programmes.*

.....



Analytics by Post as Predictors of Academic Performance of Distance Learners in a Blended Learning Course

Richard Kajumbula¹, Felix Bwire², Abigail Inapat³, Eva Mirembel

1-Makerere University, Uganda

2-Busitema University, Uganda

3-Soroti University, Uganda

Abstract

One of the indicators that learners have attained the Intended Learning Outcomes (ILOs) is their academic performance as gauged by the facilitator. In the advent of massification of education, eLearning, blended learning and use of Learning Management Systems (LMS), Learning Analytics (LA) can be utilised to evaluate and predict learning and academic performance. The purpose of this study was to evaluate the predictive power of analytics by post on the academic performance of distance learners. This quantitative study utilised regression analysis to test the null hypothesis that analytics by post do not predict academic performance. The sample comprised of 843 students who took a blended course at Makerere University. The number of postings each student made as defined by the instructor on the Makerere University eLearning Environment (MUELE), a Moodle-based LMS, were analysed. The dependent variable was the final mark while the regressors included marks of analytics by post, timed tests, concept paper and participation in group tasks. Findings show that all regressors were positively and significantly correlated to the final mark hence we reject the null hypothesis and conclude that analytics by post predict academic performance. Although the quantity of learner engagement with the course through online conversations in a blended learning setting is an important predictor of academic performance, the quality also plays a crucial role. The quality of posts that utilise rubrics and proper facilitator instructions regarding the quality of contributions can be inferred from their quantity while predicting learning and learner performance. There is need to increase use of rubrics by facilitators, student participation in online discussions and the enhancement of the potential value of analytics by post which cannot be ignored as a kind of early warning system for identifying students at risk of failing their classes.

Key words: *Learner analytics, analytics by post, blended learning, online learning, eLearning, learner performance, academic performance, Learning Management System, Moodle*

.....





Profiling of Learners’ Characteristics in e-Learning Platforms Using Machine Learning Approach

Ian Igado, David Thuku, Faith Mueni and Consolata Gakii

Speakers: Igado Ian and Thuku David

Contacts: 1648@student.embuni.ac.ke, 1529@student.embuni.ac.ke

Abstract

Online learning has gained significant attention for its global accessibility and flexibility, empowering learners to access knowledge and information from any location at any time. This surge in online education has led to the generation of vast amounts of data, effectively ushering e-learning into the realm of big data. Machine learning algorithms are being explored for their potential to group learners with similar behavior patterns, revealing distinct clusters of students, each with unique preferences, engagement levels, and learning paths. However, a critical challenge faced by online instructors is accurately identifying academically struggling students in a virtual environment where immediate physical cues and face-to-face interactions are absent. In response to this challenge, our research utilized the Python programming language where we conducted an exploratory analysis of a secondary dataset, by importing relevant libraries such as Pandas, Numpy, Matplotlib, and Seaborn. Relevant columns from the dataset, including Home Location, Device Type, Economic Status, Study Time, Sleep Time, Engagement in Group Discussions, Performance in Online Education, and Average Marks in Physical Classes, were selected for analysis. Key findings from our analysis included insights into satisfaction levels, economic backgrounds, device usage, academic performance, study time, and marks from physical classes. In conclusion, our research highlighted the need for improvements in online education, addressing content quality, accessibility, teaching methods, and personalized adaptations to cater to the diverse needs of students. Further research and literature reviews are recommended to explore interventions that can enhance overall student satisfaction and success in the online learning environment. Our data-driven approach offers a promising path to optimize online learning experiences.

.....





Effect of Role Culture Implementation Approach on Universities Performance in Kenya

1 Susan Wairimu Chege, 2Prof Evangeline Gichunge and 3Dr. Wilson Muema
123 Strategic Management, Kenya Methodist University
Corresponding author e-mail: susanberita@gmail.com

Abstract

The technique for implementing organizational culture changes gradually over time and has a significant impact on how people behave within a company. Every firm has an implementation culture strategy that influences how employees behave, causing it to fluctuate between a favorable and a negative attitude toward their work. The degree of performance that is expected of the organization may be significantly influenced by these views. In terms of performance rankings along the parameters used to gauge university performance, the majority of African universities—Kenya included—have not fared well globally. The association between the strategy for implementing a culture and the performance of the company has not yet yielded a conclusive result from empirical research. The study sought to determine the effect of role culture implementation approach on universities performance in Kenya. The study used a descriptive research approach, and its target population included 444 senior university employees from all 74 accredited universities in Kenya, including the Deputy Vice-Chancellor, Dean of Faculty, Dean of Students, Heads of Departments, and Registrar. The study’s ultimate sample size of 365 individuals was calculated using the Yamane formula. Additionally, the research’s primary technique for acquiring quantitative data was a questionnaire. Descriptive and inferential statistics were used to analyze the data. The study discovered that role culture was significant to performance of universities. The R square value of 0.184 proved that role culture affected the performance of universities by 18.4%. The correlation value of ($r=0.321$, $p<0.05$) showed the relationship between role culture and universities’ performance was positive and significant. The chi-square value of $\chi^2(5) = 12.222$, $p=0.027$ further established a significant relationship between role culture and universities’ performance. Role culture was significantly associated with research output, student placement by KUCCPS and graduation rate. It is imperative for organization managers to have good understanding of the cultures that exists in universities and the impact it generates on typical performance. At the managerial level, the management should not only pay attention on the results but also consider the needs of the staffs for positive outcomes. Learning institutions should embrace teamwork, division of tasks and compliance to procedures and protocols in e-learning platforms and programs.

Keywords: *Role Culture, Implementation Approach, Universities Performance*

.....



The Effectiveness of Lecturer-Students engagement in Blended Learning Courses in Universities in Kenya

*Gladys W Wagura - Director Zetech Digital School- Zetech University
ggituku@gmail.com*

*Bernard Mwangi - Senior Assistant Registrar- Zetech University
mwangi.bernard@gmail.com*

Abstract

In the era of post Covid 19 Pandemic, many institutions of higher learning continue to use the blended learning mode of study. This mode ensures continuity of learning and facilitation of various units remotely through the available learning management systems. Blended learning refers to a combination of traditional face-to-face instruction and online learning, and this approach has become increasingly popular in universities worldwide. The blended learning enables universities to continue their operations and to be sustainable. Lecturer-student engagement is imperative for effective learning and teaching. While this engagement is more direct in traditional face to face teaching, there is need to evaluate its effectiveness in a blended mode. The proposed research study aims to investigate the effectiveness of lecturer-student engagement in blended learning courses at Zetech University in Kenya. This study focused on the engagement between lecturers and students in blended learning courses, including the frequency and quality of interactions, and the impact on students' academic performance and satisfaction. The study was conducted using primary and secondary data where questionnaires were administered, and document analysis was done on the reports generated from the LMS. Stratified random sampling technique was used to choose respondents from different levels which include faculty, students, Heads of Department, Deans of schools and top management. The findings of this research will provide insights into the effectiveness of blended learning in improving student outcomes and inform strategies to enhance engagement between lecturers and students in blended learning courses in Kenyan universities.

Key words: *Students engagement, Blended Learning, satisfaction, Learning management System*

.....



Structures and Building Blocks: UoEm’s Journey towards Online and Blended Learning

Prof. Speranza Ndege
Associate Professor, Humanities Department
Director, Open Distance & e-Learning
University of Embu
Email: ndege.speranza@embuni.ac.ke

Abstract

The University of Embu’s journey towards online learning began in March 2020 when Covid-19 Pandemic was witnessed for the first time in Wuang, China. This pandemic spread globally forcing organizations, companies, governments and institutions worldwide to rethink and reorganize the urgent need for a paradigm shift in the mode of communication, teaching and learning in organizations and institutions in a bid to remain relevant amidst the pandemic. Many global businesses and operations closed down while others including trade and learning in institutions of higher learning were conducted online. The University of Embu is one such institution that closed down due to the fast spreading Pandemic. Students spread throughout the country were taught online both synchronously and asynchronously for several semesters and only came to the Campus physically during practical lessons and to sit their end of semester examinations. This was the University’s first encounter with blended learning. Soon it became a reality, a new norm as students and staff adapted to the new mode of learning. Three years later, online learning is flourishing in the institution with no visible signs of backtracking to fully traditional face-to-face mode of study.

The presentation focuses on the University of Embu’s three-year journey towards online and blended learning. It discusses the University’s infusion of modern technology into teaching and learning and the efforts made to build, maintain and keep it up amidst many challenges. The presentation discusses experiences at various stages as the University laid down a firm foundation for distance and e-Learning programmes as well as establishing the right structures upon which online and blended learning would thrive seamlessly into the future.

Key words: Covid-19, Online learning, Synchronous, Asynchronous, Technology, Blended Learning

.....



Influence of Strategic Communication on Medical Employees’ Performance of County Referral Hospitals in Central Region Economic Bloc, Kenya.

Eunice Nkatha Karatu
Email address: blessednkatha@gmail.com

Abstract

Employees play a critical role in achieving firms’ objectives. However, most Kenyan hospitals are suffering from low medical employee performance due to communication failure. The purpose of the study was to determine the influence of strategic communication on medical employees’ performance in county referral hospitals in the central region economic bloc, of Kenya. Explanatory research design was used to collect data from a target population of 10 referral hospitals in Tharaka Nithi, Embu, Nyeri, Meru, Kiambu, Murang’a, Nakuru, Nyandarua, Laikipia, and Kirinyaga. The sample size were 357 medical employees including medical officers, doctors, nurses, pharmacists, specialists, and therapists. A sample size of 327 medical staff was selected using a simple random method, both open-ended and closed questionnaires were issued. Data was descriptively analyzed, statistics such as frequencies and percentages, mean, and standard deviation. An inferential statistic like Pearson correlation was determined and the results presented using tables and explanations. The study unequivocally demonstrated that strategic communication, particularly through the implementation of e-learning, significantly optimizes the performance of medical professionals in county referral hospitals. It is evident that by embracing and promoting innovative work practices facilitated by e-learning, healthcare organizations can substantially boost the individual performance of their employees. This, in turn, leads to a cumulative enhancement in the overall impact of strategic communication strategies within these healthcare institutions.

Keywords: *Strategic Communication, Medical Employees’ Performance, County Referral Hospitals, Central Region Economic Bloc, e-learning.*

.....



Teaching Practical, Mathematical, and Statistical Courses with Lengthy Expressions via Online Platforms at the Department of Mathematics and Computer Science, University of Eldoret. Reflecting on Insights Gained

**1J. Koech; 2B. Aloo. 3W. Maiyo, B., 1J. Bitok, 4B. Bullut*

1Department of Mathematics and Computer Science, School of Science, University of Eldoret, Kenya.

2 Department of Biological Sciences, School of Science, University of Eldoret, Kenya.

3 Office of the president, Turbo West Sub-County, Uasin Gishu County, Kenya.

4USAID Ampath Uzima, Eldoret Centre

**Corresponding Author Email: jkoech@uoeld.ac.ke,*

Abstract

The post-COVID-19 era brought several changes in the higher education sector’s learning environment for students worldwide. To support the new teaching approaches and boost retention rates in light of the stiff competition among universities in the nation, many universities have continued to encourage staff to embrace online and blended learning as methods of teaching and learning among their undergraduate and postgraduate students. However, when students come from different areas of competence, teaching styles can get complicated, especially when there are practical and lengthy expressions involved. The paper employed a descriptive study design. Results show that the average benefit of using an online platform was 6.71, with 94% of staff having ever used an online platform, and a sizable percentage (47%) of employees rated their level of satisfaction as good. The three most widely used blended teaching and learning approaches were the use of whiteboards, demonstrations by use of video clips, and the sharing of solved tutorials as instructional material via WhatsApp or class emails. The department will continue using the hybrid approach as it gives students additional choices and ensures the department’s survival. The university should keep enhancing the essential framework for effective teaching and learning. Student performance has continued to improve despite the department’s adoption of the hybrid approach.

Key Words: *POST-Covid 19 Era; Higher Education Sector; Hybrid Approach; Blended Method; Survival; Retention.*

.....





Digital Folklore Narratives: ‘The Seen Story’ and ‘The Told Story’ In Selected Songs of John De Mathew

*Dr Wanja Kangangi
University of Embu
School of Education and Social Sciences
Department: Humanities
Email: wanja.kangangi@embuni.ac.ke*

Abstract

Digital advancement has expanded the research landscape in folklore studies. The digital space has become a resourceful arena for the dissemination of contemporary folklore such as the popular song. This evolution relates to folklore studies in terms of accessibility to research content because it enhances scholarship in African popular culture. Folklore materials are now more readily available on digital platforms for modern folklore scholars. The artistic complexities of orature composition, performance, delivery and reception have experienced a compositional shift from the traditional performance arena into a modern hybrid mode where composition and performance is filmed into audio-visual discourses. This platform generates narration in the popular song two-fold; the performed story or ‘the seen story’ (in pictures) and the narrative constructed through lyrics and melody or ‘the told story.’ This paper presents the two versions of the ‘told story’ and the ‘seen story’ in selected songs of John De Mathew; a legendary Gikūyū Benga artist. The songs have been selected purposively and the analysis has employed qualitative research design. The data is collected from digital platforms for transcription into scripts. The selected songs have been listened to and viewed on the screen in order to identify the two narrative versions of each of the songs. Translation of the lyrics from Gikūyū into English has been done for the purpose of accessibility by non-Gikūyū speakers. Description of the narratives has been made along three theoretical provisions of narratology namely; story, narration and narrative. These principles are fundamental elements in the construction of a story. The main achievement of this article is to enhance the trajectory that encroachment of folklore dissemination within digital platforms provides new research paradigms for contemporary scholarship. It also provides descriptive information on the two narrative versions of each of the selected songs of John De Matthew.

Key words: *Audio-Visual. Digital. Folklore. Narration. Narrative. Popular Song. Orature.*

.....



Clan Culture Implementation Plan and Performance of Kenyan Universities

1 Susan Wairimu Chege, 2Prof Evangeline Gichunge and 3Dr. Wilson Muema
123 Strategic Management, Kenya Methodist University
Corresponding author e-mail: susanberita@gmail.com

Abstract

The recent increase in competition and insufficient government financing, as well as the government’s increased focus on technical, vocational education training, have had a significant negative impact on higher education’s service delivery and performance. The study sought to determine the effect of role culture implementation approach on university performance in Kenya. The study used a descriptive research approach, and its target population included 444 senior university employees from all 74 accredited universities in Kenya. Descriptive and inferential statistics were used to analyze the data. The findings indicated that clan culture influenced universities’ performance by 11.9% (R square value of 0.119). The correlation value of ($r=0.071$, $p<0.05$) showed the relationship between clan culture and universities’ performance significant. The chi-square value of $\chi^2 (5) = 23.704$, $p=0.041$ further established a significant relationship between clan culture and universities’ performance. Clan culture was significantly associated with research output, satisfactory university ranking, student placement by KUCCPS, and graduation rate. Managers must support the clan culture to accomplish the goals set by an organization successfully. Therefore, employees need to be supported by managers by all means alongside training needs and learning opportunities, creativity, and innovation. Learning institutions should embrace good communication, knowledge sharing and trust development in e-learning platforms and programs.

Keywords: *Clan culture, plan implementation, performance*

.....



Influence of e-Learning on Academic Performance among Students at the Outspan Medical College Nyeri County, Kenya.

*Ruth Wairimu Githiomi
E-Learning Section Head, Outspan Medical College
Email Address: ruth.wairimu@omc.ac.ke
E-Learning Section Head*

Abstract

Following the outbreak of the COVID 19 and the ensuing lockdown, online learning for the continuation of academic activities and the prevention of dropouts from the institutions were given the highest priority. Universities in Kenya implemented numerous creative strategies to combat the crisis, they used various software/apps such as Google Classroom, Zoom, and Microsoft Teams to take online courses. However, the effectiveness of the e-learning strategy has not been assessed in Kenya. This study sought to have established the influence of e-learning on academic performance among students at the Outspan Medical College Nyeri County, Kenya. The objectives were to establish university students’ satisfaction with e-learning, determine the effect of e-learning on academic performance and find out challenges of e-learning among university students in Nyeri County. The study was anchored in the Bridge’s Transition Model. This study used a descriptive cross-sectional survey research design. The study targeted students at the Outspan Medical College Nyeri County, Kenya. Fischer’s formula was used to come up with a sample of 294 respondents. Simple random sampling was used to recruit respondents. A semi-structured questionnaire was used to collect data. Descriptive statistics and inferential statistics were used to analyse quantitative data. The study found that majority (67.3%) of the respondents were dissatisfied with the e-learning. There was a significant association ($\chi^2 = 2804.087$, $DF=560$, $p=0.000$) between satisfaction of students with e-learning and students results. The vast majority (90.5%) of respondents indicated that they had connectivity issues during e-learning. The study concluded that students’ satisfaction with e-learning in learning among students was low. There was a significant association between e-learning and results. In addition, challenges of e-learning among students at the Outspan Medical College Nyeri County, Kenya included connectivity and technical issues. It was recommended that the college ought to provide students with training about the teaching tools and software used for e-learning. It was also recommended that teaching materials should be increased to ensure that they are adequate for the technical demands of e-learning.

.....



Utilizing Artificial Intelligence for Learner Engagement in a Virtual Class

Susan Nduta Muthiuru, Victoria Mukami, Consolata Gakii, Boaz Too

Presenters: Susan Nduta and Consolata Gakii

1633@student.embuni.ac.ke

gakii.consolata@embuni.ac.ke

Abstract

The COVID-19 pandemic transitioned education from the traditional face-to-face system to a technological approach that kept students on track despite the disruptions caused by the pandemic. Technological innovations enhance the educational infrastructure by utilizing tools and services to improve learning experiences. E-learning is one of the strategies laid down by institutions to increase access to higher education. E-learning became crucial during the pandemic through continuous learning and administering tests remotely. Adapting to online learning posed challenges to educators and learners accustomed to the traditional system compared to online environments. Due to a lack of interaction with tutors and other students, online learning systems struggle to engage students by monitoring their body language, attention spans, and a handful of disruptions encourage students to engage in other activities. The increased dependency rate on the internet and other artificial intelligence tools further discourages participation and communication, challenging the effectiveness of online learning. The issue of virtual class acceptance has been addressed in various studies by evaluating technology acceptance and use, but learners' behavior and sustained attention have yet to be investigated. To address this gap, the study proposes to use Artificial intelligence (AI) and machine learning capability to track, engage and monitor learner's interaction levels within an online class. Intelligent prompts from a Chatbot will be developed to detect a pattern of frequent clicks and initiate a conversation with the learner when a set period elapses without user action on the E-learning platform. Student interaction with course materials will also be monitored using AI algorithms by analysing mouse clicks, providing real-time feedback to the instructor, and assisting the learners. The study's primary outcome will be a learner-centered assistive model aimed at improving learner attention by integrating AI and an online Learning Management System.

.....



Exploring the Impact of Learner-Centered and Self-Directed Learning Approaches in the Lives of 21st-Century Students

Ogbaga, I. N1, Nweke N. E2, Nnamani C.V3 Afiukwa C. A4

1Department of Computer Science, Ebonyi State University, Abakaliki, Nigeria

2Department of Political Science, Ebonyi State University, Abakaliki, Nigeria

3Department of Applied Biology, Ebonyi State University, Abakaliki, Nigeria

4Department of Biotechnology, Ebonyi State University, Abakaliki, Nigeria

Correspondence author's Email: ogbaga.nwoyibe@ebsu.edu.ng

Abstract

To fully benefit from the globalization agenda, there is an urgent need to key into the paradigm shifts in the education sector. One of these changes is a shift from teacher-centered (pedagogy) to learner-centered (andragogy) and learner-paced (heutagogy) learning approaches. The andragogical approach has gained considerable attention in educational settings because it prioritizes the needs and interests of learners. With this approach, learners take control of their learning journey, making informed decisions about what, how, where, and when to learn, focusing on their individual needs, interests, and strengths. The approach recognizes that students have diverse backgrounds, experiences, and learning styles. By tailoring instruction to suit the unique needs of each learner, educators can foster a more personalized and meaningful learning experience. On the other hand, the heutagogical approach helps learners take responsibility for their learning activities by emphasizing intrinsic motivation and seeking out resources, opportunities, and experiences that support their learning objectives. However, it is essential to examine whether this educational change applies to all grades and disciplines to reach permanent solutions. Existing research on innovative educational approaches has shown that pedagogy offers more guidance to learners and allows teachers to assess learners' progress, whereas andragogy and heutagogy encourage problem-solving and are useful strategies to make learners self-determined in their learning process, especially in higher education. This paper presents the teachers' perceptions of implementing learner-centered and self-directed learning and its practicality. The study further examined the teachers' perceptions of preparing and delivering learning resources to learners using this cutting-edge technology. It also analyzed the possible perceptions and adaptability of students, the end-users/ consumers of these learning resources. Finally, the study considered the implementation strategies, given that e-learning is a relatively emerging technology in the Global South.

.....



Pedagogy of Teaching Large Online Classes

*Dr. Milcah Nyaga
University of Embu
P.O. Box 6-60100
Embu
nyaga.milcah@embuni.ac.ke*

Abstract

University of Embu, is one of the Public Universities in Kenya. In 2022, it was recognized as the best performing University in Kenya. It is expected to be an epicenter for Training, Research and Extension. To achieve this, the University ought to provide quality online teaching. The practice has been a new concept that was extensively started during the COVID-19 Pandemic. The aim of the study was to: establish pedagogy for teaching large online classes, find out challenges of large online classes and determine class management of large online classes. The research was guided by Constructivism theory which focused on engaging learners in an active learning process. The study adopted descriptive research design. The study targeted eight hundred 2nd year students. Simple random sampling was used to select two hundred students. The objectives were analyzed through descriptive statistics. The study found out that each lesson should be prepared logically from students' known experience to unknown where various teaching methods such as lecture method, discussion, group discussion and presentation to be incorporated. The study reported that challenges of online teaching include: poor connectivity, some students don't own smartphones, it was expensive to buy data, individual differences, students being thrown out, limited monitoring of students' learning, difficulties in engaging all students, minimum attention of students, difficulties in enforcing student behaviour. The study found out that class management could be done in the following ways: that the lecturer should set the mode of class by logging 15 minutes to welcome students as they enter class. It was noted that students were against students who had disruptive behaviour in the virtual classroom and they reported that such student should called by the lecturer for counselling. The study recommended that: lecturers handling large classes needed to be trained on techniques of effective pedagogy for teaching large classes, Universities should make it compulsory for every student to own a laptop or smart phone and lecturers should be composed and insightful when addressing online challenges problems.

Key words: *Pedagogy, Online classes, Lecturers, Management, Teaching*

.....





Assessing the Effectiveness of Experiential Learning in Developing e- Learning Skills among TVET Trainers: A Case Study of Selected Institutions in Western Kenya

Nyongesa Lumuli Charles I; Osborne Wafula Opichol & Dr. Godfrey Wakoli Murungu Lecturer at Kisiwa Technical Training Institute, Bungoma

**Corresponding author: info@kisiwatech.ac.ke*

Abstract

The purpose of this study was to assess the effectiveness of experiential learning in developing e- Learning Skills among TVET trainers in Kenya. The study was conducted through a case study of selected institutions in Western Kenya that offer TVET training programs. The study focused on the use of experiential learning as a method of developing e- Learning Skills among TVET trainers.to determine the level of digital skills among TVET trainers, establish the extent to which experiential learning is used to develop e- Learning Skills among TVET trainers, assess the effectiveness of experiential learning in developing e- Learning Skills among TVET trainers and the challenges and faced by trainers in utilizing experiential learning methods. The study employed a mixed-methods approach in data collection. The quantitative data was collected through a survey questionnaire administered to 200 TVET trainers 5 selected institutions. Data was collected through interviews and survey. The descriptive statistics were used to summarize the quantitative data collected from the survey questionnaire while inferential statistics was used to establish the relationships between variables and to test hypotheses. The study found that there was no significant difference between the effectiveness of experiential learning and the development of e- Learning Skills among TVET trainers. However, majority of trainers (over 70%) in study institutions had limited digital proficiency making them to rely on traditional teaching approaches. Similarly, majority of respondents had negative attitude towards experiential learning; a situation that was compounded by budgetary constraints that had hindered development of adequate infrastructural base to support experiential learning as well as the development of digital professional development competencies among TVET Trainers. The study calls for the development of comprehensive and standardized digital skills training programs for TVET trainers, Promotion of the integration of experiential learning methods into TVET training programs and adequate budgetary provision in order to enhance access of trainers to Technology and Resources that support Continuous Professional Development through Collaboration and Partnerships, being aspects of quality and relevance of digital skills development in line with the demands of the digital economy.

Keywords: *Competencies, Digital Skills, Experiential Learning, Trainers, TVET*

.....



BOOK POSTER



BOOK POSTER: Online Education in the midst of a World’s pandemic, A Potential Academic Integrity Cyber Risks

Dr. Fredrick Omogah

H.o.D Information Systems (I.S)/I.T, Sci. & Technology/ Lecturer - Medical Informatics, I.T & Computer Sciences at The Uzima University, Kisumu email: fo2001ke@yahoo.com /fomogah@gmail.com

Online Education in the Midst of a World’s Pandemic, A Potential Academic Integrity Cyber Risks (AICR)

By Dr. Fredrick Ochieng’ Omogah

This book, being my second research work on Cyber Security in the time of Covid-19 pandemic, which was also submitted to the 20th European Conference on Cyber warfare and Security (ECCWS 2021), was peer reviewed and accepted for publication in the conference proceedings. This was followed by oral presentation on the 25th of June 2021 at the University of Chester, UK. This Book comprehensively covers Education Automation, amid this pandemic, and what Education stakeholders across the world should know. Education Automation may NOT only be focused on the pandemics and how well Technology can be used as “New Normal” to handle the disrupted face-to-face teaching and learning, but also on how bad things can get in the event of technology failures and potential online criminal conducts. Technology alone has never been a good solution. Better approaches MUST include People, Process, then Technology (PPT), so that a formal way for aligning Technology with Education core functions and strategies can be achieved to nature best practices, and control for successful Education Automation implementation.



Unrehearsed Boom in Education Automation Amid COVID-19 Flouts

Education in the Midst of World’s Academic Integrity



Dr. Fredrick Ochieng’ Omogah (h.c) is a head of department of Information Systems, Sci. & Technology, and a lecturer in I.T, Computer sciences, Medical Informatics & Health Systems at Uzima University, Kenya. He was (The Embryonic COVID-19) h.c Doctoral Recognition, Msc. I.T Security and Audit-(JOOUST), Bachelor of I.T from Australia, and Trained at the 4th International Training Course on Information Technology Education Methodology by JICA - to JICA-EEPIS Indonesia (Asia) 2005. Apprenticeship (P000612-002-2019) - Investigation & Management of Cyber and Electronic Crime at the University of Pretoria, ZA, 2019. Currently, Digital Forensics investigator, His main research areas are in I.T and Cyber Security in Electronic Healthcare Systems, with many journals and book Publications in Cyber Security field.

Email: fo2001ke@yahoo.com

Notes/Comments:

Presenting author details

Full name: Dr. Fredrick Ochieng’ Omogah (h.c) Contact number: +254705503939 Alternate email: fomogah@gmail.com

E-Book Edition Available On:



Print Edition Also Available On:










Get your copy from: Amazon:https://www.amazon.com/dp/9393734534 also Kobo:https://www.kobo.com/in/en/ebook/the-unrehearsed-boom-in-education-automation-amid-covid-19-flouts also on googlePlay: https://play.google.com/store/books/details?id=u-SxEAAQBAJ&pli=1Book Description





UNIVERSITY OF EMBU

E-LEARNING CONFERENCE 2023

-  **P.O. Box 6-60100, Embu, Kenya**
-  **Tel: +254 (20) 2444136,**
-  **Cell: +254 727 933950,**
-  **Cell: +254 788 199505**
-  **vc@embuni.ac.ke, info@embuni.ac.ke**
-  **@UoEmbu**
-  **@UniversityofEmbu**