



MZUMBE UNIVERSITY
(CHUO KIKUU MZUMBE)

E-LEARNING GUIDELINES

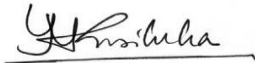
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PREFACE

Mzumbe University (MU) thrives to respond to global technological advancement taking place in teaching and learning. Since when the Learning Management System (LMS) was deployed in 2009 at MU, some efforts have been made by some lecturers and positive responses from students have been evidenced to adopt e-learning of various forms. Despite eLearning being one of the key strategic objectives in the third and fourth cooperate strategic plans, guidelines to inform educators on how to deploy and conduct eLearning courses and content creation was missing. It is against this backdrop that this guideline is introduced.

Among the core values of Mzumbe University is the “Creativity and innovativeness” aim to strive and embrace new technologies and innovative methods of doing our work and contributing to socio-economic development. The new forms of teaching and learning require techno-pedagogical transformation which will increase access by enabling learning to take place within and outside physical classrooms. The guideline has been developed based on the benchmark done to Tanzanian Universities and beyond. It is also a response to the 4th Mzumbe University Strategic plan in its targets to ensure at least 50% of academic programmes are available in blended or E-Learning modes by June 2022 (A.1.3.14).

The main objective of this guideline is to guide the effective deployment of e-Learning in its full implementation aspects including course content development, assessment and evaluation, quality assurance, support services and roles of different stakeholders. The guideline is relevant today as MU is expanding its reach by offering distance and blended learning courses across the globe. It is hoped that the guideline will position Mzumbe University among the universities in Tanzania entrusted with established standards to deploy technology-mediated learning.



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1.0 INTRODUCTION

1.1 Background Information

The adoption, deployment and implementation of innovative learning technologies in higher education institutions have melodramatically expanded. The Mzumbe University (MU) adopted the learning management system (LMS) commonly known as “MU e-learning system” since 2009 in line with the University expansion as well as responding to the global technological advancements. Significant milestones were reached in the year 2012 not only because the University Council approved the policy related to distance and e-learning (i.e. Mzumbe University Information System Integrated Policy - MUISIP- 2013) but also, the e-learning became a central agenda in the third University Corporate Strategic Plan (CSP) and subsequently fourth CSP. The two documents inspired the University into leveraging modern technologies and tools to expand the university reach beyond its borders as well as to enhance learning and teaching experiences at the University. Both the CSP and MUISIP align with the National Information Communication Technology (ICT) Policy, 2016 and Tanzania Development Vision 2025 which emphasizes the desire to unleash the potential of ICT in education delivery that may cause Tanzania to precipitate numerous pitfalls.

Although the term e-learning is vastly associated with the use of technology to facilitate learning, success in implementing such technologies relies on several factors including (1) the quality of the people involved; (2) the rules and procedures; and (3) the commitment of the deploying University. Even though the MU - E-learning system is known as a way of facilitating teaching and learning at the University, its implementation lacks a well-defined approach and procedures for the stakeholders to confirm. The available Distance and E-learning Policy (part of MUISIP - 2013) falls short of procedures, processes, standards and guidelines required to govern how the content is developed, designed and deployed; how users (students and teachers) are managed and supported; how technologies are developed including how they are customised, deployed and accessed. Furthermore, the MUISIP

document lack interface with other documents especially MU - University Examinations and students' assessment Criteria By-Laws.

The MU e-learning system provides opportunities to students and teachers to interact with both electronic content outside the classroom and traditional face-to-face interactions inside the classroom. It has also aligned to the Tanzania Commission for Universities guidelines for online and blended delivery modes of courses for university institutions in Tanzania of 2022. As such, if well-designed, arranged and executed, e-learning courses provide academic staff in traditional face-to-face universities with an opportunity to involve students both in online and in-class interactions, saving learning time wasted while wandering in search of tutorial room and space. Since its adoption and implementation at MU in 2009, there have been a lot of challenges on how the "MU E-learning system may be utilised to the level and standard that the MU desires. Some didactical and pedagogical features such online discussion forums are underutilised. However, some strategies have been established and endorsed by MU management as a means to influence its full deployment by academic staff. Among other things, the following have been done: (1) regularly releasing of semester-wise E-learning utilisation report; (2) inclusion of E-learning approach in the MU Corporate Strategic Plan; and (3) training conducted to academic staff and ICT support staff to enable them to offer appropriate experiences.

Training and awareness creation campaign in various outlets has been conducted because at the beginning, most of the instructors had limited experience with different E-learning platform (Moodle) features like uploading and downloading digital contents, monitoring and management of online discussion forum, setting and administering actual testing online, monitoring the quality of the digital contents. Although some of the academic staff were very familiar with the use of LMS features and the online delivery of materials, the lack of guidelines to enforce its adoption and implementation hampers the process.

Pragmatically, MU e-learning guidelines addresses necessities related to practicality, usability, accessibility, assessments, and

applicability of “MU e-learning system” to the MU learning community. In the context of Mzumbe University, E-learning is regarded as the use of computer-based teaching and learning technologies (online, blended, mobile etc.) to deliver a wide range of solutions that improve information and presentation as well as efficiency and effectiveness of educational undertakings.

1.2 Purpose of the MU E-Learning Guidelines

In the context of Distance and E-learning Policy (cf. Section 3.12 of the MUISIP-2013), the “MU E-learning Guidelines” have been developed to provide guidance and how eLearning and related learning technologies such as blended learning, online learning, mobile learning and computer-assisted instructions shall be handled at MU. Typically, MU E-learning Guidelines are intended to guide the efficiency and effective implementation of issues related to students’ enrolment, registration and orientation with the MU E-learning system, course design, course delivery and management; instructors’ roles and responsibilities; continuous assessments and examinations; accessibility and usability; and quality assurance.

1.3 The organisation of the E-Learning Guidelines

The MU E-learning Guidelines document is organised into seven (7) sections. Section One is an introduction, which provides background information related to the *‘MU E-learning system’*. Section Two offers information related to students’ enrolment and support services. Section Three addresses course content design, creation and development. Section Four explains course delivery and management. Section Five guides e-course assessment and examinations. Section Six describes e-learning accessibility and usability. Lastly, Section Seven illustrates the issues of quality assurance and control.

2.0 ENROLMENT AND SUPPORT SERVICES

2.1 Students Enrolment and Orientation

2.1.1 Students Enrolment

All MU students shall be enrolled in the MU E-learning system because, apart from being a learning platform intended for course delivery, management and smooth implementation of teaching and learning, the platform also acts as a means of communication. Enrolment of students in e-learning courses shall be done in the following ways: -

- i) Upon completion of the admission processes, and before the commencement of studies, the Information and Communication Technology Unit (ICTU) in liaison with the responsible university units i.e. Directorate of Undergraduate Studies (DUS) and Directorate of Research , Publication and Postgraduate Studies (RPPSD) shall upload all the approved University students in all campuses into the e-learning systems of the respective campuses.
- ii) Instructors of a given course (subject) shall facilitate and ensure that students are enrolled on their specific courses (subjects) through either of the following ways: provide students with a course access code; enable self-enrolment method to students or manually enrol students. If the instructor lacks some competencies to accomplish this responsibility, he/she will seek support from the ICTU or the eLearning support unit under the Centre of Excellence in Innovative Teaching and Learning.
- iii) To ensure that instructors have the power to enrol students DIRECTLY into their courses, the ICTU through DPS office for the E-learning coordination will train and support students and staff. The instructor shall ensure that all students have the required credentials to access and participate in e-learning contents, resources and activities. For the distance-based courses, this process will be carried out during the first two weeks of the face to face sessions.

2.1.2 Students' Orientation

Students enrolled at MU are likely to be of different age groups with varying characteristics in learning and values. Instructors need to recognise students' multigenerational, multicultural differences, interdisciplinary within their classes and diversity to the learning experiences. Students may be unfamiliar with the MU E-learning system and its functionality. E-learning orientation shall be provided to students and may include but not limited to the following:

- i) Comprehensive instructions on how to work with the "MU e-learning system" including the address, how to log in, the way the system is organised and how to use the system in general. The ICTU shall prepare 1-2 pages of intelligible instructions addressing the first users on how to log in to the "MU e-learning system" and other important information related to the use of the system such as accessibility and the "MU e-learning system" link or website. This is also known as self-instruction.
- ii) During the initial traditional face-to-face class, instructors should *provide* explanations to their students about the "*MU e-learning system*" especially the features used in the respective course to establish conducive environments for everyone to engage and utilise the system.
- iii) Instructors will clarify arrangements and provide the students with the following information through the system: syllabus (course outline); listing programme expected learning outcomes; learning objectives; expectations (students, teachers and course); course calendar (align with university academic almanac); means of communication (e-mail, cell phone, blogs, social network sites); available time for both online and face-to-face consultations; and the semester assignments with due dates.

2.2 Student and Instructor Support Services

For successful implementation of the MU e-learning system, students and staff deserve the following technical and support services:

- i) The ICTU shall inform students and instructors as to where and when they can receive technical assistance and other e-services.
- ii) The instructor shall indicate in the course site the type of technical support available and the exact time (i.e. hours) to access them. For example, it should be clear how often the instructor shall respond to the forum questions.
- iii) ICTU shall devise regular reminder messages on technical support and services offered (preferably at the beginning of the semester through website and e-mail) and support e-learning awareness campaign. This includes the use of e-ticketing systems to register all e-learning cases from students and instructors.
- iv) Instructors shall design e-learning activities that support students in realising the new knowledge acquired.
- v) E-learning instructors shall engage students through informative content and interactive dialogue. This shall, however, avoid causing distractions during e-learning learning sessions.
- vi) The ICTU, in collaboration with DPS, shall conduct induction training to both newly employed staff and enrolled students to familiarise and inform the necessary skills needed to work with the relevant university systems efficiently. These kinds of training shall be carried out before the start of the academic year.

3.0 COURSE AND CONTENT DEVELOPMENT

3.1 Conditions for Developing New Courses

Using e-learning in traditional universities like MU shall involve developing, redesigning and reshaping traditional courses or setting up new courses to the prototype. The following shall be considered conditions for setting up a new e-learning course:

- i) The Didactics and Technology Department in collaboration with the Quality Assurance Unit (QAU) shall establish a “Course Design Template” which shall be used as MU in-house-style design model for all MU courses provided via the MU e-learning system.
- ii) Either designing new e-learning courses or altering old courses, different discipline programme documents (i.e. course outline, syllabi) approved by the TCU should be followed. This shall enhance compliance with TCU requirements and standards such as credits and mode of delivery
- iii) Instructors should follow the MU e-learning system prototype by identifying and stating essential course information on the course home page such as course code, the course title, learning objectives, learning outcomes, mode of delivery, mode of communication, course concepts/topics.
- iv) The updated and newly developed courses shall recognise and utilise the MU e-learning system platform.
- v) For a new course designed for the MU e-learning system, the instructor shall ensure that course contents, learning outcomes, delivery modes and general instructions are up-to-date and available within the platform before the beginning of teaching and learning in each semester.

3.2 Content Creation and Design

Respective subject instructors in collaboration with instructional designers within the Didactics and Technology Department units under the Deputy Vice Chancellor-Academic Research and Consultancy (DVC-ARC) office should be responsible for content

creations and design, E-learning research, innovation and development as well as training. Several LMS require specialised content different from that of face-to-face systems. The following guidelines explain how the material for the MU e-learning system shall be created:-

- i) Instructors should develop or redesign relevant curriculum materials (based on current TCU approved programme documents, i.e., course outline, syllabi) to align with the MU e-learning system prototype.
- ii) To align with the e-learning archetype, e-learning instructors should seize both internal and external professional training including workshops and seminars related to e-learning content creation and scale-up skills and knowledge on a course assigned to facilitate.
- iii) E-learning course contents shall be designed and presented in a way that engages students with practical learning activities relevant to the MU learning context and stimulates higher-order thinking skills. The contents should also be designed in simple instructional language for students to understand.
- iv) In-house MU e-learning system support team (system administrator, e-pedagogy expert) or outsource with sound technical knowledge shall provide professional assistance on e-learning course content creation. Selection of these professionals shall be thoughtful and only for those who are aware of the philosophy of innovative learning technologies, blended learning experts/e-pedagogy and LMS
- v) E-learning course instructor shall be frequently assisted and informed on philosophy, trend, educational, design features and materials related to e-learning course design, materials production and development.
- vi) For the sustainability of the deployment process, the University shall establish the Didactics and Technology (Di-Tech) Department. This unit shall be established under the office of the Deputy Vice Chancellor Academic Research and Consultancy (DVC-ARC). The department shall

contain professionals such as instructional designers allocated to different faculties, multimedia programmers, curriculum developers and e-pedagogy experts. The following units shall be formed under this department

- Multimedia Development unit
- E-Learning research, innovation and learning technology unit
- E-Learning Training and Development unit

4.0 COURSE DELIVERY AND MANAGEMENT

4.1 Delivery Requirements and Expectations

In the context of MU, e-learning shall be delivered in BLENDED LEARNING MODE. This is based on the nature of MU, and for successfully delivery of e-learning courses, MU shall capitalise on the following aspects:

- i) Align *MU e-learning system* with existing By-Laws, policy and other regulations (Students' By-Laws). The utilisation of the e-learning system should be explicitly stipulated in the University Students' By-laws.
- ii) Relate e-learning delivery mode directly to what has been prescribed in specific programme documents (i.e. within Bachelor of Human Resources Management, Bachelor of Arts in Education, Bachelor of Laws, Bachelor of Bussiness Administration etc.).
- iii) Identify participants' needs before or during face-to-face sessions of the e-learning course. Instructors should plan learning activities that are relevant to identified needs and meet the needs of various students' groups (i.e. students with disabilities).
- iv) E-learning course instructors shall maintain a high degree of flexibility during the implementation (delivery) of e-learning courses so they can shift to meet the need of the students as they change.
- vii) The instructor shall upload course contents and activities for students to access. Upon completion of the course, instructors are responsible for backing up (not deleting) the uploaded contents. The incoming lecturer shall hide (not delete) the content uploaded by their predecessors.
- viii) The ICTU shall be responsible for ensuring the availability of the system and content throughout the academic year as stipulated in the MUISIP.
- v) MU should plan to help users (students and teachers) develop e-learning competencies in content knowledge, behavioural skills (methods and approaches), and didactical skills. Instructors need to understand appropriate

methods and strategies while implementing courses through the MU e-learning system.

- vi) Using the MU e-learning system demands more pedagogical and didactical skills than technical skills. Therefore, e-learning instructor needs to possess acceptable e-learning competencies.

4.2 E-learning Course Content Coverage

For the blended version of courses, course instructors shall cover at least 50% of the course modules and activities through the e-learning system (online), and the remaining can be covered through traditional face-to-face mode as described in the specific programme document. It should be noted that for novice e-learning and blended learning instructor, the Center of Excellence in Innovative Teaching and Learning shall assist novice blended learning instructors on content coverage and provide support to both educators and students.

4.3 Delivery Resources

Computer and the Internet are major resources for the proper functioning of the MU e-learning system. For successful e-learning course delivery, the following guidelines shall be prescribed:

- (i) MU shall create enabling environments such as engaging in developing a strong institutional repository with a direct link to the course delivered via the MU e-learning system.
- (ii) The Directorate of Library Services (DLS) shall ensure the availability of e-resources (i.e., e-books; e-newspapers; e-journal and databases), the Internet and computer labs as well as its accessibility to students during teaching and learning hours are paramount.
- (iii) The ICTU shall ensure the availability of several adequate technologies and systems to facilitate teaching and learning.
- (iv) The ICTU shall ensure laboratories are accessible and the infrastructure is reliable and adequate which shall include expanding the capacity of computer laboratories as well as deploying relevant software.

- (v) MU shall design and develop state-of-art lecture theatres, auditoriums, fitted with projectors and computers.

4.4 Infrastructure for MU E-learning System Delivery

E-learning system setup, implementation and delivery rely on the following three essential basic architecture including courseware, LMS and authoring tools. Other crucial substructures for e-learning system implementation include virtual learning environments and e-testing platforms.

Related to infrastructure include broadband, power, networking equipment and its management and facilities. In the case of limited infrastructure, students and staff shall be encouraged to bring/use their own devices to accomplish the purpose. The University shall stipulate on the admission letter that Mzumbe University is transforming towards blended learning; computers especially laptop is the necessary equipment for teaching and learning. Hence, all incoming students shall bring them to facilitate their learning.

4.5 MU E-learning System Communication and Delivery Tools

Web 2.0 innovative tools such as wikis, blogs and chats which are either synchronous or asynchronous shall be used on the MU E-learning system to realise e-learning activities and promote a communicative and collaborative approach. These tools allow students to work together to accomplish an assigned task such as a mini-project report and term paper. MU e-learning system shall incorporate the following most common tools:

- i. **Asynchronous** tools are more appropriate for tasks that require reflection and more time to accomplish include e-mail-based tools, a discussion forum (message boards), wiki, blog and webcasting. For example, an e-mail system shall be used for asking and answering individual questions rather than for questions of general interest. Also, mailing lists shall be used for discussions and sharing documents in small groups (especially for those with limited Internet access).

Normally, mailing lists facilitate group project work and collaborative activities.

- ii. **Synchronous** tools include chat and instant messaging (IM), whiteboard and screen-sharing tools, application sharing, audio and video conferences. These tools include forums, wikis, chats or audio conferences. Asynchronous discussions are especially valuable where students are too shy or lack language fluency to collaborate effectively in real-time conversations. Synchronous tools provide a higher social presence. For example, in a virtual classroom, students can use chats to offer comments and answer questions during both online and face-to-face presentations.

4.6 Managing Information and Participation

This part is concerning the monitoring and evaluation of content redesigned or created. Although e-learning instructors are responsible for course redesign and digital content creation, newly employed and novice teachers need mentoring on issues related to the implementation of e-learning courses. If applicable, digital contents created and materials (such as slides, e-books and links) should be assessed and evaluated by a senior instructor of the same discipline before utilization.

Instructors need to make a debriefing regarding online tasks during each face-to-face class.

Instructors need to impose penalties on students for not adhering to instructions provided such as timelines and word limits.

5.0 COURSE ASSESSMENT AND EXAMINATIONS

MU e-learning system offers an opportunity to engage students in online assessments. Therefore, for successful students' e-learning assessment, an e-learning assessment should establish valid and reliable scores to determine whether learning is taking place.

5.1 Continuous Assessment “Course Work”

E-learning course instructors shall follow different assessments as stipulated under Part II, Section I, Article 47 of the MU Examinations and Students' Assessment Criteria By-Laws. However, e-learning courses shall have different e-assessment techniques and tasks that are related to the prescribed course learning outcomes. Students' coursework based on the MU e-learning system may include assignments (individual and/or group), e-quizzes, e-exams, e-tests, practical exercises, e-essays, portfolios, and web quests throughout the semester. However, instructors may either decide to conduct face-to-face coursework assessment in consultation with the responsible Head of Department who will assist in supervision logistics or may use the MU e-learning system to issue and receive coursework assessment items (i.e., assignment). However, during the administering assessments, the following shall be considered: -

- i) Instructors shall aim to offer timely feedback on students' assessments because of the potential of enhancing communication and students' motivation for learning via the e-learning system.
- ii) Instructors shall provide constructive feedback as part of both educative and formative assessments.
- iii) Feedback such as audio or written shall focus on gaining understanding, improving students' performance and increasing their confidence in learning and shall occur throughout the learning process within the semester.
- iv) The tutorials shall guide students through appropriate questions, exercises and/or activities such as a discussion;

case method and role play and respond/feedback aligned to the intended learning objectives and outcomes.

- v) Students coursework shall be published through the MU e-learning system, MU-ARMS to enhance accessibility and integrity. Through the MU e-learning system and MU-ARMS, students shall be able to access their scores and course work. The current system offers the “Grade book” feature useful for the purpose.

5.2 Handling Misconduct on Online Examinations

The integrity of examination processes defines how credible is the academic institution. Just like the offline examinations, the online examinations require strong controls due to their vulnerability to abuse. The controls shall strictly discourage cheating not only during online tests, assignments and related tasks but also should be a university-wide strategy. The following aspects shall guide the delivery of e-learning assessments: -

- i. MU and instructors shall forge to implement several processes and tools to discourage and prevent cheating as a joint effort in the areas of institutional context and commitment, curriculum and instruction, faculty support, student support, and assessment and evaluation.
- ii. Instructors shall engage students in online tests, e-quizzes and e-examinations in the computer laboratories under the invigilation of the instructor in charge.
- iii. MU through e-learning instructors shall conduct secure online examinations (i.e. cheating is prevented through technology). Innovative technologies solutions which shall be used to make MU online examinations environments secure such as ‘Safe Examinations Browser’ (www.safeexambrowser.org) and Turnitin (<http://turnitin.com/>). These learning technology solutions can be used in creative ways to be sure students are not cheating on essay exams.
 - a) Instructors shall create assessments with a limited-time release for essay questions and then request

students to turn them into Turnitin.com. The amount of time set shall allow for some flexibility but limit the time students have to turn in the assignment. For example, have a two-day window to take the exam with the expectation that they submit their answers within 3 hours of opening the essay questions.

- b) Instructors shall include multiple questions in the essay set that rotate randomly to limit cheating on the essay examinations.
 - c) Measures such as limiting examinations by the Internet Protocol (IP) address or Virtual Local Area Network (VLAN) and examinations code shall limit those able to attempt examinations. (ICTU shall ensure that these applications are available).
 - d) Additional measures to identify students shall be applied as stipulated in the Mzumbe University Examinations and students' Assessment Criteria By-Laws.
- iv. Instructors shall develop an inquisitive culture and the ability to use technology for their undertakings. For example, the instructor can check timestamps for e-tests, e-quizzes and e-examinations takers and compare them to the IP address. If multiple students log on to the examinations from the same IP address in a relatively short timeframe, then it's probably safe to conclude they have a test-taking party where they sit together in one location and ask each other for help.
- v. MU and professional experts shall create a customised browser with specific features that locks down the testing environments within the MU e-learning system. Using test or examinations customised browsers students are unable to copy, print, access other applications or visit other websites during online tests or examinations. For security and control purposes, the customised browser should have the following features:
- a) Assessments (tests, quizzes and examinations) are displayed full-screen and cannot be minimized.

- b) The instructor should prevent access to other applications including messaging, screen-sharing, virtual machines, and network monitoring applications.
 - c) Print, print screen and screen capture functions are disabled.
 - d) Copying and pasting anything to or from an assessment is prevented.
 - e) Right-click menu options, function keys, keyboard shortcuts and task switching are disabled.
 - f) An assessment (test, quiz or examinations) cannot be exited until the student submits it for grading.
 - g) Browser menu and toolbar options are removed, except for Back, Forward, Refresh and Stop.
 - h) Assessments (tests, quizzes and examinations) that are set up for use with a customised browser cannot be accessed with other browsers.
 - i) Available for Windows, Mac, iOS and other systems.
- vi. Instructors shall not rely on automated assessments (Computer-Aided Assessment). If he/she must use them, be sure to: -
- a. Pool assessment items.
 - b. Use different assessment pools each time the course runs.
 - c. Give students a time limit for assessments.
 - d. Set the assessment to automatically save student work and submit answers at the end of the time limit.
 - e. Have the assessment accessible only for a specific period (i.e. e-tests or e-examinations open on a Thursday and close on a Sunday). This allows students with a busy schedule to take assessments at their conducive time.
 - f. Routinely review start and end times for examinations to identify anyone who takes an unusually short time to complete an examination.

- g. Assume all online examinations shall be “open book.” As such, develop examinations questions that require students to (i) either know the material thoroughly or (ii) look in several places in the text to construct the answer.
 - h. Automated assessments should be used only for progress monitors/content checks that are a small percentage of their grades. That way, the majority of the grade and course is made up of assignments addressing the higher levels of Bloom’s Taxonomy such as *Analyzing, Evaluating, and Synthesizing*. If instructors rely on automated assessments, they are most likely only addressing the lower levels of Bloom’s Taxonomy such as *Remembering and Understanding*.
 - i. Making this change may be the best chance to make. It will not only help prevent cheating but will also make the course more productive and dynamic.
 - j. Randomise the answer choices for each question.
 - k. Randomise the questions on the test.
 - l. Create a large bank of test questions.
 - m. Display one question at a time.
- vii. Set a time limit for the test. Students need to know the material to answer questions correctly, with little time to look up answers.

6.0 E-LEARNING ACCESSIBILITY, SUITABILITY AND USABILITY

6.1 MU E-learning system accessibility and usability

MU e-learning system accessibility issues involve best practices for creating and delivering e-learning opportunities that are accessible to all users regardless of their conditions (i.e. those with special needs and disabilities). Students and academic staff shall be able to access course materials and other web-based learning activities and tools for teaching and learning. The overall responsibility of the technical aspects of the systems is stipulated in the MUISIP.

6.1.1 Access to MU E-learning System

Access to MU e-learning system digital materials and online tools will be granted as follows:

6.1.2 User Registration

MU e-learning system users need to register themselves for effective use of the system. However, technical support services shall provide instructions for novice users on how to access assistance. The ICTU needs to create an e-mail for easy communication and monitoring of the services. To access the MU e-learning system, users should visit the ICTU for assistance or use the specified mean of communication provided by the ICTU.

6.1.3 Special Accounts

A limited number of users who are not faculty members of MU (i.e. visiting lecturers, guest-trainers or mentors) may each be provided with an account on an approved request basis. These accounts are considered temporary. Special accounts are assigned only to individuals who are working with MU faculty/schools/directorates/institutes on officially recognised activities on the MU e-learning system. Such accounts will be created with a particular naming protocol, so that they may be easily identified and distinguished from standard student, faculty and staff account. as stipulated within the MUISIP.

6.1.4 Guest Users

Guest users are given limited access to the MU e-learning system.

6.1.5 Students with Disabilities

MU e-learning system has different features which can accommodate students with various disabilities and learning needs, and the barriers they face. Instructors shall be able to assess and review digital contents before being published such as video and audio to verify its suitability and accessibility to all students.

6.2 MU E-learning system Suitability and Usability

- i. Participation in e-course shall be restricted to MU users (students and instructors). Doing so provides an opportunity to evaluate its potentials to concentrate on the important use of the e-learning system and enhance the utilisation of the MU e-learning.
- ii. E-learning course instructors shall have clear and well-communicated learning goals, objectives and expected outcomes that a student is to achieve upon completion of a course. Because most of the MU programmes are built on a 'student-centred hybrid' prototype, e-learning course goals, objectives and learning outcomes shall be addressed early during the planning stage and evident throughout learning sessions.
- iii. E-learning system status shall be visible. The system shall keep the user informed about what is going on. E-learning tutorials should have built-in feedback mechanisms to respond to students' answers to learning activities and exercises.
- iv. Every student-initiated action shall have a corresponding visual or audio response by the system so that students can understand the consequences of their actions.

7.0 QUALITY ASSURANCE PROCESS

Developing e-learning quality assurance shall be a collaborative and engaging process because stakeholders (students and instructors) perspectives and undertakings need to be considered. At MU, e-learning quality assurance processes and practices shall be carried out by the Directorate of Quality Assurance (QAU). However, conducting the following three phases of the quality assurance process helps instructors verify the contents and conform with acceptable standards before being uploaded for use into the MU e-learning system:-

- i. Digital Contents Development
- ii. MU E-learning system Navigation
- iii. MU E-learning system Technical

These phases may be performed at any time depending on the level of users knowledge and skills and they are described hereunder:-

7.1 Digital Course Content Development

MU e-learning system accepts the use of digital contents and media in different formats such as e-books, recorded lectures, slides, links to different e-resources such as MU repository and specific digital course content developed. For successful e-learning implementation, instructors and QAU should focus on the quality and go with the flow. While conducting e-learning quality assurance, the QAU (through the expert in digital content quality assurance) shall first examine and review the following items about programme or course learning outcomes, and objectives to verify its quality and accuracy:

- a) *Audio, Video and Text (transcript)*
 - i) Instructors shall examine and review the quality of audio content from external outlets (i.e. YouTube) before being uploaded and published for re-use onto e-learning.
 - ii) Instructors shall ensure that audio content aligns with course learning outcomes and objectives. If not sure about the quality of the audio materials, instructors should contact the QAU for assistance.

- iii) The QAU shall conduct a regular review and validate the quality of audio and video used to check if it is still appropriate to re-use and if found outdated the QAU should consult course instructors before the digital content is removed from the system.
- iv) Instructors shall confirm that the digital course contents are accurate, fair and unbiased as well as appropriate for the scope they aim to cover.
- v) Video and audio content have been reviewed by a subject expert to ensure voice accuracy, proper intonation and speed.
- vi) For audio and video with text, instructors and the QAU should perform a complete authorisation within three days from the submission by listening to the audio and watching the video and reading the transcript to confirm audio and video matches with course learning outcomes and objectives.
- vii) Audios and video produced by audiovisual units the QAU shall confirm that the text is formatted to MU standards and liking. These standards and criteria for digital content quality assurance shall be established by the QAU.

b) *Visuals, Activities and Timing*

- i. Images and graphics are used appropriately and conform to the approved MU standards (if applicable).
- ii. Instructors shall ensure that on-screen text is appropriately formatted, checked for spelling and grammar, and conforms to the approved MU standards and criteria.
- iii. QAU shall review and confirm that activities function correctly, and if possible, feedback regarding students' activities like a term paper, and assignments are timely provided. This will eliminate frequent confusion and possible flaws among users (i.e. students).
- iv. QAU shall monitor the teaching process of instructors

c) *Intellectual Property and Copyright*

- i. Instructors shall address the rights of the owner of the digital contents and e-resources (e-book, articles, and e-chapters) and the conditions for use. That is, issues associated with copyright or intellectual property and copyright learning materials should be established.
- ii. All quoted e-materials shall be cited correctly by adhering to MU standard of citation and referencing formats (cf. APA style-stipulated in Section 4 of the MU guidelines for writing a thesis or dissertation 2010).

7.2 MU E-learning System Navigation

The choice of LMS depends on several criteria including design prototype and usability. That is, users easy to navigate and access course information on the system. MU e-learning system is based on “Moodle” which is an open-source e-learning system and is made primarily for education. Moodle has different didactical and pedagogical features, which support the performance of many interactivities such as assignments, chats, choices, forums, glossaries, lessons, quizzes, resources, individual learning journals, surveys, wikis, blogs, webcasts, podcasts, instant messaging (IM), and workshops. The QAU and instructors shall receive a regular review of the design and usability to ensure accuracy and usability:

a) Course Main Menu

- i. Instructors shall ensure that all titles are reviewed and checked regularly and shall be spelt correctly and conform to the approved course outline.
- ii. QAU shall regularly review the MU e-learning system design prototype and confirm its clarity, consistency and provide appropriate instructions for navigation and interaction.
- iii. Instructors shall confirm that hyperlinks and buttons function effectively as well as colour is used appropriately throughout.
- iv. Language QA: Moodle can be translated into diverse languages, though, the QAU shall ensure that whatever

language is used, shall be as much as possible unambiguous.

b) *Next/Back Buttons*

The QAU shall confirm that the next and back buttons navigate to the appropriate location. Navigation provides users with a way to return to the start menu, navigate within and exit from the learning course. For example, MU e-learning system users have a main home page in their e-learning course. Users can click **Topic C** to jump to that location. The **Back** button on the first page shall be programmed to return to the home page; otherwise, it will go to the last page of **Topic B** by default. Similarly, the NEXT button on the last page of **Topic C** shall return to the main Home screen; otherwise, it may progress to **Topic D**.

7.3 MU E-learning System Technical

Technical quality assurance refers to testing back-end functionality that the average user (like students and novice teachers) will not see. This is where you confirm that the MU e-learning system publishes settings are correct and that other technical items function appropriately. It is the responsibility of the QAU and ICTU.

- i. **Browsers:** Technical staff and instructors should test the course in the various browsers that instructors expect students to use. Major browsers include Microsoft Edge, Internet Explorer, Firefox, Safari, and Chrome.
- ii. **Player Menu Items:** Technical staff should test all player menu items to confirm that they function as it is desired including (if applicable) glossary, search, seek bar and volume control.
- iii. **MU E-learning System Publishing:**
 - i) SCORM (Shareable Content Object Reference Model):
Version: MU shall select the appropriate SCORM level supported by the MU e-learning system if applicable.
Course Title & Description: Many authoring tools allow instructors to insert the official course name and description as it is to be listed in the MU e-learning system. The MU e-learning system shall read this

information and display it, so it shall be checked for completeness and accuracy.

- ii) MU e-learning course completion tracking shall be reviewed. First, it shall include two major components: *complete* vs. *pass* which assists in determining if a course will be shown as *complete/incomplete*, *pass/fail*, or some other reporting metrics. Second, consideration shall be made to *completion criteria which indicate whether the user is required to pass a test or not*.
- iv. **MU E-learning System Testing:**
QA shall assess, review and confirm the system based on the following aspects:
 - i) Course uploads to the MU e-learning system without errors.
 - ii) The course can be assigned to an e-test user(s) (i.e. students).
 - iii) The course shows up in the e-test user account as “not started” or equivalent.
 - iv) Start and close the course. Review and confirm that the MU e-learning system displays the course as “in progress” or completed.
 - v) Restart the course and confirm that the course returns you to the page last visited (bookmark).
 - vi) Fail the course (if applicable) and verify that the LMS recorded this appropriately.
 - vii) Pass the course and confirm that the LMS shows the course as complete (or equivalent)

7.4 Quality of E-learning Instructors and Development

Staff quality is an essential dimension of QA of academic programmes in a university. It is, therefore, necessary to put in place procedures and criteria for ensuring that appropriate staff are appointed to manage and teach courses delivered under the MU e-learning system. Also, it is the responsibility of the Faculties/Schools/directorates/institutes and ICTU to ensure that:

- i. All staff at the MU had appropriate qualifications and demonstrated experience in teaching e-learning courses.
- ii. Staff have a suitable level of intercultural sensitivity.
- iii. All staff have a clear understanding of their responsibilities in supporting students, including, but not solely in the area of prompt and detailed feedback on learning.
- iv. MU teaching and coordination staff have been fully briefed on the relevant educational, social, economic, cultural and historical context before the commencement of teaching and are aware of resources and support available to them within the MU.
- v. Both e-learning instructors and technical staff associated with each programme shall be available for student consultation by phone or e-mail as required.

In general, cognitive error recognition, diagnosis and recovery is significant. The whole e-learning system and learning activities such as discussion, tutorial assignments, tests, quizzes and exercises shall include some complex situations that require students to construct solutions since students learn from their mistakes.

7.5 Roles of E-learning Coordinators/Didactics and Technology Head

The E-Learning Coordinator shall build the University's capacity to deliver curriculum in a range of E-learning options (online). He/she shall provide support for the implementation of e-learning strategies, work together with both internal and external stakeholders to develop sustainable high-quality online learning activities appropriate for the specific discipline, incorporating sound educational design principles and consistent with the University's policies. The following serve as guidelines for the responsibilities of the eLearning coordinator:

- i. Cooperate with both academic staff and technical experts in the development of curriculum for e-learning delivery.
- ii. Design and develop training resources and facilitate learning on how to use the institutional LMS.

- iii. Collaborate with QAU and evaluate training materials prepared by instructors, such as outlines, video, text, or handouts.
- iv. Design, plan, organize and direct orientation and training for employees or customers of industrial or commercial establishments.
- v. Support academic staff to design sustainable high-quality e-learning assessment activities incorporating sound educational design principles that are consistent with the MU Academic.
- vi. Working with curriculum experts to modify existing curriculum materials to be compatible with virtual learning environments, as well as production of new materials.
- vii. Maintain quality assurance processes and protect the intellectual property in e-learning materials developed for the MU.
- viii. As a champion in e-learning, e-pedagogy, blended learning encourage sharing ideas and information with a diverse range of stakeholders to facilitate the achievement of the MU mission, goals and strategic plans.

7.6 Ethical Issues in E-learning

During online discussion forums inappropriate language such as abusive, rude language, racist, sexist, and inconsiderate behaviour guaranteed to disrupt the discussion are intolerable. As such, the following guidelines shall be used:

- i. Criticism shall be constructive, thoughtful and well-articulated. Outbursts of anger, temper tantrums and vulgarity are intolerable. Rants directed at any other contributor are unacceptable and shall not be tolerated.
- ii. Respect diversity - the academic learning environment expects higher-order language, use appropriate, respectful and non-rude, non-abusive, non-offensive toward others.
- iii. Correct spelling, grammatical construction and sentence structure are expected in every other writing activity associated with scholarship and academic engagement.

- iv. Sharing any form of pornographic materials, abusive conduct is prohibited during online discussion forums.
- v. Racists, sexist and heterosexist comments and jokes are unacceptable.
- vi. Derogatory and/or sarcastic comments and jokes directed at religious beliefs, disabilities, and age shall be offensive.

8.0 GLOSSARY

Automated Assessment (Computer-Aided-Assessment)	Is a tool for both assessment and problem authoring, where assessment comprises multiple kinds: summative, educative, formative, and diagnostic or profiling. It is also referring to assessments marked automatically.
Blended/hybrid learning	An approach to education that combines online educational resources and opportunities for interaction online with traditional face-to-face teaching.
Blended/hybrid courses:	Courses that have minimised traditional face-to-face teaching and learning time that is substituted by learning time spent outside the conventional classroom
Blog	The tool allows people to share, access and easily update information, without having any knowledge of computer programming. Blogs were created to present content as a simple list of entries, just like a diary.
Browser	A computer program with a graphical user interface for displaying Hypertext Markup Language (HTML) files, used to navigate the World Wide Web. It is also referred to as 'a web browser ' or 'Internet browser ,' For example, Mozilla Firefox, Google Chrome, Microsoft Edge and Apple Safari.
Didactic	A teaching method that follows a consistent scientific approach or educational style to present information to students.
Electronic learning (e-learning)	The use of computer-based learning technologies (online, blended and mobile learning) to deliver a wide range of solutions that improve information and presentation; efficiency and effectiveness of educational undertakings
Electronic	Information documents that are in digital

learning materials	format which include electronic books (e-books, e-newspapers, e-journal) as well as internet resources, it also consists of databases, archives, theses, conference papers, government papers, scripts and monographs in an electronic form.
IP Address	The Internet Protocol Address): a unique address that computing devices such as personal computers, tablets, and smartphones use to identify itself and communicate with other devices in the IP network. Any device connected to the IP network must have a unique IP address within the network.
Online forum	An online forum is also known as a message board, online discussion group, bulletin board or web forum whereby members can post discussions, read and respond to posts by other forum members.
Podcasts	Audio programs that are broadcast over the Internet. They are audio files (such as MP3 or .wav formatted) that can be downloaded to a compatible digital audio player or a computer.
SCORM	Stands for Shareable Content Object Reference Model. It defines a specific way of constructing Learning Management Systems (LMSs) like the MU e-learning system (i.e. Moodle, Schoology, Blackboard, CANVAS etc.).
Staff	Any person employed by Mzumbe University on a contract or permanent and pensionable terms who is the user of the “MU e-learning system.”
Storyboard	A graphic representation of how a video will unfold, shot by shot. It is made up of several squares with illustrations or pictures representing each shot, with notes about

	what is going on in the scene and what's being said in the script during that shot.
Student	Registered student at Mzumbe University who is the user of the “ <i>MU e-learning system</i> ”.
Usability	The extent to which the MU e-learning system can be used to achieve specific goals with ease and satisfaction supports user interaction, improve motivation and prevents user frustration and confusion through appropriate and meaningful interfaces and supportive navigation.
VLAN	(Virtual Local Area Network): Describes a type of local network. VLAN integrate logically and independently a set of computer machines
Wiki	A website that can be edited online. Unlike common Web pages, which are created offline and then uploaded to a Web server, wikis are edited “live”.
Webcasting	Audios and videos are sent from a single source to multiple passive receivers. The typical application is the video lesson, where an expert talks to many learners simultaneously, without any interaction. It uses streaming media to transmit audio and video over the Internet. However, recorded webcasts can be provided for asynchronous use.

9.0 E-LEARNING IMPLEMENTATION STRATEGY AND ACTION PLAN

PROPOSED MZUMBE UNIVERSITY E-LEARNING IMPLEMENTATION STRATEGY AND ACTION PLAN

Strategic Objective	To Improve Access and Quality of Mzumbe University Programmes						
Strategy	CSP target for June 2022	Implementation Plan					Responsible
		2022 July	2023 June	2024 June	2025 June		
Improving learning and ICT enabling and utilization environments	At least 50% of all academic programmes at Mzumbe University available in blended or e-learning modes by June 2022	A.1 Enrolment and Support Services					
		Enroll all Students and Course Instructors on the MU E-Learning System					ICTU, DUS
		Remind course instructors to use E-Learning platform					Deans/Directors/Principals/DVC-ARC, & DPS
		Remind students about the use of E-learning platform					DVC-ARC, All Course Instructors
		Design e-learning activities that support students learning					Center of Excellence, Course Instructor
		Provide at					ICTU, DPS

		least 2 induction training to both staff and students per year					
		A.2 Course and content development					
		Establish a furnished Center of Excellence responsible for the content design, creation, E-learning research, development and innovation, materials production and management.					DVC A, DVC AF, ICTU , DPS
		Review Scheme of Service to accommodate E-learning development posts such as instructional designers,					DVC AF
		Establish and review "Course Design Template" as MU in-house-style for all MU courses provided via					DVC A (Center of Excellence)

		MU e-learning					
		Customize the current Moodle to suit MU E-Learning development needs eg. (Automatic utilization report)					DVC A (Center of Excellence)
		Align the existing courses into online course module (ODL) format using MU in house style					All instructors (Center of Excellence)
		Seize both internal and external professional training including workshops and seminars related to blended e-learning content creation and delivery					DPS, Course instructors
		A.3 Course delivery and management					
		Align MU e-learning system with existing By-Laws and					DCV-A

		programme documents by reflecting the e-learning delivery mode directly					
		Align E-Learning performance of lecturers into OPRAS (50% of course delivery online)					DVC-ARC, DVC- AF
		Upload course contents and activities for students to access.					DPS, Course instructor
		Ensure the availability of the e-learning system and content throughout the academic year as stipulated in the MUISIP					DVC-ARC, ICTU, Course instructor
		50/50% of the course content coverage through both the e-learning system (online) and face-to-face delivery modes.					Course instructor, Center of Excellence
		Develop accessible institutional repository with a direct link to					DVC-A, ICTU DLTS

		the course delivered via e-learning system					
		Ensure availability and accessibility of e-resources, the Internet and computer labs teaching and learning hours.					DLTS, ICTU
		Ensure availability of several adequate technologies and systems to facilitate teaching and learning via e-learning					DVC-ARC, ICTU
		Design lecture theatres, auditoriums, fitted with projectors and computers					DBE, DLTS, ICTU
		Encourage students to bring/use their own computers for their learning via joining instructions.					DVC-A
		Encourage academic staff to bring/use their own computers for					DVC-A

		teaching and learning					
		A.4 Course assessment and examinations					
		Publish students' coursework via MU e-learning system to enhance accessibility and integrity					DPS, Course instructor
		Engage students in online tests, e-quizzes and e-examinations in computer lab under invigilation of the instructor in charge.					DPS, Course instructor
		A.6 Quality assurance process					
		Examine and regularly review digital course contents and learning activities in line with programme or course learning outcomes, and objectives					QAU, Center of Excellence, Course instructor

		Confirm the digital content are formatted based on MU standards and liking					QAU, Center of Excellence
		Regularly review the MU e-learning system design prototype					QAU, Center of Excellence, ICTU