



E-LEARNING POLICY FOR HIGHER EDUCATION



Ministry of Education

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Abbreviations

CTL - Centre for Teaching and Learning

ETA - Ethiopian Education Training Authority

EthERNet - Ethiopian Education and Research Networks

HEIs - Higher education Institutions

ICT - Information Communication Technology

LMS - Learning Management System

MOE - Ministry of Education

Foreword

e-Learning is becoming a key platform in transforming the teaching-learning practice and the Learning Management System in Higher Education Institutions (HEIs). As the digital version of the face-to-face teaching-learning experiences, digital education offers an alternative platform for HEIs to deliver accessible, relevant, quality, and affordable education. Moreover, it offers opportunities for HEIs to assess the current state of their digital infrastructure and digital skills at their disposal. The current e-learning initiative being implemented in HEIs is an action towards transforming education in our institutions through adopting e-learning technologies, building capacity of institutions, staff, and students which will be followed by innovation to embrace emerging requirements, and scaling the technology to its wider application. However, the introduction and adoption of e-learning technologies in our institutions might also have some unintended challenges such as lack of access to digital infrastructure and devices both by educators and students. This demands university leadership to plan and build their digital capabilities in light of the interventions they envision to introduce, the programs they aspire to launch, and the technological requirements.

The e-learning policy outlines the governance structure that must be put in place in our institutions, as well as the standardization, quality control, and accreditation of the e-learning processes and outputs. It also covers the role and responsibilities as well as incentives for instructors, the protection and management of intellectual property rights, the implementation of student support services, infrastructure management, user access, privacy and security of e-learning resources, and the sharing of resources within the institutions and beyond. The policy is complemented by an e-Learning Policy Guideline that provides detailed implementation guidance that may be tailored to the specific practices and situations of the university. To improve access to higher education for citizens, I urge HEIs leaders to deliberately incorporate e-learning into their regular teaching-learning processes expand their reach into the community, and manage any potential digital divides (such as gaps in digital literacy and skills, access to digital devices, usable internet, etc) brought about by the introduction of the e-learning technology. Moreover, a separate directive is also developed to help HEIs leaders make decisions on the implementation of e-learning.

I believe these tools will support the higher education leadership in making decisions on the seamless integration and expansion of e-learning technology in their respective institutions. The Ministry will continue its effort to support the universities to succeed in their e-learning endeavors.

Sincerely,



Berhanu Nega (Professor)

Minister, FDRE Ministry of Education

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Executive Summary

e-learning is the use of a learner-centered electronic mediated environment (web, and other internet technologies) to facilitate the teaching/learning process. There has been different initiatives in Ethiopian HEIs to integrate e-learning in their education system. These initiatives have not brought significant change in the teaching/learning process. Most Higher Education Institutions (HEIs) have not moved much beyond using PowerPoint slides and online lecture medium such as Zoom and Google Meet when it comes to using technology in delivering their courses. The major issues observed include lack of governance structure (institutional and national), lack of quality standards, instructors' skill gap, lack of incentives, fear of copy right issues, security, infrastructure limitation, and student support. HEIs failed to address these issues primarily due to lack of a guiding policies and strategies. Accordingly, this national policy document includes the following policy focus areas:

- Governance Structure,
- Quality standardization, assurance and accreditation,
- Instructors,
- Intellectual Property and Copy Rights,
- Student Support and Services,
- Infrastructure and User Access
- Digital security and privacy Rights.

Part I - Background

1.1. Introduction

e-Learning is a powerful instructional strategy because it transcends the boundaries of traditional classroom instruction. In fact, it creates virtual schools that allow learning to occur at the student's initiative—anytime, anywhere. E-Learning also holds promise for promoting equity by providing students with access to courses that otherwise might not be available, such as accelerated courses in remote rural areas (Blomeyer, 2002, p. 1¹). In the context of this document, e-learning is referred to as the use of a learner-centered electronic mediated environment (web, and other internet technologies) to facilitate the teaching/learning process. Multiple stakeholders, such as students, instructors, technology providers, course creators and administrators are involved in e-learning programs. The stakeholders are often from different backgrounds with differing stakes in the program and may span across multiple institutions. Implementation of e-learning programs will be challenging and/or problematic without a proper guidance (such as policy, strategy, or guideline) that helps to cater for the various needs of the stakeholders. This can only be achieved when there are recognitions and there is a clear understanding of the implementation context, guiding policy and procedures and above all committed leadership at national and institutional level. The current Ethiopian higher education context and the global demand for quality and accessible education to all who needs to learn makes e-Learning a must to have in every institution.

1.2. e-Learning Context Analysis

The Government of Ethiopia is embarking on lots of initiatives to transform the economy through digital technologies. Education plays a significant part in this endeavor. However, the challenges observed on the quality of education are the major obstacle. The Ministry of Education has developed different strategies to support higher education institutions achieve their mission through Information and Communications Technology (ICT). Currently, the demand for quality education at any place with low cost must be the priority and can only be achieved through the use of technology. Putting this context in focus, Ethiopian Higher Education Institutions are expected to tap this opportunity to offer quality education through all the available options. HEIs are committed to providing education that is of quality, flexible, global and suits the current era of customers. However, there are observed policy and regulatory guidelines that need to be in place to create access, improve quality and efficiency.

Documents prepared by MOE and other local and international stakeholders in relation to the use of ICT in Education include: National ICT Policy for Higher Education and TVET (December 2020), Digital Skills Country Action Plan (DSCAP) 2021 – 2030, Higher Education Policy and Strategy (December 2020), Institutional ICT Policy for Higher Education in Ethiopia (December 2020), Digital Ethiopia 2025, Africa 2063 Digital Education Strategy, National ICT Strategic Plan for Higher Education (2021 – 2030). All these documents anticipate tapping into the advancement of ICT to support the educational delivery that is inclined on the provision of a learning experience that is flexible, effective, global and suits all

¹ Blomeyer, R. (2002). Online learning for K-12 students: What do we know now. *Naperville, IL: North Central Regional Educational Laboratory. Retrieved January, 15, 2005.*

types of learners across the globe and all its partners. Therefore, developing a policy on e-learning that intends to guide and streamline the implementation of e-learning within the HEIs for effective and efficient use of all educational resources is the priority in order to achieve the stated educational goals. It is pertinent for MOE to develop a policy that will enable HEIs commit themselves and deliver e-Learning programs as expected locally and internationally.

For easy roll out and implementation of e-learning within HEIs, the educational environment needs to be prepared, enabled and conducive to both students and Teachers. These demands having a comprehensive policy document that can be contextualized as per the national and institutional requirements.

To successfully implement e-Learning within HEIs, the following points should be undertaken:

- Institutions should have reliable and accessible technology for both students and staff including people with disability.
- e-learning should be inclined to pedagogy rather than technology.
- Capacity building for both staff and students should be ably undertaken.
- Implementation should encourage social, ubiquitous, flexible, collaborative and interactive learning across all stakeholders involved in the educational process.
- The implementation model should be one that allows use of appropriate technologies to enable effective teaching and learning to occur ubiquitously.
- HEIs should exploit the opportunity of using open courseware available as part of their programs.

The e-learning policy should articulate rationales, principles and overall missions and visions of e-learning at a national level, which can further be referenced by institutional policies and guidelines for effective implementation. The current higher education practice particularly after the COVID-19 pandemic points moving towards the integration of ICTs in the teaching-learning process.

- Ministry of Education and Higher Education Institutions (HEIs) have units that work on digital education. However, the units are more focused on technology rather than pedagogy. In addition, the institutional units, if exist, are not setup in a structured way that enables them to deliver the expected service. In a baseline survey², out of 39 HEIs that have completed the ICT director tools and 34 (87%) reported that the ICT directorate is accountable to the president office while the remaining two are accountable to either business and institutional development or Business strategic development. Similarly, only 8 (20.52%) have reported that there is an established e-learning coordination office. As a result, HEIs fail to integrate e-learning as an alternative delivery method.
- Some HEIs have begun digitizing their course materials and making it available through the Learning Management Systems like Moodle; though, there is limited use and implementation of courseware tools across the HEIs. However, limited utilization of Learning Management Systems seems common due to outright resistance to adapt

² Baseline survey for implementation of eSHE project.

learning technologies, due to fear of security and copyright issues, lack of incentives/rewards, and lack of training and limited capacity of academic staff. Only two HEIs reported availability of policy/e-learning guideline on e-learning implementation. Of those, only one reported that the policy or guide is currently being implemented.

- Most of the first and second generation HEIs have smart classrooms that are mostly not effectively used. Audio-video (AV) and media services quality vary across the campus. Eight universities of the total 39 (20.5%) reported that the institutions have an established resource center (media lab/studio) for e-learning implementation – utilization of LMS/SIS. Of those 8 HEIs have claimed to be the owner of the media lab such as FM radio(33.3%) followed by Moodles/Zoom and teams (22.2%).
- Some institutions are using e-learning platforms customized and inhouse developed for graduate program teaching and often they use Google meet and Zoom for lecture. This raises major quality and standardization issues as instructors follow their own method to develop the courseware.
- There is low digital resource sharing among HEIs for teaching and learning. Out of the 39 HEIs, only two HEIs have deployed courses to other catchment HEIs but not in digital format.
- Connectivity and access for ICT equipment is still a challenge for students and staff. HEIs reported that the overall bandwidth subscription ranges from 600 MB per second to 7.4 GB per second. This is translated into significant variation in Bandwidth per pupil and core network speed. With regards to the access for ICT equipment, the HEIs failed to give data due to lack of databases. However, there are indicators that teachers have better access while students have strong challenges.
- Improvement has been seen in terms of students and faculty purchasing their own devices in support of the transition towards one-to-one computing. However, HEIs still rely on shared “computer labs” that are often locked up when they are not in use outside lab schedules and office hours.
- Most of the initiatives in HEIs are focused on the instructors. Student capacity building and support is not given due consideration. The additional burden created on students due to this fact makes the initiatives less successful.

Considering the current state of e-Learning in HEIs, the following policy elements are identified to be focal issues to this policy.

- E-learning Governance Structure,
- E-learning quality standardization, assurance and accreditation,
- Instructors Skills development, certification, performance evaluation, and incentive packages,
- Intellectual Property and Copy Rights of e-Learning resources,
- Student Support and Services,
- Infrastructure and User Access
- Digital security and privacy Rights.

1.3. The Need for the Policy

This Policy is in response to the need for a rationalized and harmonized approach to the provision and expansion of e-learning, given its recognized potential to contribute to human

resources continuous development. It facilitates successful implementation of e-learning, as an integral component of the national education and training system. To formalize and standardize the e-learning activities in Ethiopian Higher Education, the following was taken in to consideration:

- Facilitating the reform of educational resources and pedagogy, to open up opportunities for innovation to achieve quality education.
- The interactive nature of e-Learning encourages collaboration, providing an opportunity to enhance the quality of learning, teaching and research.
- E-Learning resources are available and are accessible at any time therefore enabling a self-paced approach for educators and students.
- The ‘trackable’ nature of e-Learning encourages transparency and accountability.
- Expedite that Learning materials are easily re-used and openly shared thus promoting the Faculty’s public profile.
- Exploit the Cost effectiveness of e-Learning as a key feature of online engagement

1.4. Mission, Vision and Objectives

Mission: To improve quality of and access to higher education through harmonized e-learning tools, resources and programs.

Vision: Create a Higher Education sector where citizens have equal opportunities and access to world class learning resources to create lifelong learning society with the required skill, knowledge and attitude.

Objective: The objective of the e-learning policy is to issue general statements that will guide Higher Education Institutions (HEIs) and stakeholders in the development and implementation of e-learning in Ethiopia.

This policy aims to:

- Facilitate the initiatives of MoE to the provision and continuity of learning and teaching in HEIs through e-learning programs.
- Promote functional and sustainable e-Learning programs and services.
- Increase access and success through e-Learning programs and services.
- Facilitate the integration of e-Learning programs in the education system of the country in a way that should be aligned to the vision of MoE and to the UN Sustainable Development Goals – SDG-4.

1.5. Fundamental Assumption

The following assumptions are made during the development of the policy document:

- The e-Learning policy conforms to the legal and ethical frameworks of MoE.
- HEIs investigate and monitor emergent technologies and educational developments and consider their integration in the learning environment.
- There is an organizational framework that can foster innovation and development, and evaluation by scholarship and research.
- HEIs consider e-learning requirements such as equipment purchase, software implementation, recruitment of staff, training and research needs, staff workload and technology developments.

- HEIs internal policies and guidelines ensure that e-learning systems are compatible with related management information systems (e.g. admission, registration or administrative system) and are reliable, secure and effective.

1.6. Guiding Principles

- **Principle 1:** HEIs ensure that all academic programs to be adopted for e-learning are approved by the respective academic body of higher Education Institutions and ensure that the appropriate pedagogy and regulation has been embedded. Similarly, such programs need to be accredited and monitored by Ethiopian Education Training Authority (ETA).
- **Principle 2:** HEIs ensure that the empowerment and support of staff to pedagogically develop and deliver education that are supported by technology and that it is mainstreamed within the educational system.
- **Principle 3:** HEIs strive to ensure that on-campus teaching and learning is blended with online learning and digital resource sharing.
- **Principle 4:** HEIs ensure that the adoption of e-learning will lead to a full range of flexible and independent learning experiences. The e-Learning experiences will be for the local and global learners who are interested in accreditation in the levels of certificate, diploma, undergraduate and postgraduate degree programs.
- **Principle 5:** HEIs ensure that students who are being taught through any form of e-Learning have the same opportunities to achieve their learning objectives.
- **Principle 6:** HEIs regularly undertake the task of making sure all infrastructure used in making sure there is effective e-learning and are interoperable, up to date, secured, well managed and provides a learning environment that fits to the 21st century stakeholder (staff and student).
- **Principle 7:** HEIs ensure that all e-learning programs have a mechanism for quality assurance and feedback provision through formative assessments from both staff and students. This should ensure that improvements are regularly done within the entire processes of e-learning implementation.
- **Principle 8:** HEIs ensure that, by using effective costing models and market research, the pricing of e-learning offerings is both competitive and appropriate to the target populations.

1.7. Definitions of Terms

- e-learning:** e-learning is the use of a learner-centered electronic mediated environment (web, and other internet technologies).
- Online Learning:** is education that delivers instruction to students who are separated from the instructor or instructors, and that supports regular and substantive interaction between students and instructor(s) either synchronously or asynchronously.
- Distance Learning:** Distance learning is a method of studying in which instructions are broadcast or lessons are conducted by correspondence, without the student needing to attend a class with physical presences
- Blended Learning:** Blended learning is defined as learning mode that utilizes at least 30% - 79% of the course content delivered online to complement the face-to-face learning (Sloan Consortium, 2010³).

³ The Sloan Consortium Website. About Sloan-C. <http://www.sloan-c.org/aboutus/>.

- E. **Learning Management System (LMS):** A Learning Management System or LMS is a platform that supports the implementation of e-learning. It enables course information, lecture notes, learner communication and other learning activities to be accessed online through the institution's computer network. It also serves to enhance collaborative activities among learners and instructors.
- F. **Course portfolios:** Course portfolios are online courses that are available and accessible by instructors through the LMS. Learners subscribed to the course portfolios to gain access to the course materials uploaded by the instructor.
- G. **Learning Objects:** Learning Objects are e-learning content or modules that can be shared and reused by other instructors in other courses, using the same LMS.
- H. **Confidentiality:** in information security, is the protection of information in the system so that an unauthorized person cannot access it.
- I. **Integrity:** in information security, refers to the accuracy and completeness of data
- J. **Availability:** in information security, refers to the assertion that a computer system is available or accessible by an authorized user whenever it is needed.

1.8. Scope of the Policy

HEIs will use e-learning where appropriate to support the achievement of its goals which are in-line with the national Higher Education ICT policy in providing e-learning experiences that are flexible, responsive, effective, and meet the needs of all its learners and partners

Policy aspects pertaining to e-learning will, where relevant, be embedded in all HEIs policies and procedures to ensure a consistent and corporate approach associated to systems, processes and responsibilities. For the e-learning to be effective and efficient, a student is expected to have access to all required materials/resources so that she/he is able to meet the learning outcomes of the course and this includes the expertise. The e-learning policy provides an agreed, common and transparent framework of essential elements that need to be effectively addressed. To this end, the policy addresses high level issues such as governance, standards, instructors' development, infrastructure, student support, data security, intellectual property rights, and resource sharing at a national level.

This policy will be used as the main reference for HEIs to develop their own institutional e-learning policies. Specific institutional issues, such as course creation, credit assignment and duration of instructor training programs will be handled by the institutional e-learning policies. Hence, are not within scope of this policy.

Similarly, achievement of the learning outcomes of individual students does not fall within the scope of this policy, as there will be multiple factors affecting achievement. Nevertheless, issues relating to e-learning content, quality and management might be addressed by the HEIs.

1.9. Relationship with other Policies

e-learning demands closer working relationships between academic and administrative and operational institutional structures. However, this policy is required to work in alignment with existing national education policy and ICT related policies. On the other hand, institutional policies and strategies need to consider e-learning as integral parts of their system. This imposes new requirements for the institutions to provide online services and a technical infrastructure designed to provide secure services accessed by users operating outside and inside the institutions. A new infrastructure should be put in place and only designated persons

will be authorized to have access and provide support. Thus policies on infrastructure, human resource, security and resource sharing have to be aligned with the mission and objective of e-learning which demands new institutional culture.

Part II – Policy Focus Areas

2.1. Focus Area 1 - Governance

A proper governance structure has paramount importance in ensuring quality of service by instilling transparency and accountability. In areas where various units of an organization collaborate with each other and with external organizations, a clear governance structure and explicitly described roles and responsibilities are mandatory for the successful delivery of e-Learning programs. As there are multiple entities interacting to deliver e-learning courses, special consideration shall be given for governance related issues at different levels. Thus

1. An e-learning governance unit shall be established at the Ministry of Education level to harmonize implementation of e-learning in public and private HEIs. The e-learning unit shall have clear roles and responsibilities.
2. The MoE through its regulatory body, ETA, shall have a dedicated unit for monitoring, regulating and accreditation of e-learning programs in both public and private HEIs. This unit shall make sure that special needs students are not left behind in e-learning courses and programs developed by HEIs.
3. The MoE shall solicit funds for implementation and operation of e-learning in HEIs. Likewise, HEIs shall make the appropriate funding available for e-learning.
4. HEIs shall be responsible for providing the training, support and the resources required in the implementation of e-learning.
5. HEIs shall establish a dedicated e-learning coordinating unit to support the national agendas of e-learning. Emphasis must be given to the pedagogical and technology aspects of e-learning while establishing the unit. There should be clear demarcation between this unit and other collaborating units, such as ICT Directorate, Registrar, and Academic Quality Assurance Unit.
6. HEIs shall equip the e-learning coordinating unit with appropriate staff, technology and funding. The staff of the unit shall have diverse specialization mainly pedagogy, technology, instructional design, and multimedia. Professionals who specialized on instructional design for learners with special needs shall be part of this unit.
7. HEIs shall make sure that academic units are the primary units through which e-learning programs are proposed for approval.
8. HEIs shall make sure that there is a responsible unit to review and coordinate course enrollment and cancellation.

2.2. Focus Area 2 -Standardization, Quality Assurance and Accreditation

e-learning formats in Higher Education have been significantly developed in recent years and are faced with major challenges in terms of their standards, quality assurance and accreditation. However, standard and quality assurance are a comprehensive process involving the institutional arrangement and strategy. In addition, e-learning program development must consider e-learning related pedagogical practices and innovations. This policy element mainly

focuses on the approaches and process that an e-learning course is being developed and delivered with high standard, management and quality.

1. HEIs shall have an institutional policy for e-learning quality assurance that is part of their strategic management. HEIs should also implement it through appropriate structures and processes. These include development of appropriate guideline for:
 - a. institutional support;
 - b. course development;
 - c. teaching and learning;
 - d. course structure;
 - e. student support;
 - f. instructor support with compulsory e-learning certification for new members of staff;
 - g. technological infrastructure;
 - h. student assessment (learner authentication, work authorship and examination security) and certification; and
 - i. electronic security measures
2. HEIs shall make sure that e-Learning content standards are developed by the ministry and/or the regulatory authority specifying the minimum requirements of courses in terms of the type and format of the digital content courses must have. All e-learning courses should meet the minimum defined standard within the program in terms of course information, specification, credit hours, description, outline, key calendar and assessment criteria.
3. HEIs shall make sure that content standards meet specific requirements of learners with special needs.
4. HEIs shall make sure that e-learning course offerings meet all curriculum requirements of the HEIs. e-learning, online learning, blended learning, and standard course offerings should be consistent in terms of student learning outcomes, quality, assessment, and purpose with other courses bearing the same program and course number.
5. HEIs shall ensure that all digital materials used in the teaching and learning program are made available to the students within the e-learning platform. In case the HEI does not have such a platform, it should acquire it through lease or through support systems available at the MoE.
6. HEIs will have to make sure that the e-learning experience is effective to deliver the intended learning outcomes and program content. At the same time, program development staff must indicate the rationale for the choice of the teaching and learning methods and their relevance for online delivery.
7. HEIs must make sure that student-instructor interaction is maximized through online and in-person communications. HEIs must also promote student-student interactions to facilitate peer learning.
8. HEIs should make sure that course and program development for e-learning promote student collaboration through means such as: discussion questions, learning team activities, and weekly participation using either asynchronous or synchronous technologies.
9. HEIs should have consistent course and program approval processes for e-learning, blended learning and regular course offerings.

10. HEIs shall monitor and evaluate effectiveness of e-learning programs regularly as per their institutional quality assurance procedure.
11. HEIs shall ensure that there is an appropriate balance of formative and summative assessments, that the assessment methods are adequate to demonstrate achievement.
12. HEIs shall ensure that e-Learning programs', student assessment and evaluation are in line with higher education assessment and evaluation standard. Whereas formats of assessment shall be determined by the course and program requirement and the expected learning outcomes.
13. HEIs shall make sure that any e-learning program is accredited by the responsible body and meet the required standard set for each program.

2.3. Focus Area 3 - Instructors

Quality e-learning program depends not only on the availability of e-learning tools and technology but also on the quality and skills of the major stakeholders who are developing the contents, facilitating the learning and conducting student support and assessment. This can only be achieved while there are skilled and motivated academic staff. Thus the focus of this policy statement is on staff skills development, certification, evaluation and incentive packages. Thus,

1. HEIs shall make sure that staff has the minimum required basic computer literacy skills to interact with the technology used in e-learning.
2. HEIs shall make sure that staff has the capacity to interpret learning analytics to evaluate the effectiveness of the teaching, learning and assessment activities. For staff who do not have the necessary skills, capacity building as per their demand shall be provided.
3. HEIs shall make sure that e-learning instructors, trainers and content developers are well trained and are equipped with the latest knowledge and skills of using technology tools to create materials to support e-learning.
4. HEIs shall provide training on e-learning pedagogy and tools to their instructors regularly. HEIs shall make sure that Instructors should take the e-learning course development training before developing e-learning courses.
5. HEIs shall make sure that e-learning course instructors are regularly evaluated, provided feedback, and certified.
6. HEIs shall have a mechanism to incentivize instructors who are participating in e-learning course development, e-facilitation and course or program assessment. Accordingly,
 - A. Instructors who are preparing e-learning courses and are active in using and implementing e-Learning tools should be incentivized for the amount of time they spent in preparing the course as per the institutional regulation of the relevant HEIs.
 - B. Institutions must recognize e-learning, online teaching or online instruction as equivalent with the traditional course offerings in terms of load and instructor's teaching time. And load for e-Learning should be determined by the respective HEIs.
 - C. Hours spent in teaching in an online environment MUST be calculated and credited into the e-learning instructor's official teaching hours load.
 - D. Institutions have to consider involvement in e-learning activities as one of the criteria for promotion and awards.

2.4. Focus Area 4- Intellectual Property Rights⁴

Any teaching and learning activity require production, use, reuse and development of materials and content. These materials and contents are outcomes of individuals and institutions. These individuals' and institutions' contributions have to be properly recognized and their intellectual property should be protected. Thus, recognized and acknowledged as per the national and international rules and regulations. Accordingly, the following should be considered:

1. The Ministry of Education shall promote establishment of ethical standards for the creation and consumption of digital content
2. HEIs shall make sure that e-learning materials and contents comply with the international copyright laws to which Ethiopia is a party.
3. HEIs shall make sure that only materials for which the institution has secured the right to use or has copyright can be uploaded in the e-Learning system.
4. HEIs shall grant other partner institutions the license to use their copyrighted material available in the e-Learning platform.
5. HEIs shall guarantee that any content developed by their academic staffs will comply with all intellectual property law of the country and the institutional rules and regulations related to intellectual property.
6. HEIs shall make sure that e-learning materials and content developed by an instructor of an HEI to deliver instruction for the Institutions becomes property of the HEI and can be re-used in other courses or modules within the same HEI.
7. HEIs shall follow any non-disclosure agreements necessary for internal/external projects.
8. HEIs shall guarantee that works created will protect a student's, teacher's and other third parties' legal right to privacy and confidentiality.
9. HEIs shall agree that content that generates royalties or proceeds will be owned and managed by the institution that created them.
10. HEIs shall grant partner institutions a royalty-free non-exclusive license to use the e-Learning materials created for non-commercial teaching or research purposes.

⁴ Proclamation concerning Inventions Minor Inventions and Industrial Design, Federal Negarit Gazeta 123/1995

Copyright and Neighboring Rights Proclamation, Federal Negarit Gazeta 410/2004

Copyright and Neighboring right proclamation (Amendment) , Federal Negarit Gazetta 872/2014

Trade Mark Registration and Protection proclamation, Federal Negari Gazeta 501/2006

Computer Crime Proclamation, Federal Negarit Gazeta 958/2016

Plant Breeder's Right Proclamation, Federal Negarit Gazeta 1068/2017

Electronic Signature Proclamation Federal Negarit Gazeta 1072/2018

Hate Speech and Disinformation Prevention and Suppression Proclamation Federal Negarit Gazeta 1185/2020

2.5. Focus Area 5 - Student Support and Services

e-learning education brings additional responsibilities to the learners. It demands learners to manage and lead their learning. e-learning students want more than course materials and effective instruction to succeed in the learning. HEIs should develop policies and strategies for the design and provision of student support services. Although the delivery of student support services may vary between institutions, student support should be taken into account in all e-learning programmes.

Support services for e-learning students should be designed to cover the pedagogic, technological and administrative aspects that affect the online learner:

1. HEIs shall ensure that the electronic learning management platform is available, viable and reliable to provide students with administrative, academic and technical support at times that suit students' learning at flexible hours and locations.
2. HEIs shall establish student support centers where students involved in online courses could get technical support.
3. HEIs shall provide clear and up-to date information and advice about courses to enable students to make informed choices. Every e-learning course has to state the available forms of support students need to get and have to be provided by respective actors.
4. HEIs shall make sure that information and advice about technical and administrative matters are easily accessible and available before student registration in e-learning courses.
5. HEIs shall provide guidance, resources and activities to support students on their journey through the program, including induction, the development of generic study skills and e-learning skills, and career advice.
6. HEIs shall provide helpdesk and advisory services at times appropriate to students' needs.
7. HEIs shall provide online library services to e-learning students. Study centers may be appropriate for some courses.
8. HEIs shall make sure that all student support services consider the needs of learners with special needs.

2.6. Focus Area 6 - Infrastructure and User Access

For successful e-Learning program, sufficient tools and infrastructure is required. In addition to these, continuous upskilling is required to ensure proper utilization of the tools and the provided infrastructure. Furthermore, emphasis must be given to maintenance and upgrading of the tools and infrastructure used for e-learning.

1. HEIs shall have an easy-to-use Learning Management System (LMS) where instructors and students interact online. The LMS shall be made available 24/7 for the students to learn at their own pace.
2. HEIs shall make sure that the server(s) hosting the LMS have sufficient processing and storage capacity to provide seamless access to all students.
3. HEIs are responsible for selecting the appropriate software that is installed on servers along with LMS. All HEIs are prohibited from using pirated software whatsoever.

4. HEIs shall make sure that sufficient bandwidth is provided to the facilities hosting the LMSs and Student Information System (SIS).
5. HEIs shall use open-source tools as much as possible to limit the use of pirated proprietary software by students. If proprietary software must be used, HEIs shall come together and subscribe to multiple licenses to be cost effective.
6. HEIs shall make sure that minimum storage, processing, and bandwidth requirement per user set by the regulatory body.
7. MoE shall give the necessary support for HEIs to improve students' access to affordable devices (laptop computers, desktop computers, or tablets).
8. HEIs shall find ways to provide sufficient devices and connectivity to facilitate students' access to the LMS. HEIs may use innovative ways of providing devices to their students.
9. HEIs shall make sure that devices offered to students shall also cater for learners with special needs. Specialized hardware and software must also be made available for students with hearing and/or visual impairment.
10. HEIs shall make sure that the devices used by all registered students meet the minimum requirement to access the e-learning material online.
11. HEIs shall make standard recording studios and lecture rooms available for instructors to broadcast and record their lectures to be uploaded on the LMSs.

2.7. Focus Area 7 - Information and Data Security

One of the key considerations in e-learning is information and data security. Every information and data security initiatives must be addressed with confidentiality, integrity, and availability of information. Thus,

1. HEIs shall provide continuous awareness sessions on privacy and data security.
2. HEIs must ensure that e-Learning systems are used by authorized users only with the right privilege.
3. HEIs must ensure that unique user accounts are used to identify users and are private.
4. HEIs must ensure that password strength, length and frequency of change are governed by the ICT policy. If such policy doesn't exist, the HEIs shall develop a guideline specifically applicable for e-learning.
5. HEIs must ensure that user account management and privilege to access e-Learning course content is done in accordance with the HEIs user access policy.
6. HEIs must ensure that students have access to only courses that they are enrolled in. Even in these courses, students shall not be allowed to view sensitive data of other students (eg. Grades, assignments, etc)
7. HEIs must put a mechanism in place to detect, report and control fraud, illegal activities and vulnerabilities.
8. HEIs must make regular backups of data in accordance with their ICT policy. The minimum retention period shall be defined by the institutions.
9. HEIs must ensure that personal data of students is treated following national and international data protection and privacy laws and regulations.

10. HEIs must make sure that private data of students and any user, in no means, is transferred to third party without the consent of the user.
11. Cross-border data sharing shall be governed by the country's data sovereignty regulations.

2.8. Focus Area 8 - Resource Sharing

Educational resource sharing is emerging as a viable means to improve quality and access to education. By pooling resources and taking advantage of each other's expertise, learning providers could build adequate capacity, optimize the use of infrastructure and reduce costs. Consequently, the time and cost that would have been incurred by an institution is sharable amongst the partners. This is the reason why Institutions have to be part of the Ethiopian Education and Research Network (EthERNet).

In order to share e-learning resources in a more rationalized and formal way,

1. EthERNet, as a national coordination hub, shall be strengthened for the purpose of sharing research and educational resources among all HEIs including private institutions.
2. Ministry of Education shall coordinate sharing of resources such as content, reference materials, data centers, and studios. Cost effectiveness shall be at the core of such resource sharing initiatives.
3. HEIs shall have institutional e-learning policies, guidelines, and processes that support resource sharing.
4. HEIs shall share the Infrastructure used for e-learning. Each participating institution must have the basic infrastructure that would allow for full participation in the sharing process.
5. HEIs shall make sure that capacity building in e-learning is undertaken among institutions to effectively share e-learning resources.
6. Ministry of Education shall facilitate sharing educational resources locally, regionally and internationally.
7. HEIs shall make sure that both resource developing institutions and resource seeking institutions incentivize e-learning resource developers and facilitators while resources are shared.

Part III – Monitoring and Evaluation

3.1. Monitoring and Evaluation

This policy shall be reviewed by following the start of the e-learning implementation in HEIs that the MOE is managing. Once the program has started there will be practical and contextual challenges to be managed regularly. Thus, a regular follow up and support by MOE to each implementing university is mandatory.

1. **e-learning Policy Review Process:** Commencing with the approval of this policy, every three years the relevant academic unit of the MOE shall initiate and carry out a review process to ascertain the need for updates or modifications to the e-learning policy. The review is to take into account emerging issues and trends.
2. **Review of e-learning Practices:** For the purposes of providing pedagogical and technological support, the e-Learning management unit of the HEIs should conduct, in

coordination with the Academic office, periodical institutional-wide multi-dimensional e-learning satisfaction surveys of courses that make use of such technologies. This information will be in aggregative form and used for planning and programmatic consultation. The survey will focus on practices associated with the online tools themselves as well as their satisfaction and usage level of the tools (e.g. how often students interact with the online tools).

3.2. Success Indicators

1. HEIs develops working guide and internal e-Learning policy drawn from this policy to their local context
2. Implementation of e-Learning programs on selected HEIs and selected courses
3. Number of instructors involved in e-learning course development
4. Number of e-learning programs successfully delivered per HEIs
5. Number of students enrolled in e-learning courses or programs
6. Number of HEIs sharing resources
7. Number of e-learning courses shared among HEIs

