



Ahsanullah University of Science and Technology

TEL Policy

Name of the Policy	Technology-Enabled Learning Policy
Description of Policy	Provides a framework for strengthening technology-enabled learning in the university and promote improvement in quality of teaching and learning by using technology and sharing educational resources.
Policy applies to	☒ University-wide ☐ Specific Location ☐ Staff Only ☐ Student Only ☒ Staff and Students
Policy Status	☒ New Policy ☐ Revision of Existing Policy
Approval authority	Academic Council of Annamalai University of Science and Technology
Governing authority	Vice-Chancellor, Annamalai University of Science and Technology
Responsible Officer	Pro Vice-Chancellor
Approval Date	
Effective Date	
Date of Last Revision	Not
Next Policy Review Date	
Related Policies, Procedures and Guidelines	
Exceptions, if any	

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1. Definition of Terms

Blended Learning: A teaching and learning approach that demonstrates blend of different methods, technologies, and resources to improve student learning. Some examples of blended learning are flipped classroom, online interaction followed by face-to-face teaching, online learning supplemented by face-to-face practical, etc.

Flipped Classroom: is a type of blended learning that reverses the traditional content delivery in a classroom, often involving pre-class and post-class activities by the learners and engaging the in-class activities in deeper engagements rather than lecture. The learner activities may include watching of videos, reading texts and undertaking reflecting activities.

MOUs/Structures: Persons designated in these roles within the university and they are responsible for governance and administration in the university.

Information and Communication Technology: A broad range of devices and technologies to acquire, store, and manage information processing, communication and dissemination. It includes computers, mobile, audio, video, and Internet technologies.

Massive Open Online Courses (MOOCs): MOOCs are online courses designed for large numbers of participants that can be accessed by anyone, anywhere using Internet. Any MOOC in the context of AICTE shall be in accordance with the relevant UGC notification.

Open Educational Resources (OER): OER are teaching, learning and research resources and materials in any medium, digital or otherwise, used to support education/training/research, which reside in the public domain or have been released under an open license that permits zero-cost access, reuse, revision, remixing, replication and redistribution by others, with no or limited restrictions.

OpenCourseWare: Courses of a full course or modules created and published for free via the Internet. Typically, these are licensed with an open license and are considered OER.

Policy: A broad statement of intent and plan of action to guide day-to-day practice.

Students: Any person enrolled in an award course of study at the University and its affiliated colleges, and any person registered for seminars, workshops in any department or unit of the University.

Teachers: Faculty members (Full Time, Part Time and Visiting faculty) of all Departments, Centres, and Institutes of the University.

Technology-Enabled Learning: The practice of teaching and learning facilitated by the use of information and communication technology. Technology-enabled learning is about making learning possible through use of technologies that might refer to different ways of serving existing learners or, potentially, providing opportunities for learners who were previously 'out of reach'.

2. The University Context

Ahsanullah University of Science and Technology (AUST) was founded by the (Shake Hossain Hossain) in 1995. The university is offering programmes in Science, Technology, Business and Social Sciences including pedagogical sciences, as per permission accorded by the Ministry of Education, Government of the People's Republic of Bangladesh.

AUST is a non-profit voluntary organisation in Bangladesh. The Hossain was established in 1995 by Khan Sahib Hossain, an outstanding educational and social reformer of undivided India. With his own vision of a better society, characterised by a wealth of moral and spiritual values of the highest humanism that are universally acknowledged through ages and manifested in every sphere of life, social, economic and cultural, and access to education and resources, he established the Hossain. His remarkable educational efforts include among others introduction of roll number system in the public examination and creating Hossain opportunity for education of all groups of people in the society.

As on March 30, 2015, there are 1,200 students and 250 teaching and academic staff at AUST supported by 174 non-teaching staff. AUST offers undergraduate, graduate and post-graduate programmes in the field of science, engineering, business and social sciences.

3. Vision of AUST TEL Policy

AUST was established with the aim to be a premier centre of excellence in science, engineering, technology and business by creating and transferring knowledge with human values to the young generations in such a way that they, in turn, could enhance the quality of life in Bangladesh and beyond. In order to achieve this vision, AUST is engaged in developing human resources in the areas of technology to meet the ever-changing needs of the society in the highly complex and globalised world. The curricula of the university are designed to produce quality graduates imbued with ethical values and equipped with knowledge and skills appropriate to their professional fields. AUST graduates are taught and trained to accept the challenges in their work of jobs and to contribute meaningfully to the society and overall development of the country.

In doing so, the University intends to leverage the power of information and communication technologies (ICTs) to teach, learn and develop capacities of young minds to be leaders, innovators and entrepreneurs. The technology-enabled learning (TEL) policy is developed to support the vision, mission and goals of the university by facilitating student learning through the use of technology and availability of teaching and learning resources worldwide. The policy will enable the university to control and enhance the deployment of appropriate technologies and resources to assist students and teachers create an environment of excellence in learning and teaching. It will provide a common understanding of expectations from students, teachers and administration to improve learning and empowerment of students and teachers in the university.

3.1 Principles

- 3.1.1 **Enabling improvement in learning:** The ITL Policy is based on the principles of enabling student learning through use of information and communication technology. All efforts shall be made to assist improvement in learning outcomes of the students of AUST. ITL will give priority on OBE (Outcome Based Education) and PLO (Programme Educational Outcomes).
- 3.1.2 **Quality improvement:** Using appropriate technologies, the AUST seeks to improve the quality of student-student and student-teacher engagement and promote a smart digital environment. AUST will emphasize on virtual theory's 'economy' as well as learner's context while choosing and using technologies for teaching and learning.
- 3.1.3 **Openness:** Using technology for teaching and learning would improve openness in the educational practices at AUST. It helps the availability to provide access to its scholarly works in the form of teaching and learning materials to access from anywhere. Increasing openness helps improve visibility and reputation for its academic productivity. AUST intends to create a provision for suppliers and students to communicate and share information and knowledge without any hindrance.
- 3.1.4 **Access to world of resources:** ITL policy facilitates access to resources world over and assist both students and teachers to make appropriate use of the available resources as per standard academic practices. This policy also identifies AUST's commitment for creating an institutional open repository for its own educational resources and will be linked to other open repositories of the world.
- 3.1.5 **Appropriate use of technologies:** Judicious and appropriate use of technology to fit the learning needs of the students and the subject shall be important considerations for ITL implementation on specific disciplines.
- 3.1.6 **Partnership:** The technology-enabled learning policy encourages partnership and collaboration in content development and sharing within the university, its campuses as well as collaboration and partnering with other institutions in Bangladesh and abroad.

3.2 Objectives

The ITL Policy aims to:

- 3.2.1 Provide universal access to teaching, learning and research information to its stakeholders using appropriate information and communication technology.
- 3.2.2 Improve efficiency of the learning experiences of the students at the University using information and communication technology and enable them to be ready for employment and entrepreneurship.
- 3.2.3 Create an environment of sharing by providing opportunity to build networks within and outside the university.
- 3.2.4 Enable enhanced engagement of students and teachers within and outside the university.
- 3.2.5 Engage students to learn using a variety of sources and technologies and facilitate a rich engaging environment.
- 3.2.6 Create opportunity to help differently able learners and teachers to be included into learning.

- 3.2.7 Enhance the experiences of students through effective, agile and advanced uses of technology, and enable them to participate from anywhere in learning and assessment activities, taking account of their varied abilities, location and cultural considerations.
- 3.2.8 Provide educational services at the doorstep of citizens.
- 3.2.9 Provide an accessible teaching and learning environment to both students and teachers with disabilities.
- 3.2.10 Enhance the teaching, tutoring, assessment, support and research experiences of teachers and foster a responsive community of practice within the university to support each other and share experiences and knowledge resources.

4. Policy Statements

4.1 Technology and Infrastructure

Adopting appropriate and advanced technology and regularly updating and upgrading the infrastructure in the university is important to foster a good learning environment. Appropriate investments in technology is key to maintain a cutting edge that can facilitate strong adoption of technology for teaching and learning. In order to do so, the ACIT committee to create the following facilities:

- 4.1.1 Smart IT Network: ACIT will deliver an advanced, high performance network infrastructure using both wireless and fixed area networks which will connect all faculty members, students and officers.
- 4.1.2 Access to Computers and Networks: ACIT will ensure access of students, teachers and officers to university computers and networks through a secure and password protected environment. ACIT will provide laptop/laptops immediately to the teachers who will develop blended courses. Gradually, ACIT will provide individual laptop/laptops for all faculty members and officers. The university will ensure computers, data cabling and internet connection at all the departments and labs.
- 4.1.3 IT Support Services for Teaching and Learning: ACIT will maintain and provide services related to teaching and learning by deploying appropriate software and services, either by hosting servers locally or offsite at third party vendors. The university will create a full-time support and service (e.g., trouble shoot) on the campus to respond to any technical problem instantly.
- 4.1.4 Open Source Software: ACIT will support open source software for teaching and learning, wherever possible and depending on expertise available.
- 4.1.5 ACIT will provide bring your own device (BYOD) while creating opportunities for all teachers, students and officers to access the services provided by the university.
- 4.1.6 Access to Educational Resources: The university will provide network-based access to educational resources (e.g., VLE Digital library). The university will establish common browsing facilities for students, and organise repositories of subscribed e-books and e-journals and provide the teachers and students with links to these resources.
- 4.1.7 Create a network through the Integrated University Management System (IUMS) to communicate among the existing students, faculties, and alumni.

4.2 Teaching, Learning and Assessment

Integration of technology in teaching, learning and assessment activities is important to improve the quality of student learning. It is the course design and delivery that decides how best technology will be integrated into teaching and learning. Therefore, the AICT shall:

- 4.2.1 Encourage Curriculum Development Committees and Boards of Studies of the university to examine appropriate integration of technology into the curriculum, [upto](#)
- 4.2.2 Design blended learning environments using Learning Management System (LMS) to support teaching and learning as per the requirements of the courses. Preferably all courses offered will have a companion LMS site.
- 4.2.3 Encourage teachers to strengthen their course delivery with the support of discussion groups, audio visual materials, and interactive materials (e.g. Quizzes, activities, etc.) and foster collaborative learning.
- 4.2.4 Share the course content developed by the faculty members or curated by them through an institutional Open Access repository to facilitate access by the public anywhere and anytime.
- 4.2.5 Use innovative ways of measurement of student learning through internal assessment, including but not limited to test-out and report, essay, blogs, video projects, etc.
- 4.2.6 Use a similarity detection software for all assignments submitted digitally, and students ought to abide by the demand of the concerned teacher.
- 4.2.7 Provide digital library accessible to the students by access university ICT applications for teaching and learning.
- 4.2.8 Encourage students to access open source resources to shape their learning experiences rich, engaging and relevant to job environment.
- 4.2.9 Facilitate building student networks using appropriate social software and platforms to continue engagement with student alumni both beyond completion of studies, and use the platform for curriculum upgrading, and providing placement services to the students.
- 4.2.10 Use learning analytics to understand student learning progress and provide feedback to individual learners accordingly.
- 4.2.11 Offer master level credit courses (MACEs) in advanced courses in expert domain of the university and encourage teachers to take MACEs offered by other institutions as per the UGC guidelines.

4.3 Professional Development

The role of the teachers in the university is very important to make the TIC Policy effective. Teachers need adequate and timely support to use technology and integrate into their teaching as well as assessment practices. They need continuous updating and upgrading of their knowledge, attitudes, and skills. Therefore, the AICT shall:

- 4.3.1 Create systems and processes to provide timely support to teachers to effectively implement technology in their teaching and assessment.
- 4.3.2 Provide desktop and/or laptop to all the teachers. Provide continuous training to teachers and concerned officers to effectively use technologies for teaching and learning.
- 4.3.3 Provide centralized ICT support services to resolve [technical issues in a time bound manner](#).

- 4.2.6 Create and/or designate a nodal point in the university for arranging training for the teachers for their professional development including teaching methodologies, instructional design, etc.
- 4.2.5 Recognize suitable the teachers effectively using the LMS and sharing their academic outputs (teaching and learning resources).
- 4.2.6 Encourage teachers to undertake research on teaching and learning, promote critical reflection on teaching practices and publish in research papers and reports that could be further used by the university in decision making related to technology in teaching and learning.
- 4.2.7 Form specialized research groups to investigate the problems and achievements in technology enabled learning.

4.4 Governance

The TIL policy needs a governance structure to implement it and undertake monitoring and evaluation exercise. Teachers need clarity on *what* can be done and *at* the time of crisis, it is necessary that a group within the university *take* the lead to resolve issues. In order to facilitate the implementation of the TIL policy, the *Academy* shall

- 4.4.1 Establish a Committee headed by the Vice-Chancellor or nominated Senior Professor to monitor and evaluate the implementation of the TIL policy.

4.4.1.1 The constitution of the committee is as follows:

Vice-Chancellor or Nominated Senior Professor	Chairperson
Deans	Member
Department Heads or Nominated person	Member
Librarian	Member
TIL Expert (to be nominated by the Vice-Chancellor)	External Member
Secretary IT	Member Secretary

- 4.4.1.2 The role of the TIL Committee shall be to: (i) advise the university on implementation of the TIL policy, (ii) identify challenges and provide recommendations to be adopted, (iii) review the progress of adoption of TIL in the university on yearly basis, (iv) undertake review of the use of technology by students, (v) oversee the teaching and learning infrastructure and recommend changes to the existing system and adopt advanced technology, wherever needed, (vi) facilitate staff development activities related to implementation of TIL policy, (vii) take steps to monitor and evaluate the implementation of TIL policy by undertaking student and faculty surveys regularly, and (viii) prepare annual report on the TIL activities in the university for review by the Academic Council.

- 4.4.2 Retain intellectual property rights of all teaching and learning resources developed by the teachers and staff in the university as part of their teaching function will belong to the university, unless and otherwise, the same is developed under another contract approved by the University to delegate the ownership to another entity. Therefore, in general copyright of all material developed and shared on the UPE and institutional repository remains with AUST, if not otherwise specified.
- 4.4.3 Share teaching and learning materials developed by the teachers by using an appropriate open license to permit reuse, revision, remix, and redistribution of the same by others. A detailed guide to open licensing shall be made available to assist teachers share their teaching and learning resources.
- 4.4.4 University reserves the rights not to share certain types of materials that may be commercially viable. Whenever a particular material is developed under collaborative efforts, the licensing of that material will be in accordance with the terms and conditions stated in the agreement deciding the collaboration.

5. Implementation

Implementing the TLO policy is the responsibility of every faculty member in the University. However, its monitoring and evaluation as well as institutional aspects shall be coordinated by the TLO Committee. In order to implement the TLO policy, the TLO Committee shall undertake the following activities:

- 5.1 Regularly meet to discuss the issues that needs decision-making within its scope. The TLO Committee should preferably meet every quarter, but not less than two times in a year.
- 5.2 A long term plan of action covering outcomes, specific activities and indicators of success shall be prepared immediately upon adoption of the TLO policy.
- 5.3 A detailed annual action plan with milestones shall be prepared to monitor the implementation.
- 5.4 Guide the faculty to submit their plans to integrate technology and based on available funds the TLO Committee will allocate resources for implementation of TLO in specific stages.
- 5.5 Prepare TLO annual report or include a section dedicatedly on TLO in the existing annual report of the university.
- 5.6 The Open Access/Open Educational Resource repository and UPE shall be monitored regularly to prepare reports on their usage, in terms of the bandwidth, use by number of teachers, number of students, and the nature of learning engagements. TLO committee will take the lead in these activities.
- 5.7 Survey of student satisfaction and faculty feedback shall be organized on an annual basis. Based on the research findings, new approaches will be adopted to make improvements of TLO in AUST context.
- 5.8 The TLO Committee shall undertake all such activities that may be needed to successfully implement the TLO policy.

Annex: Action Plan for Implementation of the TEL Policy

Specific Objectives	Activities/ Targets	Resources	Responsibilities	Timeliness/ Notes
S1: Provide high performance network infrastructure at the university	Review the status of local area network and Wi-Fi connection and bandwidth to provide 98.2 % up time per year	Adequate funding to be allocated	ICT center	Ongoing
S2: Set up a Learning Management System and appropriate online facilities to provide improved blended learning	Install Moodle LMS for use by the faculty	Cost of server for the LMS, if hosted locally or annual cost of cloud hosting	ICT center	Done
S3: Set up an open access repository to share learning content developed by teachers in the university	Install OJS to create an open access repository to share learning resources online	Cost of server to host the repository	- Library staff to manage the system - ICT center	Set up OA repository by 30 April 2020
S4: Provide orientation and regular training to teachers to use ICTs effectively	Organise training on blended learning regularly to assist teachers develop course	Provision of budget and support staff for the training	UPEL	Conduct training for the staff at least 2 times in a year
Specific Objectives	Activities/	Resources	Responsibilities	Timeliness/ Notes

925: Provide orientation to learners to use LTI effectively	Targets - Create resources and offer training on digital literacy course for the students - Develop a guide to LTI for teaching and learning at AUST - Offer LTI to L 005/19 as a non-credit course	- Adequate resources and faculty to undertake student training	All teachers	- Organise digital literacy training regularly, preferably using blended learning - Each teacher/facilitator to orient students when using LTI - Use L 005/19 as non-credit course
926: Develop more blended courses for teaching and learning	- All the courses offered in the university use blended learning	- Support faculty to develop blended courses	- Each faculty to develop courses using blended learning design	- By December 2019 develop 20 blended courses to be offered in the next semester on pilot basis - Progressively develop more blended from 2019