Technology Enabled Learning at UMS Center For E-Learning

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KOTA KINABALU: The Center for E-Learning at Universiti Malaysia Sabah, has been actively engaged in the promotion of Technology Enabled Learning (TEL) across the university. TEL has become an essential component of the process of teaching and learning and it is in keeping with the national education blueprint which aspires to establish universalised online learning as a norm in Malaysia.

TEL caters to the current generation of digital natives, which refers to students who have been acculturated to digital technology at an early age, as well as the needs of industry which requires life-long learning and the upgrading of skills to meet current and future demands.

Cyberspace now dominates human and social interaction as we adapt to a new paradigm in which essential social functions such as communication, trade and leisure move into the online realm.

The process of teaching and learning the field of TEL (TLE) is no exception when it comes down to the onward march of society.

This new offshoot of pedagogy has been termed Technology Enabled Learning (TEL) and what it essentially involves is the application of the tools of technology to facilitate the process of teaching and learning.

This combination empowers both students and lecturers with powerful tools to facilitate TEL. TEL Convex is teaching approaches involve the delivery of instructions using tools like traditional chalk and board.

Students are expected to take notes and to understand the content of the lectures distributed via pre-recorded copies of lecture notes. The students are then assessed for their degree of competence by measuring learning via formative and summative evaluation, both of which involve tests of cognition, physical dexterity and affective development.

This process has its limitations as the lecturer is not able to make effective interventions in order to address the limitations of individual learners.

The emergence of technology and big data has transformed the conventional classroom into a site of hybrid physical and virtual environment via blended learning (BL).

This new approach to teaching involves the lecturer recording his or her lectures using a video recording facility which are available to students at any point in time for review, the student can in turn communicate with the lecturer using online chat and commenting tools.

The classroom component of the lecture now transforms into a computerized learning space in which the lecturer facilitates learning via student centered learning which may involve solving problems, working on projects, flows and deployment of higher order thinking skills.

Analysis of big data which is generated when students participate in online learning facilitates tracking of student progress. For example, if the data indicates that most of the students are reviewing a video lecture many times over may indicate a lack of understanding of a specific topic covered in the video tutorial.

The lecturer can then make suitable interventions by modifying the content so that it can be understood more easily. Learning analytics can also be leveraged to improve students’ performance by monitoring the success of students and providing assistance to learners who may not be able to keep up with the classwork.

Though this can be done privity contributes to the self-esteem of the students as they communicate better with the lecturer or with a selected group of their peers. TEL has become a constructivist model based on the constructivist model in recent times.

The constructivist model involves the delivery of content by the instructor, learners, and course support. TEL allows students to build their knowledge via social networks, and this gains relevance in a world in which learning is continually evolving and new information networks are accessible to both students and lecturers in real time.

Conclusively, there has been a rise in the use of the learning management system SMARTUMS which is continuously evolving and new information networks are accessible to both students and lecturers in real-time.

As a result, the role of moderates is essential in order to ensure that students are familiarized with the use of information technology that is available today.

Exponential increase in the percentage of courses which are delivered via blended learning at UMS with 80 percent Blended Learning in the current academic year. CEL was given an additional impetus with the collaboration of the international intergovernmental organization, The Commonwealth of Learning (COL) which established a working relationship with UMS in 2018 by signing a Memorandum of Agreement (MoA) to provide academic and support staff to provide online learning courses for the benefit of students.

COL has been instrumental in the development and establishment of the UMS Technology Enabled Learning policy which was launched in 2018.

This policy has set the direction for the development of TEL at UMS in times to come. COL has provided training to more than 20 lecturers via a five-day training program with follow up training over a one-year period.

These lecturers are now trainers of trainers who are propagating the culture of TEL at their respective faculties across UMS.

In a joint effort with the Department of Information, Communication & Technology (JTMK), CEL has established a repository for Open Educational Resources (OER) at UMS. OERs developed by the lecturers and students are released under an open licence and are currently available via the OER repository.

Open licensing permits the development, repurposing, and redistribution of online content by licensing the content under a Creative Commons license.

For example, a lecturer can write an article or deposit images at the OER repository. These images are available for free download and reuse, provided that the name of the first author is cited and his contribution is acknowledged by the user.

This form of licensing is gaining traction globally as higher educational institutions, funded by public funds, envision the need for the distribution of their knowledge across learning networks.

This facilitates access to students and researchers from poor and developing countries who do not have access to printed materials and the funds to procure such material.

One of the areas which CEL has championed related to the work of TEL is in promoting research and development in the digital arena. This is in keeping with the spirit of the United Nations Sustainable Development Goals (SDGs), two of which focus on reduced inequalities in education and quality education for all.

UMS Centre for E-Learning has been instrumental in the development of a draft policy on inclusive open educational resources (OERs) in collaboration with United Nations Scientific and Cultural Organization (UNESCO), MIEPTA, MyCEL, and private higher education institutions and non-governmental organizations involved with differently abled people.

This draft policy was developed under the guidance of the Ministry of Education and will have a significant impact on the development of open educational resources for differently abled learners in Malaysia.

The implementation of the policy will contribute to the development of teaching and learning material for all manner of disabilities and conditions ranging from visual, auditory, hearing and physical and combinations of these.

This is in keeping with the Ministry’s commitment to sufficiently abled learners in Malaysia and an extension of a right to a quality policy for special needs students. This will benefit the community of differently abled students, which currently has more than half a million registered citizens with disabilities (OKU).

CEL constantly strives to excel and evolve as a service provider and hub for TEL to testaments to our key stakeholders, which is the student community at UMS.