



COMMONWEALTH *of* LEARNING



UMS
UNIVERSITI MALAYSIA SABAH

Report of the Benchmarking of Technology-Enabled Learning at Universiti Malaysia Sabah



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COMMONWEALTH *of* LEARNING

The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources, and technologies.

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Introduction and Background

Benchmarking as an activity is an important tool to compare and make deliberate progress in any field of human endeavour. For integration of technology for teaching and learning, this is relatively a new field. The Commonwealth of Learning (COL) promotes the use of technology-enabled learning (TEL) for improving access to and quality of education and training in the Commonwealth. The approach has been to support policy development, improve institutional capacities and technological infrastructure to leverage the potentials of TEL. The process follows three-phases systematically – (i) Preparation, (ii) Development and (iii) Maturation. Benchmarking is part of phase three, which indicates that the educational institution has taken steps to incomplete TEL in a systematic manner and is ready to take the next leap to continue the cycle of development. As such, the process of benchmarking is important, where it is expected that the institution as a whole participate, and the activities are validated by external experts to provide guidance and advice. Therefore, it is as much an internal exercise as an external validation activity.

This report presents the findings of the TEL benchmarking carried out at the Universiti Malaysia Sabah during September-December 2020. It provides an overview of the methodology, the validated self-study report and an action plan developed by the UMS team.

Universiti Malaysia Sabah and COL Support

Universiti Malaysia Sabah (UMS) is a public university in Malaysia with three campuses in the State of Sabah: the main campus in Kota Kinabalu, UMS-Labuan International Campus in Labuan, and the Faculty of Sustainable Agriculture in Sandakan. UMS offers 64 undergraduate programmes in science, engineering, medicine, food science, agriculture, forestry, arts, humanities, business, accounting, and economics. In addition, UMS offers postgraduate programmes through its ten faculties, three research institutes, and the five branches of the UMS Centre for External Education throughout the state, which are Kota Kinabalu, Sandakan, Tawau, Keningau and Labuan. UMS has more than 1,000 academics, about 40% of whom hold a PhD or its equivalent. With more than 17,000 undergraduate and postgraduate students enrolled, UMS aims to enhance excellence in teaching and learning and provide holistic student experience.

UMS is committed to education transformation to fulfil the core aspirations outlined in the Malaysia Education Blueprint 2015–2025 (Higher Education) for preparing Malaysia's youth to thrive in a complex and ever-changing future. In 2018, UMS and COL signed an agreement that forms the basis for a systematic approach to institutionalising TEL at UMS. Since then, COL has supported UMS in the following activities:

- a) A baseline study on TEL at UMS¹
- b) Policy for TEL

¹ <http://oasis.col.org/handle/11599/2974>

- c) Capacity building of teachers to develop blended courses
- d) Development of a student guide to learning with technology²
- e) Setting up of the OER repository³
- f) Research on Impact of TEL at UMS⁴
- g) Integration of Commonwealth Digital Education Leadership Training in Action (C-DELTA)
- h) Support on Design and Development of MOOCs
- i) Offer of MOOC on Introduction to Biorisk Management⁵, and
- j) TEL benchmarking (current report).

As such, UMS has taken proactive steps in collaborating with COL and implementing the suggested measures to integrate ICTs in teaching and learning effectively. During the COVID-19 pandemic, these initiatives and preparedness helped the university in offering its programmes to learners with limited disruption. The benchmarking of TEL at UMS was also modified to carryout the activities remotely.

Process and Methods

Once UMS agreed to use COL's *TEL Benchmarking Toolkit*⁶, COL engaged an experienced Consultant to support UMS and validate the self-study report. A brief description of the process followed is given below. It may be noted that in contrast to the advice in the Toolkit to use two experts for the validation process, this report used only one expert engaged by COL. This was due to the travel restrictions during the period and there were no other peer institutions ready to support this process. UMS is the first institution to adopt COL's TEL Benchmarking, though it has been reviewed and agreed by other TEL partners during the development process.

UMS nominated 10 teams to work on the ten domains of the *Toolkit*. There were at least five team members in each team, having in total more than 57 staff members with representation for both men and women (Annex-A).

There activities during the Benchmarking exercise had five distinct stages:

- A. Setting-up processes and documentation: The Consultant discussed and agreed with the staff of Centre for E-Learning regarding the protocols of sharing and copying mails. A Google Drive was created to share the data and reports coming from the 10 domain teams.
- B. Introduce the three-phase benchmarking process to the members of the Benchmarking team through ZOOM meeting facilitated by COL.
- C. Phase 1- Self-review: This was carried out by the team members and their reports with evidence shared via the Google Drive.

² <http://oasis.col.org/handle/11599/3200>

³ <https://oer.ums.edu.my/>

⁴ <http://oasis.col.org/handle/11599/3483>

⁵ <https://www.mooc4dev.org/biorisk>

⁶ <http://oasis.col.org/handle/11599/3217>

- D. Phase 2-Validation of self-review: This was carried out by the Consultant. In the process, several queries were made to provide additional information and the Consultant moderated the scores, where the evidence provided were not sufficiently justifying the scores.
- E. Phase 3: Action Plan Development: A draft action plan was prepared the teams, and the Consultant carried interviews of five nominated key stakeholders (Annex-B) to discuss the Action Plan. This was then edited by the consultant after discussion with the Education Specialist at COL. While the original Action Plan is with UMS, Annex-D presents key actions that are needed to make UMS a strong TEL implementing institution.
- F. The Consultant also presented the findings on a ZOOM session (on December 8, 2020) with the senior management and the key team members of the TEL Benchmarking (Annex-C).



The ten team leaders with the local facilitators, Prof Fong and Dr Kenneth



A ZOOM session in progress.

Validated Self-Study Report

COL's TEL Benchmarking Toolkit has ten domains to ensure that a base level of quality practices is present. Each of the benchmarking domains contains four to six performance indicators (PIs). Inherent within the PIs is the understanding that an institution may score well in one and not in another, but that this information is then used as a stimulus to improve in certain areas. The benchmarking domains are:

1. Policy
2. Strategic Plan
3. IT Support
4. Technology Applications
5. Content Development
6. Documentation
7. Organisational Culture
8. Leadership
9. Human Resource Training
10. Technology-Enabled Learning Champions



Policy

Score: 4.25

Description: *The existence of a TEL policy provides direction for the use of technology in learning and teaching. It can be known by other names, such as an eLearning Policy, but its focus is to integrate technology in teaching and learning.*

UMS has a well-documented TEL policy⁷ developed with the support of COL. The TEL policy is clearly aligned to the vision and mission of the University and identifies the linkages to institutional strategic plan. It says, the TEL Policy will support Key Results Area 1 and 8: enhancing excellence in teaching and learning and enhancing holistic student experience. The Centre for E-Learning continuously engage with the faculty and staff to promote blended learning and the SmartUMS⁸. There is a commitment on the part of institutional leaders to use technology to achieve strategic academic goals.

While the UMS TEL policy is already in operation, it is expected to be officially approved/endorsed by UMS Board of Directors. Additional communication efforts via roadshows, dialogues, town hall sessions, infographics, etc. may be useful to share information about the existence of the policy, especially with newly recruited teachers.

⁷ <https://www.ums.edu.my/pep/en/tel-policy>

⁸ <https://smartv3.ums.edu.my/>

Strategic Plan

Score: 4.75

Description: *The strategic plan ensures the commitment to TEL is implemented in a time-bound manner.*

According to 'Dasar e-Pembelajaran Negara 2.0' universities need to have a strategic plan for TEL. UMS has a strategic plan as Annex to the TEL policy covering six action points as strategic objectives. The Center for Strategic Management and Corporate Communication (PPSKK) advised all faculty which include online courses in the key result area-1(KRA-1). At the faculty level, specific measurable key performance indicators (KPIs) are identified. The Centre for E-Learning brings out reports and statistics on TEL regularly for the use of the Senior Management and faculty members. These include specific numbers for open educational resources (OER) and massive open online courses (MOOCs). Senior management regularly offer discussions and talks to online learning, and this became more prominent during the COVID-19 pandemic. There is also enhanced budgetary support for TEL implementation, including for upgrading the smart classroom spaces and student-centred learning.

IT Support

Score: 4.83

Description: *The IT support department or a similar department is responsible for a centralised or decentralised approach to providing infrastructure support in the institution.*

UMS IT department handles all the ICT services. UMS IT department⁹ is entrusted to guide the university to bring the ICT technology gap closer to supporting teaching and learning, as well as university management in general. There is also ICT policy¹⁰ in the university. The head of the ICT department reports to the Vice Chancellor, and there is also an ICT Committee in the University. The ICT department is agile and has upgraded the Learning Management System (LMS), institutional repository recently, and has also installed mooKIT¹¹ for offering MOOCs.

Technology Applications

Score: 3.5

Description: *Appropriate technologies are deployed for teaching, learning and assessment as per standard academic practices.*

All workers at UMS are eligible to apply for funding under the Bring Your Own Device (BYOD) grant to purchase their device, such as a laptop or desktop. But students are encouraged to carry their own laptop to the lecture / lab for practical subjects (e.g., programming courses, etc.). UMS has number of computing labs¹² for the students. Most of

⁹ <https://jtmk4u.ums.edu.my/>

¹⁰ <https://jtmk4u.ums.edu.my/DICT/html5forpc.html?page=0>

¹¹ <https://www.mookit.in/install>

¹² <http://fki.ums.edu.my/fki/facilities/>

time the students share a computer doing their lab exercise. Due to insufficient computer in the lab students conduct their assignment or search for information beyond the class time. Printers are not available in the class for use by the students/lecturers. Both staff and students can access the application / software for teaching and learning purposes, either through the virtual desktop infrastructure (VDI) or the stand-alone software installed in the lab computers. Lecturers and students can use the SmartUMS¹³, a LMS, where lecturers can upload notes, perform evaluation, and have a discussion / forum with students. Postgraduate student uses "Sistem Maklumat Pelajar" to update their progress report while the supervisor and examiner could give the comments on student progress. Several software¹⁴ for teaching and learning are available at the University. UMS is supported under Malaysia Research and Education Network¹⁵ with 3Gbps bandwidth. Lecturers can use either wired or wireless Internet connection in their room. Student can access to the Internet through the wireless connection around the campus. UMS has adequate measures for data privacy and security in place¹⁶. While the technology applications at UMS is robust, the expectations from the stakeholders are more to have additional software required for teaching and learning.

Content Development

Score: 3.5

Description: *Availability of both infrastructure and human resource support for digital content development is crucial for effective TEL implementation.*

UMS has advanced broadly in providing essential resources to access the digital multimedia contents through:

- comprehensive and well-constructed training engagement via Centre for E-Learning, supported by well-trained coordinator appointed at each faculty.
- subscription to up-to-date local and international database.
- continuous encouragement to accessing the digital content by individual development plan (IDP), IDP points system and UMS's annual performance appraisal report.

The university has knowledgeable and well-trained educators to full-fill the need to organise and design appropriate content in the LMS. COL has also supported several training programmes facilitated by international experts. UMS also follows the "1-7-3-2 formula" for 13 blended learning hours per credit, which includes course synopsis (1), contents (7), activities (3) and assessments (2). All learning content produced are by the lecturers, and therefore issues of copyright are matter of concern for many. However, the UMS has made efforts towards openness and sharing by creating TEL policy and OER repository. There is a need to make understanding of copyrights and OER more pervasive within the university.

¹³ <http://smartv3.ums.edu.my/>

¹⁴ http://bpa.ums.edu.my/images/dokumen/Prospektus/2019/INTRODUCTION_JTMK_BI.pdf

¹⁵ <https://myren.net.my/>

¹⁶ <https://www.ums.edu.my/pendaftar/v3/index.php/en/security-policy>

Documentation

Score: 4.75

Description: *There is adequate documentation in the form of guidelines, handouts, and manuals available (online/offline) for use by the stakeholders.*

UMS has a manual for the LMS that helps educators to support how to navigate the systems and make effective use for teaching and learning.¹⁷ There is also a student guide¹⁸ for teaching and learning with technology. The lessons learned in the implementation of TEL are stored and shared within the organization for others to access and learn through the TEL Practices @UMS¹⁹.

Organisational Culture

Score: 3.75

Description: *The organisational culture supports and fosters innovation, teamwork, learning and sharing to strengthen TEL.*

Academic staff members have demonstrated great enthusiasm and willingness in embracing new technologies and innovations for teaching and learning by actively participating in a myriad of related training programmes as well as webinars. Some academic staff members have been organizing their own knowledge sharing sessions, tutorials, and workshops, apart from those organized by the institution. There is also a conscious effort to support one another, including personal coaching by those who are more well-versed, to help their colleagues to embrace new TEL technologies and methods. The University has been proactively inculcating a culture of knowledge creation and sharing, through a comprehensive range of programmes/activities/training sessions conducted by the related departments/setups. UMS organizes TEL Carnival to promote innovations in TEL and has instituted awards to motivate the staff to embrace a culture of innovation for teaching and learning.

Leadership

Score: 3.5

Description: *Leaders in the organisation are enthusiastic about TEL and support an evidence-based approach to decision making in relation to technology adoption.*

The university top management encourages and promotes the use of TEL by all academic staffs of the faculty to cope with the new norm and demands in education at university level especially in distance learning programmes. They also review the progress and provide direction from time to time by issuing relevant orders. The awards instituted for TEL is a step towards motivating the staff to use technology for teaching and learning. Members of senior management also deliver lectures to the staff from time to time and organises lectures by external experts. The university need to create a system to orient

¹⁷ https://oer.ums.edu.my/handle/oer_source_files/1178

¹⁸ https://oer.ums.edu.my/handle/oer_source_files/1145

¹⁹ <https://telcop.ums.edu.my/>

newly appointed members of senior management to be aware of the existing provisions of TEL at the university.

Human Resource Training

Score: 2.67

Description: *Human resources are treated as key in delivering quality teaching and learning using technology. Staff training to strengthen the adoption of TEL is a regular feature in the institution's professional development programmes.*

This domain received lowest score in the benchmarking. This is because, the expectations of the teachers and the members of the TEL benchmarking team is more in terms of training of teachers on technology for teaching and learning. While several international experts provided training in the past with the support of COL, UMS needs to institutionalise a training plan with qualified staff for this purpose. Training programmes whenever organised are intimated through email. The Centre for eLearning has only two staff members who are qualified to organise and offer training programmes. There is no specific staff development unit for TEL, and the Centre for eLearning is responsible for training on this area. While the ICT staff members response to IT related calls from the academic staffs of the university quite satisfactorily, they are not necessarily aware of the pedagogic part of the usefulness of the tools. It has been reported that teachers face problems from time to time due to lack of skills in using technologies.

TEL Champions

Score: 3.0

Description: *The existence of a group of teachers to champion TEL initiatives helps create a supportive environment for the adoption and scaling up of different technologies.*

There are several early adopters of TEL at UMS who apply and embrace the use of technology in their teaching and learning. The university's TEL Community of Practice has staff from 16 departments (Faculty/ Institute/ Centre). In 2019/20, 79% of courses used blended learning in the university. The Centre for eLearning is responsible to oversees and conduct training for academicians concerning online learning and implement the TEL policy. The centre takes leadership in all activities related to TEL. For example, the offer of a MOOC on "Introduction to Biorisk Management" during the COVID-19 pandemic is an example of such leadership. The support from the university for TEL Champions come from the recognition and awards instituted for this purpose.

Key observations on the Benchmarking of TEL at UMS

The key areas at UMS to celebrate are:

- Strong IT support
- Variety in documentation using manuals, infographics, etc.
- Existence of strategic plan for TEL demonstrating commitment to TEL implementation in a time-bound manner

- Availability of TEL policy

The key growth areas at UMS are:

- Human resource training needs to be further institutionalised with dedicated staff for conducting training on advanced areas on a regular basis.
- TEL Champions have been playing key roles in promoting TEL at UMS. The TEL community of practice has the potential to create a vibrant community that could support itself with limited intervention.
- Leadership is a continuum, especially due to changes in the organisation from time to time. While the members of senior management are supportive, there is opportunities here to involve new members proactively to have their support for evidence-based decision making.

Action Plan and Recommendations

The overall score of 3.85 in a scale of 5 shows that TEL at UMS is now growing towards robustness. TEL baseline study²⁰ at UMS carried out in 2018 indicated its stage as “Developing preparedness”, which means “The institution has put in place some of the aspects of a Technology-Enabled Learning system, policies and infrastructure, and is in the process of developing a robust system”. In about three years time, UMS has demonstrated systematic implementation of TEL and has enhanced the quality of teaching and learning environment by integrating ICTs in teaching and learning. The growth of blended courses at the university is also a testimony of this. However, the TEL benchmarking team at UMS has several recommendations in the action plan prepared to make further progress in this direction. There is also a buy-in to these from the senior management. In this section, we are reporting only some of the key recommendations of the Action Plan (Annex-D).

Some key recommendations for the consideration of the UMS are:

- UMS TEL policy is to be officially approved/endorsed by UMS Board of Directors.
- Review academic staff appraisal policy at UMS to strengthen technology-enabled learning.
- Continue the strategic planning process for TEL and seek/allocate additional funding for the same.
- Increase investment on IT support, especially for the networking of satellite campuses.
- Provide access to new software for teaching and learning on demand and consider using cloud-based services.
- Create awareness about OER and develop a guide to copyright and open licensing of content at UMS.

²⁰ <http://oasis.col.org/handle/11599/2974> The score of 123 in the report when converted into a five-point scale is 3.32. Thus, the change over the time is obvious.

- Create more guides for teaching and learning to be available on UMS website. These could be in the areas of teaching and learning, including use of specific software as well as new concepts.
- Consider engaging regular and qualified staff developers in TEL to enhance the current activities of the Centre for E-Learning and develop a calendar of training programmes to support teachers.
- Circulate information about free courses on teaching and learning through the UMS's TEL Community of Practice.

Annex-A: The Ten UMS Benchmarking Teams

Domain	List of Participants	Position	Faculty/Center/Institute	Gender
Policy	1. Prof. Dr. Lay Yoon Fah (Moderator)	Lecturer	Faculty of Psychology and Education	Male
	2. Ms Yenny Fadzlyena Ahmad Shah	Head	Legal Advisor Office	Female
	3. Assoc. Prof. Dr. Mohd Rahimie Karim	Director	Centre for Strategic Management & Corporate Communication	Male
	4. Prof. Dr. Coswald Stephen Sipaut @ Mohd Nasri	Assistant Vice Chancellor	Centre for Industry and Community Network	Male
	5. Prof. Dr. Vincent Pang Ah Fook	Director	Centre for Teaching Excellence & Academic Quality	Male
Strategic Plan	1. Dr. Adilah Md. Ramli (Moderator)	E-Learning Coordinator	Faculty of Food Science & Nutrition	Female
	2. Mdm Muhajirah Muchlish	Deputy Treasurer	Bursar	Female
	3. Dr. Grace Phang Ing	Deputy Director	Centre for Strategic Management & Corporate Communication	Female
	4. Dr. Rahmawati Pare	Deputy Director	Centre for Teaching Excellence & Academic Quality	Female
	5. Assoc. Prof. Dr. Lee Hock Ann	Deputy Director	Labuan Faculty of International Finance	Male
	6. Assoc. Dr. Kenneth Francis Rodrigues	Deputy Director	Centre for E-Learning	Male
IT Support	1. Mr. Awang Lamsari Saupi (Moderator)	Senior Assistant IT Officer	Department of Information Technology & Communication	Male
	2. Assoc. Prof. Dr. Ag Asri Ag Ibrahim	Chief Information Officer	Department of Information Technology & Communication	Male
	3. Mdm Norhanas Lamit	IT Officer	Department of Information Technology & Communication	Female
	4. Mdm Salfarah Abdullah	Senior IT Officer	Department of Information Technology & Communication	Female
	5. Mr. Mohd Zulfadlee Bin Abdul Nasyir	Assistant IT Officer	Centre for E-Learning	Male
	6. Ms Kamisah Hussin	Deputy Senior Registrar	Department of Student Affairs	Female
	7. Assoc. Dr. Kenneth Francis Rodrigues	Deputy Director	Centre for E-Learning	Male
Technology Applications	1. Mdm Melissa Sharmah Gilbert (Moderator)	E-Learning Coordinator	Faculty of Science & Natural Resources	Female
	2. Assoc. Prof. Dr. Edmund Ng Giap Weng	MOOC & OER Coordinator	Faculty of Computing & Informatics	Male
	3. Mr. Chong Tze Chien	Senior IT Officer	Department of Information Technology & Communication	Male
	4. Dr. Rozaimi Zakaria	Deputy Dean	Faculty of Science & Natural Resources	Male
	5. Dr. Leau Yu Beng	Head of Program	Faculty of Computing & Informatics	Male
Content Development	1. Dr. Sitty Nur Syafa Bakri (Moderator)	Lecturer	Centre for the Promotion of Knowledge & Language Learning	Female

	2. Mdm Eugenia Ida Edward	E-Learning Coordinator	Centre for the Promotion of Knowledge & Language Learning	Female
	3. Tn. Hj. Zawawi Tiyunin	Chief Librarian	Library	Male
	4. Mr. Baharin Entoh	Senior Librarian	Library	Male
	5. Dr. Junainah Jaidi	Deputy Director	Centre for Teaching Excellence & Academic Quality	Female
Documentation	1. Dr. Mie Mie Sein (Moderator)	E-Learning Coordinator	Faculty of Medicine & Health Sciences	Female
	2. Mr. Hafizi Ahsan	E-Learning Coordinator	Labuan Faculty of International Finance	Male
	3. Mdm Salmie Jemon	Blended Learning Coordinator	Faculty of Humanities, Arts and Heritage	Female
	4. Mr. Suprianto Mohd Noor	Senior IT Officer	Department of Information Technology & Communication	Male
	5. Mdm Elizabeth Malanjun	Senior Registrar Officer	Centre for E-Learning	Female
Organisational Culture	1. Dr. Ng Shean Yeaw (Moderator)	E-Learning Coordinator	Institute for Tropical Biology and Conservation	Male
	2. Mr. Masri Judah	Deputy Senior Registrar	Registrar's Office	Male
	3. Prof. Dr. Henry Bernard	Deputy Director	Institute for Tropical Biology and Conservation	Male
	4. Prof. Madya Dr. Lai Yew Meng	Dean	Centre for the Promotion of Knowledge & Language	Male
	5. Dr. Wilson Yong Thau Lim	E-Learning Coordinator	Biotechnology Research Institute	Male
Leadership	1. Mr. Aminuddin Ibrahim Lastar (Moderator)	E-Learning Coordinator	Faculty of Psychology & Education	Male
	2. Assoc. Prof. Dr. Rachel Fran Mansa	Lecturer	Faculty of Engineering	Female
	3. Ms Nortin Mr.in	Deputy Senior Registrar	Registrar's Office	Female
	4. Ms Kamisah Hussin	Deputy Senior Registrar	Department of Student Affairs	Female
	5. Mdm Noor Hapipah Samat	Deputy Senior Chief IT Officer	Library	Female
	6. Dr. Junainah Jaidi	Deputy Director	Centre for Teaching Excellence & Academic Quality	Female
	7. Prof. Dr. Fong Soon Fook	Director	Centre for E-Learning	Male
Human Resource Training	1. Dr. Md Sayed Uddin (Moderator)	Lecturer	Faculty of Humanities, Arts and Heritage	Male
	2. Prof. Dr. Jennifer Chan Kim Lian	Director	Centre for Borneo Tourism Research	Female
	3. Mr. Mohd Aiddy Suffian Abd Rashid	Registrar Officer	Registrar's Office	Male
	4. Assoc. Prof. Dr. Mohd Zaki Ishak	Lecturer	Faculty of Psychology & Education	Male
	5. Prof. Dr. Fong Soon Fook	Director	Centre for E-Learning	Male
Technology-enabled	1. Dr. Intan Soliha Ibrahim (Moderator)	Radio FM Coordinator	Faculty of Humanities, Arts and Heritage	Female

learning (TEL) Champions	2. Mdm Haslinda Hassan	Lecturer	Faculty of Business, Economics & Accountancy	Female
	3. Ms Norazzaleza Bertly	Assistant IT Officer	Centre for E-Learning	Female
	4. Dr. Assis Kamu	Lecturer	Faculty of Science & Natural Resources	Male
	5. Dr. Nor Elliza Tajidin	E-Learning Coordinator	Faculty of Sustainable Agriculture	Female
	6. Dr. Rahmawati Pare	Deputy Director	Centre for Teaching Excellence & Academic Quality	Female

Annex-B: Interviews conducted by the Consultant

Date	Name	Position
17th November 2020	Professor Dr. Rasid Mail	Deputy Vice Chancellor, Academic and International.
17th November 2020	Associate Professor Dr. Lai Yew Meng	Dean of the Center for the Promotion of Knowledge and Language Learning
18th November 2020	Professor Dr. Vincent Pang Ah Fook	Former Director of the Center for Teaching Quality and Academic Excellence. The founding director of the Center and the most senior staff at UMS.
18th November 2020	Associate Professor Dr. Mohd Rahimie Abdul Karim.	Director of Centre for Strategic Management & Corporate Communication
19th November 2020	Associate Professor Dr. Ag Asri Ag Ibrahim	Director, Department of Information Technology and Communication.

Annex-C: Participants in the ZOOM meeting on December 8, 2020

1. Professor Datuk Chm. Dr Taufiq Yap Yun Hin – Vice-Chancellor
2. Professor Dr Hj. Rasid Mail
3. Assoc. Professor Ts. Dr Ramzah Dambul – Deputy Vice-Chancellor (Research & Innovation)
4. Assoc. Professor Dr. Raman Noordin – Deputy Vice-Chancellor (Student Affairs & Alumni)
5. Mr. Luqman Ridha Anwar – Registrar
6. Mdm. Zallifah Shadan – Bursar
7. Mr. Zawawi Tiyunin – Chief Librarian
8. Mr. Awang Suhaizam Bungso – Legal Advisor
9. Professor Dr. Jualang @Azlan Abdullah bin Gansau – Director, UMS Labuan International Campus
10. Professor Dr. Coswald Stephen Sipaut – Assistant Vice-Chancellor (Industry & Community Network)
11. Assoc. Professor Dr Ag. Asri Ag Ibrahim – Chief Information Officer
12. Assoc. Professor Dr. Mohd. Rahimie Abdul Karim – Director, Centre for Strategic Management and Corporate Communication

With the ten team leaders:

1. Professor Dr. Lay Yoon Fah
2. Pn. Melissa Sharmah Bte Gilbert@ Jesuet
3. En. Aminuddin Bin Ibrahim Lastar
4. Dr. Sitty Nur Syafa Binti Bakri
5. En. Awang Lamsari Bin Saupi
6. Dr. Adilah Binti Md. Ramli
7. Dr. Mie Mie Sein
8. Dr. Intan Soliha Ibrahim
9. Dr. Md Sayed Uddin
10. Dr. Ng Shean Yeaw.

Other Participants

1. Professor Dr. Fong Soon Fook, Director, Centre for E-Learning
2. Associate Professor Dr. Kenneth Francis Rodrigues, Deputy Director, Centre for E-Learning
3. Dr. Philip Uys, Consultant
4. Dr. Sanjaya Mishra, Education Specialist, eLearning, COL

Annex-D: Action Plan (Revised)

Important:

- 1) *These are some of the key actions identified by the UMS staff.*
- 2) *All figures estimated by the UMS Faculty and are not reviewed/verified.*

	From When (month and year)	By when (month and year)	By who	With what resources (technical and monetary)	Indicators of success (quantify where possible)
Policy					
UMS TEL policy is to be officially approved/endorsed by UMS Board of Directors	Jan 2021	March 2021	UMS Board of Directors	0	Policy Endorsed
UMS TEL policy is to be well-communicated across UMS academic staff via roadshows, dialogues, town hall sessions, infographics, etc.	Jan 2021	July 2021	Centre for E-Learning	0	Policy Distributed Across all Faculties, Department, Institutes and Units.
Review academic staff appraisal policy at UMS to strengthen technology-enabled learning	Jan 2021	Dec 2021			Amended staff appraisal policy at UMS strengthens technology-enabled learning
Strategic Plan					
Seek additional Government funding needs to deal with effective digital learning e.g., to fund actions proposed in this Action Plan	2021	2023	Centre of E-Learning	UMS may secure funding for digital learning under Belanjawan Pendidikan 2021	The fund would support different department budget on TEL such as Centre of E-Learning, PKPKA and JTMK
* UMS strategic plan to suit the 'Dasar e-Pembelajaran Negara 2.0' for 2021-2025 plan on E-Learning (digital learning) to get funding from government (i.e., state or under ministry of higher education)					
Promote the Strategic Plan for implementation of the Policy (this benchmark/domain should be about the development and formulation of strategies, not just the smart classrooms	2021	2023	Centre of E-Learning, PKPKA and JTMK	Implementation by various departments	Faculty level: KPI strategic plan for eLearning (Blended learning), Unit or department: KRA1 strategic plan (MOOC and OER)
IT Support					
Provide an ICT infrastructure which accommodates all information flow and provide Internet access to all students. The focus should be on 100% access including provision of equipment for access (for lecturers and support staff)	2021	2021	Department of Information Technology & Communication	Estimated RM 5 – 10 Million	Fully integrated LMS platforms across the university.

Note: infrastructure complete by April 2021 and bandwidth by end of 2020 tot 11gbps; government will provide 10 more GBPS for 2021	2021	2022	Department of Information Technology & Communication		Remote students (e.g., in the Interior) have equitable access and connectivity
Develop strategies specifically for remote students (e.g., in the Interior) for access and connectivity e.g., using pre-loaded mini-servers; SIM cards for students; community centres access	2022	2022	Department of Information Technology & Communication	Estimated RM 1 Million	Energy compliant system with reduction in a load factor of 20%
Strengthen the service through advanced and green technology.	2023	2023	Department of Information Technology & Communication	Estimated RM 0.6 Million	Upgrade to the latest version of LMS
Learning Management System (LMS) upgraded and a more user-friendly theme to be considered, and more complementary and user-friendly technologies (continue to bring user experience (UX) analysis into all the systems)	2021	2022	Department of Information Technology & Communication	Estimated RM 0.778 Million	Implement to Academic Staff and Support Staff
Implement BYOD within the minimum requirements of UMS	2021	2023	Management of USM	0	Speed and access to Internet highways have increased to allow for ubiquitous digital learning
Advocate for increased speed and access to Internet highways for the University at national level.	2022	2022	Department of Information Technology & Communication	Estimated RM 15 Million	Increased satisfaction in convenient online access from student / kukuro/TAMS.
Increase availability of, and access to internet connection across all campuses and residential colleges	2021	2021	Department of Information Technology & Communication	Estimated RM 15 Million	All infrastructure updated to current / projected industry standards.
Technology Applications					
Provide all students with relevant software for teaching and learning integrated in the LMS, including collaborative software.	2021	2021	Department of Information Technology & Communication Specific software based on course requirement are needed. Some needs more	Estimated RM 5 Million in licensing fees.	Systems installed and operational.

						sophisticated software more than others.			
Academic staff (100%) provided with laptop and teaching aids using appropriate schemes (e.g., loan for privately owned?). Can give loan, but rather privately owned?	2022	2022	2022	2022	2022	Bursars Office	(500 staff X RM 3000) Estimated RM 15 Million	All staff provided with a device. Currently approximately 50%.	
Continue to provide students who cannot afford a smart device with such contemporary devices for learning.	2022	2022	2023	2023	2023	Student Affairs; Department of Information Technology & Communication	(3000 students in the B40 category X RM 2000) = Estimated RM 6 Million	All students have an appropriate and contemporary device for learning	
Provide appropriate user-friendly content development software in consultation with key role players especially academics	Jan 2021	Dec 2022						Academics have user-friendly content development software	
Content Development									
Provide access to more digital assets for content development for digital delivery including open education resources (OER) and more comprehensive subscriptions to databases	2021	2021	2021	2021	2021	UMS Library	Total budget approximately RM 5million (RM 300,000 for per enterprise licenses for stock libraries).	All lecturers have access to stock libraries.	
Develop a guide to copyright and open licensing of content at UMS	2021	2021	2021	2021	2021	UMS library, Department of Information Technology & Communication, Centre for E-Learning, Centre for Teaching Excellence & Academic Quality, Legal and Integrity Division UMS, FPI (under observation of TNCA)	0	Policy endorsed by senate.	
Increase use by lecturers of the online platform, and generally in using TEL	2023	2023	2023	2023	2023	Centre for E-Learning	0	100% of the academic staff utilise the official LMS	

Develop capacity at UMS for augmented reality, virtual reality, simulation to address practical subjects (consider OERS)	2022	2023	Centre for E-Learning and Department of Information Technology & Communication	Estimated RM 1.5 million for hardware, software and infrastructure for augmented reality, virtual reality, and simulation to address practical subjects.	100% of the practical courses utilise the licences/devices/simulation
Documentation					
Create more "Libguides" / "how to" type guides for both learners and teachers	Jan 2021	Dec 2023			"Libguides" cover all aspects of digital learning
Organisational culture					
Improve interest of academic staff on innovation in teaching and learning through motivational strategies and external quality assurance measures.	Jan 2021	Dec 2023	University wide implementation with Centre for eLearning	Monetary support to organise more attractive events or competitions	Increased number of participants
Integrate Innovation in teaching and learning as one of the Key Performance Indicators (KPI) for academic staff.	Jan 2021	Dec 2023	TNC Academic and International	Training and Support Centre to resolve problems related to teaching and learning	At least one innovation approach in teaching and learning annually
Leadership					
Encourage newly appointed top management (senior leaders) to support and reinforce the implementation of TEL.	Jan 2021	Dec 2023	TNC Academic and International Registrar – Human Resource Development	Training and Support Centre to give TEL onboarding course to the newly appointed top management	100% of senior leaders, management & new appointed to impose TEL in their T&L.

Academic leaders to ensure that preparation time for TEL courses is included in the academic staff workload, so that academicians have time to adapt to, and adopt technology in their courses	Jan 2021	Dec 2023	TNC Academic and International	UMS system will notify unfulfilled requirement for UMS Table 4 to academic staff. LMS must allow academic staff access to their courses a week earlier.	100% table 4 upload onto LMS (Smartv3) a day before the start of each semester.
Strengthen the current recognition/award system (e.g., TELC and AKIPP in UMS, representatives to national and international competitions). Include in staff appraisal (e.g. participation contributes 2 points, winning at UMS level 5 points and winning at National/International 10 points), for yearly performance appraisal and promotion exercises. Create opportunities for the Award winners to mentor fellow teachers.	Jan 2021	Dec 2023	TNC Academic and International. Registrar – Human Resource Department	Rubric for appraisal and promotion. Monetary support for award ceremonies, honorariums to the winners and national/international event financing.	2-5 pax per faculty win awards at ums level. 5 - 10 pax - win at national events* 1 – 3 pax win at international events* 2-5 TEL winners Mentees win at UMS level *Note = Increment in 20% of existing achievement per year for national and higher level.
Human Resource Training					
Increase the regular training programs by qualified staff for teachers on Successful Teaching and Assessments using digital learning.	Jan 2021	Dec 2023	Centre for E-Learning	Cost of Content Development staff (5); Estimated RM 150,000 per year Refer Above	Five (5) content developers appointed.
Undertake training needs assessment for effective online teaching and organise regular training	Jan 2021	Dec 2023	Centre for E-Learning	Refer above	Refer Above
Increase the number of TEL support staff	Jan 2021	Dec 2023	Centre for E-Learning	Refer above	Refer above
Review the structure and functions, and possible amalgamation of some functions, of the Center for Teaching Quality and Academic Excellence and the Centre for E-Learning (as there is strong alignment and some overlapping of the work) to help teaching staff develop content for TEL delivery	Jan 2021	Dec 2023	Management of UMS with Centre for E-Learning and Center for Teaching Quality and	0	Completion of review Establishment of Unit for Instructional Design

Consider the fully online course "Design, Develop and Deliver Blended Courses in Moodle" of COL (developing and learning design and fully workable Moodle course) to be conducted widely across UMS. University authority should encourage faculty to complete COL supported MOOCs on TEL and Blended Learning Practice.	Jan 2021	Dec 2023	Academic Excellence Centre for E-Learning	No cost if done with COL support	Completion of COL's course "Design, Develop and Deliver Blended Courses in Moodle" and COL supported MOOCs on TEL and Blended Learning Practice
Conclude the creation of Quality Control dept which is underway to also enhance the quality of teaching and the operation of departments impacting on TEL	Jan 2021	Dec 2023	Management of UMS	As budgeted	Quality Control dept in full operation
TEL Champions					
Enhance the digital technology skills of our academicians through professional learning opportunities at all stage to equip them with the skills to utilise the digital technology effectively.	Jan 2021	Dec 2023	Centre for E-Learning	0	All staff (100%) to be provided with a minimum of six hours (6) of training per semester.
Increase the number of Academic TEL champions– each faculty identify the champions based on interest and commitment (regardless of age)	Jan 2021	Dec 2023			Each faculty has a growing number of Academic TEL champions



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