Education Technology Roadmap – Summary Briefing

Overview

Technology in education has a principle role in enriching our students' tertiary experience. For our students, Education Technology extends opportunities to create; connect theory to practice; and communicate efficiently with peers, mentors and educators. For our educators, Education Technology enables novel approaches to efficiently assess competencies, relate theory to practice, collaborate effectively with peers and students and conduct evidence based assessment for continual improvement of both student learning, and teaching approach.

The Education Technology Roadmap:

- Establishes key priority projects to be led by the OVPLT in partnership with eSolutions and in collaboration with all stakeholders,
- Provides broad objectives over a three-year period; setting expectations of capabilities and timelines for students, academics, course designers and administrators,
- Transparently prioritizes competing initiatives based on impact, risk, and alignment with institutional strategy,
- Operates concurrently with other projects led by the University in both the physical and virtual space.

While our predominant effort should be in developing, maintaining and enhancing solutions that have the broadest impact for our students and educators, there is a simultaneous need to support the introduction of innovative, bespoke pilot programs. Additionally, the roadmap must provide a transparent approach for pilot programs to be transformed to enterprise solutions.

Philosophy

Development of the Technology Roadmap has been undertaken with the following key principles,

- A focus on a relatively few, large, highly adaptable initiatives with wide impact across faculties and broad support institutionally,
- A focus on the expectations of students and academics in 3-5 years time,
- A focus on ensuring appropriate resources for development, enhancement and maintenance of existing technology solutions,
- A focus on National and International technology solutions, leading to projects that are aligned with institutional strategy, grounded in good pedagogical practice, and visionary,
- Alignment with Focus Monash and the Better Teaching Better Learning Agenda,
- The provision of mechanisms for continued support of bespoke technology solutions that are Faculty, course and/or study area specific,
- The provision of clearly outlined projects that provide the clarity of intent, approach, and supportive evidence for all stakeholders.

Proposed Projects

A number of projects have been identified for future development. These projects align with sector wide projections[1] at a National and International level. Projects have been assessed for institutional alignment; while faculty input continues to inform ongoing project selection and prioritization.

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[1] http://www.nmc.org/publication/nmc-horizon-report-2015-higher-education-edition/

Proposed Projects – Précis

Virtual Desktop Environment (Bring Your Own Device)

A University-wide approach that offers access to specialized software direct to our students' personal devices. The Virtual Desktop solution will provide a consistent environment and availability of key software for a wide variety of makes and models of student computers. A student's computer will act as a portal to the virtual desktop environment. This allows an extensive range of computing equipment to interface with the virtual desktop environment, from smart phones to tablets to laptops.

Learning Analytics

Our students' interaction with their learning provides a wealth of information that, employed appropriately, can inform students and academics of student engagement and success in their studies, supporting timely intervention and personalized learning.

Evidence based evaluation of student engagement with learning and corresponding academic success leads to a series of typical cases, and enables the creation and availability of user-friendly forecasting tools for our academics.

eAssessment

Summative assessment continues to rely heavily on traditional, paper-based assessments across many faculties. These assessment modes typically reduce the scope of graduate skills that may be assessed for, and do not reflect the environment that many of our graduates will be working within. eAssessment approaches allow academics to rely upon students have access to computers operating in a controlled, invigilated environment, with a selection of pre-approved software and appropriate restriction to internet resources.

AV Creative Facilities

Monash University has progressively created recording studios for the generation of Audio-Video content. A micro-studio was installed on the Caulfield campus in 2015, and two more are currently under construction. Further construction of micro-studios will support quality learning object creation. In addition, the OVPLT is investigating the design and distribution of nano-studios; allowing users to create high-quality videos from their portable computing device.

Remotely Connected Learning

A number of platforms exist enabling remote telecommunication between students and experts. These platforms have a variety of features, but there are a range of features that can still be implemented, designed specifically to enhance the learning experience. The evaluation of existing platforms and vendors against existing feature sets and preferred feature sets allows for institution-wide understanding of capability and future opportunities.

Enhanced Live Audience Feedback

Live student interaction with peers and experts is key to active learning. Digital systems that enhance interaction is mature technology. The evaluation of existing platforms leading to the university-wide adoption of a digital solution will present a step-change for live class interaction.
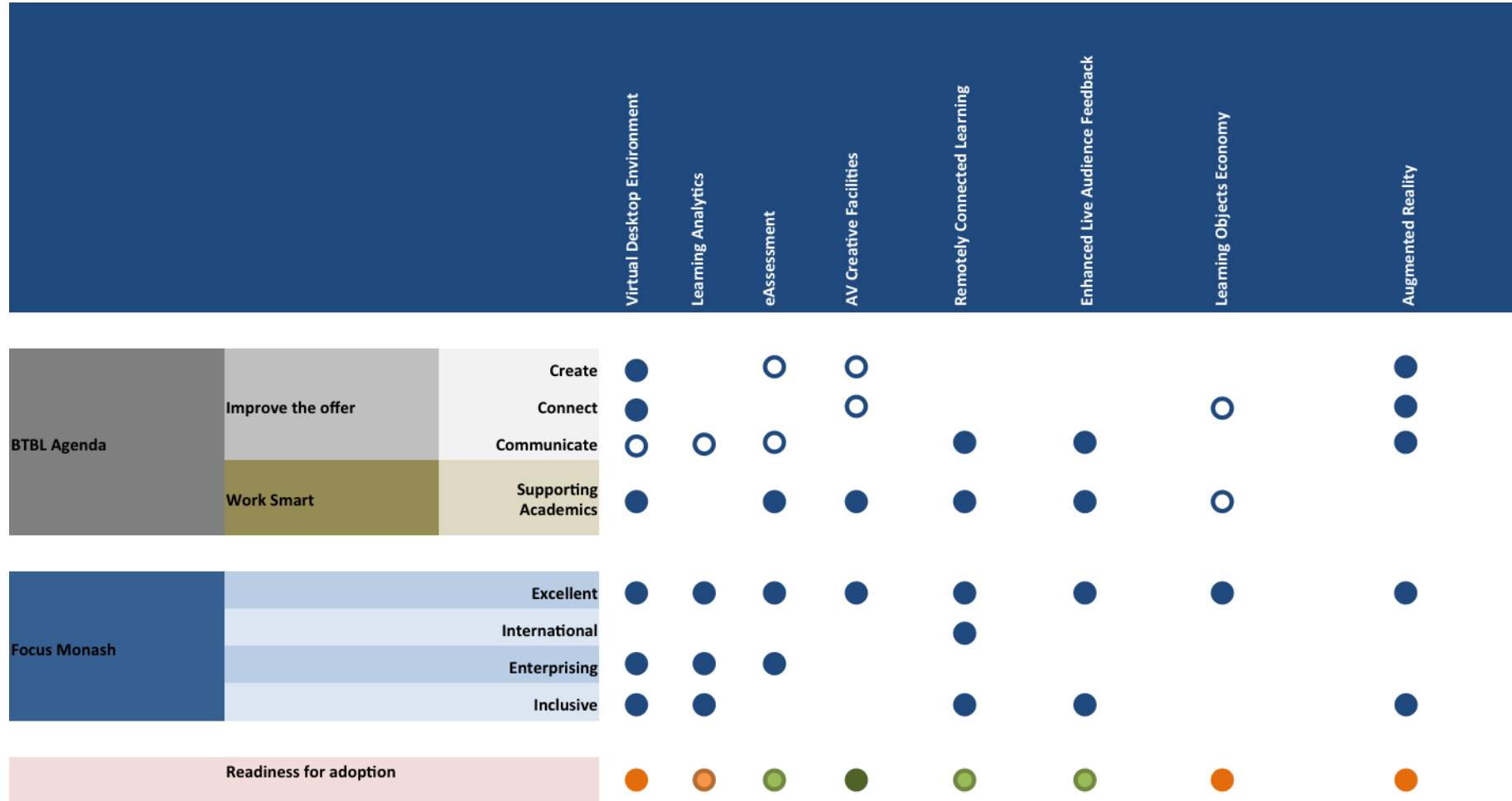
Video Management System/Learning Objects Economy

Shared quality modules of learning materials allow academics to move from learning material generation to learning material curation. Curated learning modules allow academics to search, select, add to, and augment a database of pre-existing materials.

Augmented Reality

Augmented reality provides an opportunity to elegantly combine theory and practice in a way that enhances self-motivated exploration. Typically employing mobile computing platforms, the AR system invites users to interact with the environment around them, overlaying key information from a remote database.

Summarized Benefits Analysis

			Virtual Desktop Environment	Learning Analytics	eAssessment	AV Creative Facilities	Remotely Connected Learning	Enhanced Live Audience Feedback	Learning Objects Economy	Augmented Reality
BTBL Agenda	Improve the offer	Create	●		○	○				●
		Connect	●			○			○	●
		Communicate	○	○	○		●	●		●
	Work Smart	Supporting Academics	●		●	●	●	●	○	
Focus Monash		Excellent	●	●	●	●	●	●	●	●
		International					●			
		Enterprising	●	●	●					
		Inclusive	●	●			●	●		●
	Readiness for adoption		●	●	●	●	●	●	●	●

● Direct benefit

○ Indirect benefit

Colour coding for "readiness for adoption" indicates initial assessment. Dark green: immediately ready/maintenance of existing project; Light green: new project – infrastructure ready; light amber: new project – infrastructure available in medium term; dark amber: new project – infrastructure available in mid to long term.