



University of
South Australia

Discussion paper: Developing UniSA's Digital Learning Strategy

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Introduction

This document has been prepared to inform the development of UniSA's Digital Learning Strategy. It proposes an ambitious plan to reconfigure our educational practice to ensure UniSA not only remains competitive in a deregulated market but establishes for the University a quality education that fully embraces what it means to be a lifelong learner in the 21st Century. In so doing, the document proposes the implementation of a Digital Learning Strategy that emphasises the critical importance of design, quality and innovation in curriculum to reposition the learner at the forefront of our education practice.

The Australian Government's proposed radical reforms to higher education aim to raise the level of education and research quality. The underpinning concept is that a deregulated market will increase competition to deliver higher quality education, and deliver associated economic and social outcomes. The provision of federal teaching subsidies to private education providers further fuels the domestic and international competition. For Australian universities the message is very clear - we must ensure quality programs and practices to attract students in a sustainable, competitive, adaptable and resilient model in the face of a global education market. In this context, the considered integration of technologies can provide costs savings alongside dramatic improvements in the quality of learning. However, this requires substantial institutional change, both in terms of new educational pathways and new models for teaching and learning that that can realise the potential opportunities inherent in a technology-driven economy.

Online learning has been described as a possible "disruptive innovation" for higher education¹². Disruptive innovations provide simple, affordable and accessible products, processes or systems to replace the more complex, expensive and inefficient. The first versions of these innovations are often perceived as cumbersome and of poor quality. However, subsequent versions rapidly improve and as such acquire a greater share of the available market. The growth of online and blended learning courses internationally illustrates the disruptive potential of digital learning. Furthermore, considered investment in digital learning can serve to strengthen an institution's competitive advantage. However, to date as a sector we have progressed little in terms of realising the full potential these technologies can bring to the education space. We are now at a tipping point where opportunity meets our technical capability. Now is the time to challenge our institutional practices and collectively embrace pedagogical models that actively engage our learners in their education. To adopt scalable and sustainable practice that better leverage the affordances technologies can provide to deliver a flexible and personalised learning experience.

UniSA is well positioned to seize upon the affordances digital technologies can provide. The University has a strong track record of engaging with new technologies and moving pedagogy into the online learning and teaching space. For instance UniSA has the largest external Nursing program in Australia and all our courses have an online presence. The University has made, and continues to make, a significant investment in the roll out of a rich learning technologies ecosystem integrated around the Moodle learning management system. While the pedagogical and technical foundations are well established, there is work to do to ensure that the tools available are optimally adopted into courses and programs and that our students are active participants in a quality learning experience.

¹ Christensen, C.M., Horn, M.B., Caldera, L., & Soares, L. (2011). *Disrupting College: How Disruptive Innovation Can Deliver Quality and Affordability to Postsecondary Education*. Innosight Institute and Center for American Progress. Retrieved from: http://cdn.americanprogress.org/wp-content/uploads/issues/2011/02/pdf/disrupting_college.pdf

² Ernst & Young (2012). *University of the future: A thousand year old industry on the cusp of profound change*. Retrieved from: [http://www.ey.com/Publication/vwLUAssets/University_of_the_future/\\$FILE/University_of_the_future_2012.pdf](http://www.ey.com/Publication/vwLUAssets/University_of_the_future/$FILE/University_of_the_future_2012.pdf)



The Digital Learning Strategy will need to cover the enterprise-wide implementation of online and blended learning at UniSA, within a revised framework for learning and teaching in the digital age. The document outlines proposed themes and targets for each of the teaching and learning actions stated within *Crossing the Horizon* (CTH). In the process, the necessary pedagogical reforms that scaffold an exceptional learning environment are articulated. Importantly, there is an emphasis on developing a culture of collaboration, collective engagement and innovation to support broad-scale pedagogical transition from the dominant lecture-driven format to a model that is student facing, engaging, enriched, and draws on contemporary learning theory and practice.

In order to achieve this, UniSA's Digital Learning Strategy will need to:

- increase the appeal of studying at UniSA for domestic and international students through improving teaching quality, and flexibility of study time, mode and place
- recognise the importance of life-long learning by providing opportunities and pathways for students to “dip in and out” of study
- increase student retention through personalised and adaptive learning
- increase the value of UniSA graduates to potential employers through strong workplace integrations and industry engagement.

The Digital Learning Strategy will need to be supported by the:

- Curriculum Innovation Process – initiated by the Provost and Chief Academic Officer the CIP responds to the challenges laid out in CTH by establishing a holistic perspective and review of UniSA curriculum offerings to better support and develop teaching quality and ensure alignment with the University's research strengths and the future workforce needs.
- Teaching Enhancement – the draft standards and criteria for the introduction of the teaching-academic roles at UniSA are in development.

The Strategy will also need to consider the recommendations made in:

- Review of the Personal Learning Environment
- Online Education Scoping Study
- VC OUA Taskforce report.

The following discussion does not cover the issues surrounding the technical infrastructure. Although ongoing investment in UniSA technologies is required, it is suggested that the articulation of these goals and requirements would flow through the Information Strategy and Technology Services enterprise support plan. Furthermore, this discussion paper does not propose particular actions, key performance indicators or outline the resourcing required for the Strategy.

Drivers for digital learning

The pervasive growth of technology and social networks have accelerated and defined our access to information and knowledge. This has presented new opportunities for higher education to adopt alternate models for teaching and learning that reflect and embrace personalisation, flexibility, internationalisation and engagement with industry. The adoption and promotion of “digital learning” captures the concept of **engaged and connected learners**; learners that are actively engaged in studies regardless of time and place, connected to staff, peers, community and industry in formal and informal networks that transcend local and national boundaries.



There are obvious drivers and pressures for universities to embrace digital learning (“digital learning” encompasses online and blended modes of teaching for formal and informal learning contexts). These are driven by changes in the contemporary student characteristics and developments in technology and the economic landscape including:

- increase in student access to information and technologies
- increasing trend in student mobility (transferring across programs, universities, and internationally)
- growing demand for flexible learning opportunities due to increasing commitments such as part time work
- calls for more flexible pathways and curriculum to provide students an opportunity to dip in and out of study as circumstances demand
- graduate knowledge, skills and attributes are shifting from profession specific to more transferable skills and knowledge that will help the graduate navigate a set of professional and personal challenges and changes where creativity, networking and agility are emerging as core 21st Century literacies
- significant developments in educational thinking and innovations in learning technologies combine to make digital learning the norm in post-secondary education.

Defining digital, online and blended learning

Within the teaching and learning space there are numerous terms applied to describe modes of digital learning or technology-enhanced-learning. For instance, online, blended, personalised and hybrid models of learning are often used to describe the context and tools via which a student engages in their course or program. While these terms are obviously related – there are considerable differences in their specific context and theoretical underpinnings. This section defines digital, online and blended learning as they relate to UniSA.

Digital learning

Digital learning is defined as any pedagogical practice (formal or informal) incorporating the use of technology to support the learning process. Hence, digital learning is an “umbrella” term that is inclusive of online, blended, hybrid and even mobile learning practice. Digital learning brings into focus four distinct learner requirements; the time of learning, the place of learning, the technologies for learning and the connections with learners.

The following definitions are suggested as subsets of the overarching Digital Learning Strategy:

- **Online learning:** Also referred to as e-learning, is a formal education model where all course curriculum and learning activities are completed online using web-based technologies. Importantly, online learning models of education do not formally require students to attend a physical campus for any aspect of their course. All learning activities, assessment and administration of the course are conducted entirely online.
- **Blended learning:** In its simplest form, blended learning is the combination of online and face-to-face teaching³. **Table 1** below outlines four common forms of blended learning.

³ Noted education researcher, Tony Bates, outlines several models of blended learning which essentially extend along a spectrum from online supplemented to fully online (Appendix 1).



Table 1: Blended learning approaches

| Blended learning approach | Description and examples |
|---------------------------------|---|
| Supplemented | Basic learning materials such as course outlines and policies are provided through the online environment |
| Flipped Classrooms/ Learning | Involves the use of online technologies to provide course materials and learning activities that are later discussed in class settings. |
| Residency | The residency model involves an extended online component that is then supported through an intensive on-campus period. |
| Hybrid | Class time is reduced to allow for extended engagement in the online setting. For instance, a standard class-room lecture time would be replaced with an online activity ⁴ . |

A blended learning definition for UniSA

While recognising there are numerous definitions of blended learning, it is suggested that UniSA defines the concept as:

The convergence of online technologies with face-to-face instruction to optimise student engagement in their learning and provide greater flexibility in study.

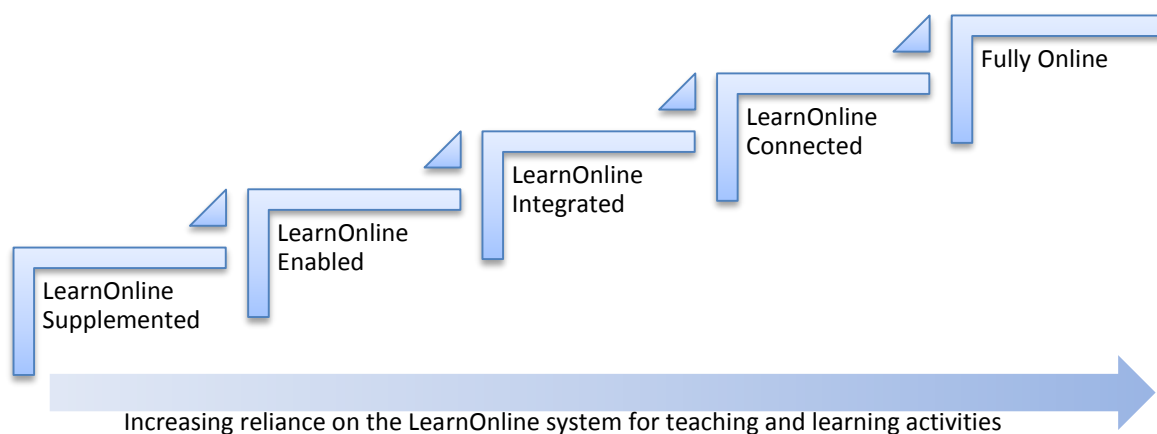
Categories of blended learning for UniSA

There is a need to identify and capture the spectrum of blended and online learning offered across UniSA programs. This information can be used to ensure diversity of course offerings and identify the teaching models that promote specific learner attributes and outcomes alongside quality assurance processes. The following represents a suggested categorisation that can further enhance the current Government (AQF) classifications (external/ internal/ mixed mode) of student modes of learning, and this is summarised below in **Figure 1**:

- **LearnOnline supplemented**: This digital learning category retains the structure of more traditional course delivery and includes supplementary online course materials. This may include slide presentations; required readings and video capture of lectures.
- **LearnOnline enabled**: This model of course delivery involves a reduction of no more than 50% of the time a student is required to attend on-campus classes and replaces this with a suite of online learning activities and resources. This model would be considered a flipped classroom.
- **LearnOnline integrated**: This teaching model involves a greater than 50% reduction in the time a student is required to attend on-campus classes and replaces this with a suite of online learning activities and resources. This model would also be considered a flipped classroom.
- **LearnOnline connected**: LearnOnline connected, represents a model whereby all course learning activities and resources are available online. Student attendance is required only for assessment or demonstration of disciplinary specific skills.
- **Fully online**: This model implies that all course materials, activities and assessments are completed online. There is no course requirement for students to attend on-campus teaching sessions.

⁴ Carol Twigg from the National Center for Academic Transformation has been a strong advocate for this approach demonstrating enhanced student outcomes and performance (Appendix 1).

Figure 1: Proposed categories of blended and online learning for UniSA



Proposed Themes

Crossing the Horizon (Action set 1): Enhanced educational offerings and an outstanding student experience: UniSA will design and deliver curriculum that is relevant and of high quality, delivering excellent outcomes for graduates in an educational environment that allows our students to make the most of their student experience.

To achieve the goals and ambitions stated in CTH we must collectively work to foster an organisational culture that places high value on student learning and a high value on quality teaching. In every aspect of our roles we will demonstrate commitment and an unrelenting pursuit for excellence. This will require committed and inspired leadership at all levels, resources and building a culture of supported innovation and experimentation. We must collectively inspire our students through passion, innovation and opportunity.

It is proposed that the Digital Learning Strategy will be achieved through three themes and associated principles, namely:

Theme 1: Designing for learning

- Student engagement
- Assessment
- Employability
- Flexibility (online, time-tabling)
- Credentialing (continuing professional development; entry pathways, challenges).

Theme 2: Designing for quality

- Evaluation and feedback
- Quality assurance
- Program alignment
- Industry engagement.

Theme 3: Innovating and developing practice

- Building pedagogical capacity (workforce capability)
- Promoting research and scaling innovation
- Reward and recognition.



Theme 1: Designing for Learning

Higher education must alter its dominant pedagogical methods and embrace more participatory, flexible and networked learning models that can help address the learning and teaching challenges confronting the sector. To date education has attempted to tackle these challenges through increasing student and staff access to technology – a simple solution to what is a complex learning and teaching issue. **The greater adoption of technology alone will not shift our dominant pedagogical model.** However, pedagogical change can be encouraged, promoted and propagated by directing attention to designing engaging, relevant and innovative curriculum. In arguing for pedagogical change, Peter Goodyear stresses the importance of **“design” as an enabling agent to transition from a teacher to a learner-centric educational paradigm.** Designing for learning emphasises the importance of providing a well-structured, authentic and high quality curriculum that reflect the graduate qualities and attributes necessary for productive participation in the 21st Century world of work.

Principles:

- 1.1 Designing for student engagement: Our course and program curriculum will be socially and cognitively challenging and engage our students as active participants in their learning process. Our curriculum will be designed to ensure that student time is respected and activities are relevant and value-add to their learning process and career pathway.
- 1.2 Designing for Flexibility: Our courses and programs will be flexible in all aspects of their offering. Flexible in terms of the pace at which a learner undertakes and completes a course, the place of study (virtual or physical) and when study commences. Delivering increased flexibility in our course offerings promotes an inclusive curriculum that invites our students to be the primary decision makers in their learning experience.
- 1.3 Designing for Assessment: Our assessment practices will foster deep learning and promote co-operation rather than individual performance. Our assessment will be authentic, engaging our students in solving real-world problems. Our assessment will be integrated and cohesive, reflecting a scaffolded and programmatic approach.
- 1.4 Designing for Employability: It is well accepted that employability is a driving motivation for student participation in higher education. This means designing curriculum which ensures students can directly apply the skills and knowledge into their work during and after study, and get as much exposure to real work issues and scenarios during their studies as possible. Employability is not a separate construct divorced from teaching and learning it is integral and interwoven into the fabric of the UniSA curriculum.
- 1.5 Credentialing (continuing professional development; entry pathways, challenges): Recognising the increasing number of formal and informal learning opportunities that now occur outside of the classroom (such as workplace, MOOCs) this principle speaks to the emerging need to extend the opportunities for our learners to receive recognition for prior learning and how these experiences can contribute to their chosen UniSA studies.



Theme 2: Designing for Quality

Across the sector information and communication technologies are being rapidly deployed to support the adoption of flexible and networked learning and teaching. However, in the enthusiasm of exploiting new technologies there is often little attention and evidence devoted to testing the inherent assumptions of impact on student learning. This theme addresses this deficit in articulating the principles, objectives and actions for implementing a process of informed change. Through effective evaluations and proactive learning analytics, we will better understand the impact of our curriculum and educational transformations; the inputs, the outputs, and the factors that ultimately contribute to learner success and teaching quality – from enrolment to graduation.

Principles:

- 2.1 **Evaluation and feedback:** Understanding the impact of teaching and learning practices is critical for our continued success. Ongoing evaluation and feedback measures will be effective, targeted, resourced for action and widely communicated. This principle challenges all UniSA staff to engage in incremental improvement through a data informed process that leads to the development of actions and outcomes that will provide for effective learning and teaching.
- 2.2 **Quality assurance:** Transparent and rigorous quality assurance processes will be established to ensure that UniSA courses and programs are developed with a strong focus on student engagement and authentic learning opportunities. The quality assurance process will be widely communicated and involve multiple stakeholders including students and industry partners.
- 2.3 **Program alignment:** Our course offering and programs will align with our key research strengths. This provides for increased opportunities for our students to engage in quality, cutting edge research. The modality of any course offering will be evaluated and determined in the context of a program, its goals, attributes and outcomes. This includes potential partnerships with education providers such as Open Universities Australia.
- 2.4 **Industry engagement:** Employment is a key driver for student engagement in their studies. This principle challenges our staff to build relationships and partnerships with aligned industry groups to provide increased work-integrated learning opportunities for our students. The skills developed within our programs must be directly transferable to the work-force.

Theme 3: Innovating and Developing Practice

To position UniSA at the forefront of teaching and learning quality we must create space for our academic staff to engage in innovation and experimentation. Our teaching methods and curriculum cannot remain in stasis and we must continuously seek for areas of improvement in a supportive and considered manner. In essence, a collaborative facilitated transition is required. Through experimentation and innovation Academic staff will have opportunity and space to collaborate with peers to devise new methods, tools and approaches for broad-scale implementation. It is through the promotion and support of innovation that we will collectively develop our academic staff skills and capabilities related to teaching and learning. In this context, the embedding of the “teacher-focused” roles at UniSA will be integral to build a culture of innovation, creativity and experimentation in a supportive community of practice. A supported culture of innovation results in an adaptable, flexible and networked workforce that can effectively access and leverage the full suite of expertise that resides within an organisation. It is through a practice-based research approach that UniSA can effectively and efficiently address the learning and teaching challenges, questions and issues confronting our organisation presently and into the future.



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Principles:

- 3.1 Building pedagogical capacity: Developing aligned, effective and engaged curriculum is a complex process. Our teaching staff will be supported in all aspects of their teaching and learning practice. Academic staff will have the opportunity to undertake a broad-suite of professional development activities to develop the necessary skills and expertise to be autonomous self-regulated teachers.
- 3.2 Promoting research and scaling innovation: UniSA academic staff will have extensive opportunity to engage with a network of peers to investigate, explore and engage with new modes of teaching, technologies, assessment practices, and to undertake rigorous evaluative methodologies to determine learning impact. Our course offerings and teaching activities will be informed by and through research and scholarship of teaching and learning.



Appendix 1

This definition of blended learning for UniSA summarises the work of Garrison and Vaughan (2008) in emphasising the importance of student engagement and flexibility when incorporating technologies with more traditional models of instruction. The definition encompasses the diversity of pedagogical approaches adopted at UniSA and provides a clear directive for supporting academic staff in further enhancing teaching practice and the student learning experience. Importantly, despite the abundance and accessibility to educational technologies at UniSA our focus must centre on the enhancement of student learning through the implementation of innovative and engaging curriculum. The integration of technology is simply a means to support this vision and promote greater flexibility and opportunities for learner engagement. The following curriculum models by Carol Twigg from the National Center for Academic Transformation⁵ (NCAT) illustrate effective use of course re-design that is focused on appropriate and relevant technology integration in order to provide an enhanced student learning experience (as outlined in **Table 2**). The six models proposed by NCAT have been shown to have significant impact on student learning performance in a sustainable, cost effective manner. Five of the proposed models (refer to **Table 2**) encompass a blended learning approach. The remaining model would be classified as fully online. Each model has a contextual fit and could act as a potential framework of operation and definition for UniSA.

Table 2: Six Models for Course Redesign (NCAT, 2008)

| Models | Description |
|-----------------------|---|
| #Supplemental Model | The supplemental model retains the basic structure of the traditional course and a) supplements lectures and textbooks with technology-based, out-of-class activities, or b) also changes what goes on in the class by creating an active learning environment within a large lecture hall setting. |
| #Replacement Model | The replacement model reduces the number of in-class meetings and a) replaces some in-class time with out-of-class, online, interactive learning activities, or b) also makes significant changes in remaining in-class meetings. |
| #Emporium Model | The emporium model replaces lectures with a learning resource centre model featuring interactive computer software and on-demand personalized assistance. |
| #Fully Online Model | The fully online model eliminates all in-class meetings and moves all learning experiences online, using Web-based, multi-media resources, commercial software, automatically evaluated assessments with guided feedback and alternative staffing models. |
| #Buffet Model | The buffet model customizes the learning environment for each student based on background, learning preference, and academic/professional goals and offers students an assortment of individualized paths to reach the same learning outcomes |
| Linked Workshop Model | The Linked Workshop model provides remedial/developmental instruction by linking workshops that offer students just-in-time supplemental academic support to core college-level courses |

[#] Original 5 models from Twigg, C. A. (2003) Improving learning and reducing costs: New models for online learning. *EDUCAUSE Review*, 38 (5) (2003), pp. 29–38

⁵ National Center for Academic Transformation, Six Models for Course Redesign:
<http://www.thencat.org/R2R/R2R%20PDFs/Six%20Models%20for%20Course%20Redesign.pdf>