Written Application

Preparing first year students studying on-campus for online learning: a pilot project

Overview

This project aims to improve online learning engagement and outcomes for students enrolled in an internal (on-campus) program at UniSA. Students enrolled in programs for on-campus delivery, predominantly school-leavers, enter their degree expecting 'classroom-style', structured learning in all courses. This is distinct from UniSA Online students, which enter their degree in the full knowledge that all learning will occur in the online environment.

With the implementation of the Digital Learning Strategy, UniSA has shifted from traditional face-to-face course delivery toward blended/hybrid and online delivery. Many on-campus-enrolled students are required to study a fully online course in their first semester of university and all will study courses in hybrid (blended face-to-face and online) format. This results in a mismatch between students' expectations of their study mode and the reality.

Managing students' expectations and preparing them for online learning is critical for student engagement, including elements of *affect* (e.g., interest, belonging), *cognition* (e.g., mastery of knowledge/skill), and *behaviour* (e.g., time/effort, participation) (Kahu, 2013). Course evaluation feedback indicates negative affective and behavioural elements of engagement among first-year UniSA students, which may impact on student learning, satisfaction and wellbeing (Kahu, 2013). UniSA Online is an example of best practice, providing students with a compulsory online orientation and first term course which prepares them for online learning; however, there is no systematic provision of orientation or preparation for self-directed online learning for UniSA students enrolled on-campus but who are required to study courses online.

As a university committed to positive student experience and student wellbeing, it is imperative we facilitate improved engagement in hybrid and online learning for on-campus students. To this end, this project aims to improve student learning and engagement outcomes for those enrolled in an on-campus program by preparing them for online learning through an Orientation Module to be delivered as embedded within course curriculum.

Selection criteria

1. Project addresses strategic priorities of the Digital Learning Strategy 2015-2020
Through actively and explicitly preparing on-campus students for online learning, this project contributes to addressing two strategic priorities of the Digital Learning Strategy:

Strategic Priority 2: Supporting our students to become productive professionals in a digital age

Graduates are required to undertake development activities and routine work-related tasks in the online environment. Thus, graduates need to develop confidence and competence in using online environments for these purposes. Our proposed Orientation Module will develop and enhance student confidence in learning online, and improve outcomes related to affect, cognition and

behaviour. Successful improvement in these outcomes over time will contribute to developing graduates who are 'digitally ready' for the workplace.

Strategic Priority 4: Developing our academics as leaders in the digital learning experience

The opportunity for the project team to develop an online learning experience that improves student outcomes will situate the involved academics as leaders in this space. The project team will publish at least two peer-reviewed articles resulting from this project. In addition, we plan to present at relevant national and international teaching and learning focused conferences. Disseminating project outcomes widely will ensure that UniSA is visible as a university at the forefront of online education, and will provide development opportunities for the academics involved. Disseminating project outcomes widely will ensure that UniSA is visible as a university at the forefront of online education and will provide development opportunities for the academics involved. This may also provide a platform for a national project, which could involve for instance the Australian Technology Network and for which we would apply for competitive funding opportunities.

2. Need for the project

Delivery of courses in an online format offers greater flexibility for students enrolled in an on-campus program, as their face-to-face commitments are significantly reduced and they can schedule their learning at a time to suit them. Feedback from UniSA first-year Human Movement and Exercise and Sport Science (HLTH 1044 SP2) students enrolled in on-campus programs such as: "*Because it is a foundations course, it was handy to have the flexibility of half online/half in person*" and "*The major strength of this course is that it is predominantly online, which alleviates much pressure when it comes to attendance*" support this potential benefit. Yet not all students have a positive experience with hybrid course delivery, as evidenced by examples of MyCourseExperience feedback from students within the same cohort:

> "*As a first year student, having a completely online course was stressful and a problem that could have easily been avoided. Having to navigate a strange, new website was troublesome at first, and I know many people who missed lectures and quizzes because of this. I did not like the fact that the course was completely online*";

> "*With the entire course being online it was difficult to find motivation to do the lectures/tasks*";

> "*Making this course online did not work for first year uni students as it is a completely new environment and more support and teaching is required outside of the lectures*";

> "*Not have this course only online (people forget about it and then panic when they realise they still have this weeks content to do*"; and

> "*Hated the idea of the course being totally online. Was way too hard to keep up to date when there were no face to face lectures or tutorials weekly*".

Our on-campus UniSA students appear to be echoing similar barriers and issues identified in the literature surrounding hybrid and distance delivery of courses. Much of the extant literature suggests learners struggle with time management, understanding the website, locating resources and motivation in a self-directed environment (Muilenburg & Berge, 2005; Song, Singleton, Hill, & Koh, 2004). A smaller proportion of literature, reflecting the more recent uptake of the online,

flexible course delivery approach, reports similar barriers and facilitators to studying online for on-campus students (Concannon, Flynn, & Campbell, 2005).

The challenges faced by students to engage and thrive in an online or hybrid learning environment may have significant consequences for their university journey. Low self-efficacy and lack of satisfaction have been linked to university dropout and poorer academic achievement (Chambel & Curral, 2005; McKenzie & Schweitzer, 2001). Evidence suggests that most students need support for learning online (Kirschner & van Merriënboer, 2013), and self-regulated learning strategies (Broadbent & Poon, 2015) and facilitating student readiness for online learning (Bernard, Brauer, Abrami, & Surkes, 2004) are critical to online academic achievement. These findings, combined with the experiences of a cohort of our on-campus students indicating a lack of self-efficacy, support and strategies for online learning, demonstrate a clear need for this project.

Online orientation modules for first time online and hybrid delivery students can improve students confidence in their computer skills and their personal understanding of what it takes to be successful in an online learning environment (Jones, 2013; Taylor, Dunn, & Winn, 2015). The benefits of online orientation sessions have also extended to improved retention rates (Jones, 2013) and significant improvements in grade distribution (Jones, 2013; Taylor et al., 2015).

Currently, there is no systematic provision of any online learning orientation for internally-enrolled UniSA students. The provision of a university-wide Orientation Module would benefit all on-campus students and reduce burden on course coordinators, allowing them to redirect time and energy to course content delivery. Thus, this project aims to develop and deliver an Orientation Module, embedded within curriculum, to prepare UniSA on-campus (internal) students for online/hybrid learning. This is a pilot project, establishing the ability of the Orientation Module to improve student learning and engagement outcomes within the School of Health Sciences; However, the module will be developed with a view to its potential for university-wide implementation in future.

The learning objectives this project will deliver are:

> **1. Increased student readiness and confidence in an online learning environment; and**

> **2. Development of skills to learn in an online environment.**

3. Project Outcomes and the Anticipated Improvements

The primary outcomes of the project relate to student learning and engagement across the three domains proposed by Kahu (2013), in terms of *affect* (self-efficacy and readiness), *cognition* (academic learning), and *behaviour* (course participation).

Research has shown that embedded orientations for online courses have improved student satisfaction, withdrawal rates and course grades (Taylor et al., 2015). The product to be delivered through this project is an online Orientation Module, designed to prepare on-campus students for online learning. Through delivering this module at the outset of an online course, **we expect to see improvements in student learning and engagement** as indicated by:

1. **Confidence** and **readiness for online learning** determined via questionnaire and further explored through focus groups (Affect);

2. **Skills in and use of online learning materials** (participation) measured using learnonline analytics and further explored through focus groups (Behaviour);

3. **Proportion of Withdraw/Withdraw Fail grades**, measured using learning analytics (Affect & Behaviour); and

4. **Proportion of passing grades** (P2 or higher), measured using learning analytics (Cognition).

We anticipate the Orientation Module will not only have benefit for these students for the course within which the module is delivered, but also for future courses undertaken online by these students. If evaluation results show these outcomes can be achieved through the online module, we intend to seek support for implementing the module university-wide.

4. Project approach

We will take a collaborative team-based approach in undertaking and managing this project. All project team members (KB, KF and NP) are experienced online educators, with respect to the design, development and delivery of online courses and programs. Two project team members (KB and KF) have extensive experience in delivering online (fully online and hybrid/blended) to first year, undergraduate on-campus students and have first-hand knowledge of the issues encountered by students in delivering online education to students enrolled internally.

The project team will oversee the project collaboratively through regular team meetings with the project team including research assistants, and through the training and supervision of research assistants. Responsibility for specific elements of the project will be allocated according to the expertise of the team members as follows:

1. **Consultation:** The **project team** will share responsibility for this stage of the project, involving consultation with staff across the university, and with students in the School of Health Sciences to inform the development and delivery of the online module, and assess scalability and appetite for university-wide implementation;

2. **Focus groups:** The development of semi-structured focus group questions, and training and supervision of research assistants in running the focus groups will be the responsibility of **Assoc Prof Parange** and **Dr Baldock**;

3. **Quantitative data collection and analysis:** Extraction, analysis and synthesis of data from online student systems (online questionnaire, MyCourseExperience data, grades and learning analytics) will be supervised by **Dr Baldock** and **Dr Ferrar**;

4. **Online module design and development:** The **project team** will share responsibility for this, as this is the key product of this project required to achieve the project outcomes;

5. **Project reporting and dissemination:** The **project team** will share responsibility for writing up the results of the project and its evaluation, presenting the results across the university, and preparing manuscripts for publication and conference presentations.

The project **reference group** will be consulted for advice and input prior to each project stage. The course coordinators of the two courses involved in this pilot study (SK, MH) are members of the reference group and will be intimately involved. The reference group has already provided input into this application and are committed to providing input at all stages of the project.

5. Table 1: Project Development Process

Course 1: Online/hybrid course *without* an online preparatory module (SP2 2019).

Course 2: Online/hybrid course *with* the online preparatory module delivered at the outset of the course (SP5 2019).

Milestone	Description	Timeframe	Responsible	Deliverable	Cost
Ethics application	Seek ethics approval for online questionnaire, linkage of questionnaire to student outcome data available through learnonline (e.g., online course participation and grades), and focus groups	Month 0	Research assistant supervised by Project Team	HREC Approval	$1808
Focus group consultation	Focus groups will be conducted with students and tutors who experienced learning and teaching in first time online or hybrid delivery course at UniSA (internal students). Students will be invited to participate from across all divisions at UniSA. It is anticipated that 5-6 focus groups will be conducted with approximately 6-8 students in each focus group. The purpose of the student focus groups will be to a) understand the perceptions and feeling about online and hybrid course delivery, b) identify barriers and facilitators to success, and 3) explore what students would like included in an orientation module and preferred delivery modes. The research team, in conjunction with the Stakeholder Advisory Group, will rank the themes or concepts to develop the content and style of the online educational module.	Months 1-2	Project Team	Assessment of UniSA-wide scalability	$1808
Learning Outcome Evaluation Point 1: Course 1	At the start of this hybrid course (Foundations of Physical Activity and Health), students will be invited to complete the Student Online Learning Readiness (SOLR) Instrument questionnaire regarding their readiness for and confidence in online learning.	Month 1	Course coordinators, Project Team	Evaluation Data	Nil
Orientation Module development	Development of the Orientation Module. The module content and delivery (e.g. video, text, videos, etc.) will be informed by literature and focus group findings and will be developed collaboratively by a Research Assistant and Project Team, supported by an Online Educational Designer (external) and Reference Group.	Months 3-4	Research Assistant supervised by Project Team	Online module	$6492

Pilot test Orientation Module and refinement	Eight students will be recruited to pilot test the Orientation Module for content, usability and satisfaction. Individual interviews will be used to collect the feedback. Feedback will be incorporated, and changes made to the module.	Month 5-6		Improved Online Module	$2196
Learning Outcome Evaluation Point 1: Course 2	Prior to accessing the Orientation Module, students enrolled in HLTH 1049 will be invited to complete the SOLR Instrument regarding their readiness for and confidence in online learning. This will be compared to their readiness and confidence mid-course (Evaluation Point 2).	Month 7	Course coordinators, Project Team	Evaluation data	Nil
Online module delivery to Course 2	The module will be made available to HLTH 1049 students in the week prior to course start date and will remain available for students to access across the study period.	Month 7	Course coordinators, Project Team	Data relating to module completion	Nil
Learning Outcome Evaluation Point 2: Course 2	Mid-way through the course (HLTH 1049), students will be invited to complete a second SOLR questionnaire regarding their readiness for and confidence in online learning. This will be compared to their initial SOLR data (Evaluation Point 1).	Month 9	Course coordinators, Project Team	Evaluation data	Nil
Learning Outcome Evaluation Point 3: Course 2	After the mid-point of the course, students will be invited to participate in focus groups. It is anticipated 2 focus groups of 6-8 students will be recruited. The purpose of the focus groups is to explore the perceptions of the usefulness of the Orientation Module and the impact on the student learning.	Month 9	Course coordinators, Project Team	Evaluation data	$603
Learning Outcome Evaluation Point 4	MyCourseExperience (quantitative & qualitative) data will be extracted and analysed to describe student engagement. Course scores and comment themes will be compared to 2018 and the 2019 SP2 course with no online orientation. Course engagement data will be extracted from learnonline to compare 2019 to 2018.	Month 9	Course coordinators, Project Team	Evaluation data	$5124
Dissemination	UniSA-wide presentations will be offered. We will develop a short video to report the findings of the study. A final project report will be written alongside manuscripts for publication. Presentations will be prepared for conferences in teaching and learning.	Months 9-12	Research Assistant supervised by Project Team	Presentations, video, report, publications	$1507

6. Project Evaluation

The key product of this pilot project, the Orientation Module, is designed to prepare students for online learning and improve student learning and engagement. Methods for evaluating this project have been built into the project process (see Table 1).

Data contributing to the evaluation of project outcomes will include quantitative measures such as readiness for and confidence in online learning, learning analytics data such as course participation, and grades, as well as qualitative data obtained through MyCourseExperience open comments and student focus groups.

Achievement of the primary outcomes of this project will be evaluated through the collection and analysis of quantitative and qualitative data as follows:

1. **Confidence** and **readiness for online learning** will be determined via the Student Online Learning Readiness (SOLR) questionnaire (Yu & Richardson, 2015) which assesses a series of competencies for success in online learning (quantitative), and will be further explored in student focus groups (qualitative). SOLR scores will be compared pre- and post-Orientation Module completion to determine change in readiness for online learning after completing the Orientation Module. SOLR scores will also be compared between two courses, one with and one without access to the Orientation Module.

2. **Skills in and use of online learning materials** for 2019 will be measured using learnonline analytics, such as first logon, number of times resources accessed, and forum posts (quantitative) and through further exploration in student focus groups (qualitative). These statistics will be compared with the 2018 analytics data for the same course.

3. **Proportion of Withdraw/Withdraw Fail grades** in 2019 will be assessed using learning analytics (quantitative) and will be compared with the 2018 analytics data for the same course.

4. **Proportion of passing grades** (P2 or higher) in 2019 will be measured using learning analytics (quantitative) and will be compared with the 2018 analytics data for the same course.

7. Indicate whether any ethics approvals are necessary.

Ethical approval will be required for this project in relation to seeking information from students that is not already collected as part of their normal engagement with the university. The application to the UniSA Human Research Ethics Committee will seek approval for 1) delivery of online questionnaires to students, 2) linkage of questionnaire data with learning analytics data and other data obtained through learnonline (e.g., grades), and 3) student focus groups.

8. Indicate a strategy for the dissemination of the project outcomes beyond the immediate context of the project, i.e. across the University.

Presentations will be offered UniSA-wide to disseminate project findings and invite course coordinators and/or program directors to use the Orientation Module. Ideally, if our pilot project is successful, we would like to implement the Orientation Module university-wide. School and/or Division Teaching and Learning Committees would be ideal audiences for these presentations.

We will also present project findings at relevant academic conferences, including the Higher Education Research and Development Society of Australasia, Council of Academic Public Health Institutions of Australasia, Australia and New Zealand Association for Health Professional Educators annual conferences, and the international online OLC Innovate conference.

References

Bernard, R. M., Brauer, A., Abrami, P. C., & Surkes, M. (2004). The development of a questionnaire for predicting online learning achievement. *Distance education, 25*(1), 31-47.

Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education, 27*(C), 1-13. doi:10.1016/j.iheduc.2015.04.007

Chambel, M. J., & Curral, L. (2005). Stress in academic life: Work characteristics as predictors of student well-being and performance. *Applied psychology, 54*(1), 135-147.

Concannon, F., Flynn, A., & Campbell, M. (2005). What campus-based students think about the quality and benefits of e-learning. *British journal of educational technology, 36*(3), 501-512.

Jones, K. R. (2013). Developing and implementing a mandatory online student orientation. *Journal of Asynchronous Learning Networks, 17*(1), 43-45.

Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education, 38*(5), 758-773. doi:10.1080/03075079.2011.598505

Kirschner, P. A., & van Merriënboer, J. J. (2013). Do learners really know best? Urban legends in education. *Educational psychologist, 48*(3), 169-183.

McKenzie, K., & Schweitzer, R. (2001). Who succeeds at university? Factors predicting academic performance in first year Australian university students. *Higher education research & development, 20*(1), 21-33.

Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance education, 26*(1), 29-48.

Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The internet and higher education, 7*(1), 59-70.

Taylor, J. M., Dunn, M., & Winn, S. K. (2015). Innovative orientation leads to improved success in online courses. *Online Learning, 19*(4), n4.

Yu, T., & Richardson, J. C. (2015). An Exploratory Factor Analysis and Reliability Analysis of the Student Online Learning Readiness (SOLR) Instrument. *Online Learning, 19*(5), 120-141. doi:10.24059/olj.v19i5.593