

# **2020 Technology (and Digital Affordances) Demonstrators**

## **Executive Summary, Recommendations and Final Project Reports**

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# Executive Summary and Recommendations

## Introduction

The 2020 Technology (and Digital Affordances) Demonstrator Special Initiative Grants connected with the successful Technology Demonstrators program offered in the past. This special initiative was offered with specific requirements to enmesh the technologies and/or digital affordances into curriculum and teaching (in alignment with the USQ Academic Plan) in Semester 1, 2021 in a scholarly, systematic, and evaluated manner. Grants were made available to USQ academic staff to support and enable solutions to contextualised learning and teaching challenges using new technologies while also encouraging consolidation of existing technology use at USQ. Grant money was provided for Learning and Teaching Assistant (LTA) time managed through the Office for Advancement of Learning and Teaching, (and after the restructure in July 2021, the Academic Transformation Portfolio) for the purpose of individual support with the technologies, pedagogical applications and completing a final report. The project overall was supported by regular community of practice workshops and sessions (from November 2021) that focused on designing interventions and encouraged suitable approaches to implementation data collection, analytics and ethics application writing (as required).

This report provides an executive summary, pertinent recommendations, and final reports for each of the 11 completed projects.

## The Online Engagement Framework for Higher Education

Projects for this initiative are aligned with the Online Engagement Framework for Higher Education (Redmond et al., 2018) as shown in Figure 1. The goal was for academics to identify student engagement problems (such as non-engagement with resources, teachers, or other students) and purposefully implement new ideas (interventions) for enhancing and transforming the learning and teaching experience. Choice of technology enabled innovation with new technologies and consolidation of existing technology at USQ.

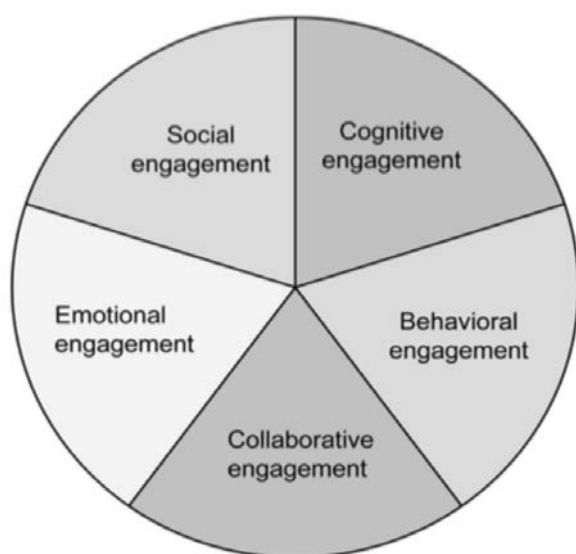


Figure 1. *Online engagement framework overview.*

## 2020 TechDem participants

Successful participants came from schools in both HES and BELA, as shown in Table 1.

Table 1. 2020 Technology Demonstrators - reporting participants

Name	School	Course(s)	Project title
Andersen, Cecily	School of Education	EDM8014 English Literacy and Special Educational Needs	Embedding Student Engagement Technologies
Beccaria, Lisa (Dr)	School of Nursing and Midwifery	NUR1100 Introduction to Nursing Praxis	Embedding online technology to build social and emotional engagement with first year nursing students: A pilot study
Beel, N (Dr) & Hoare, N (Dr)	School of Psychology and Counselling	COU8101 Counselling Skills and Applications and the Graduate Certificate/Diploma/Master of Counselling	ePortfolio for a graduate counselling skills course
Chan, KC (Dr)	School of Business	CIS8500 Applied Research for Information System Professionals	Design of course activities for improving behavioural and collaborative engagement for the CIS8500 Applied Research for Information System Professionals course
Hills, Catherine	School of Mechanical and Electrical Engineering	ELE1301 Computer Engineering	Using Padlet to Support Development of a Sense of Belonging in First Year Engineering Students
Johnson, Rhi	School of Creative Arts	VIS1010 2D Studio Foundations	Expanding Creative Communities: Facilitating Multimodal Forms of Engagement and Learning in Tertiary Visual Arts
Rees, Sharon (Dr)	School of Nursing and Midwifery	ANP5001 Introduction to Rural and Remote Nursing Practice	Introducing asynchronous tutorials to an online postgraduate nursing course
Southern, Jo	School of Nursing and Midwifery	NUR1102 Literacies and Communication for Health Care	Using Padlet and student attitude toward learning communication skills from teacher-made video vs generic YouTube video.
Taylor, Melissa (Dr)	School of Nursing and Midwifery	NUR3020 Professional Transitions ANP8003 Management in Health Care Practice	Increasing social and collaborative student engagement through interactive technology integration into online StudyDesks in an undergraduate and postgraduate course
Tualaulelei, Eseta (Dr) Getenet, Seyum (Dr)	School of Education	EDM5010 Literacy Learning in the Early Years EPM4100 Mathematics in Context	Promoting student engagement with embedded technologies
van der Hoorn, Bronte (Dr)	School of Business	MGT8077 Project Risk Management	An exploration of postgraduate management student engagement

## Educational Technologies used in TechDem Projects

Participants were encouraged to implement technologies for flipped classroom approaches (Padlet, FlipGrid and Voicethread), for ePortfolios (Mahara, WordPress), and for clinical simulation and active lab work. There was also an open 'free choice' category. Table 2 provides details of technologies used for interventions.

Table 2. Educational technologies used in Technology Demonstrator interventions

Tool	Description	Key uses	USQ license and access status
<b>360 Video</b>	Use of video to create an immersive learning experience.	Interactive artefact to share an experience Asynchronous	Access to 360 video cameras and SeekBeak software subscription through the HIVE.
<b>Adobe Spark</b>	Cloud-based, video creation tool that provides templates and easy access to images, music and recording of narration.	Teacher presence Video content Asynchronous	Free online for all users.
<b>FlipGrid</b>	Cloud-based, video discussion platform. Teachers can post discussion prompts for students to react to and interact with peers via short videos.	Share ideas and promote interactive discussion Collaboration Multimodal responses Asynchronous	Free for education/educators.
<b>Google Tools (Docs)</b>	Cloud-based, free, tools for sharing. Docs provides a shared word processing environment.	Small group Collaboration Zoom breakout rooms Mind mapping activities Synchronous Asynchronous	Free online for all users.
<b>H5P</b>	A plugin for existing publishing systems that enables the system to create interactive content like interactive videos, presentations, games and quizzes.	Short self-check quiz activities Formative feedback Asynchronous	Integrated into USQ Moodle / StudyDesk.
<b>Mentimeter</b>	Cloud-based tool for interactive presentations, live polls, quizzes, word clouds, Q&As.	Initial course contribution Warm-up exercise Synchronous Asynchronous	Free version provides some workable options. Recent USQ trial of the paid version (used by some participants) highlighted advantages of purchasing a license.
<b>Padlet</b>	Cloud-based tool hosting a real-time collaborative web platform in which users can upload, organise, and share content to virtual bulletin boards called "padlets." Interactive including posting images, links, videos, and documents.	Communication skills Group activity Team & individual contribution Collaboration Asynchronous Synchronous (learning tool in tutorials)	Free version is limited. ATP provided access to a subscription for TechDems.
<b>Panopto Quizzes</b>	Cloud-based platform for recording and sharing video. Searchable and provides integration of quizzes.	Enmeshed into lecture viewing Check student prior knowledge Formative feedback Synchronous	USQ preferred platform for lecture and tutorial recordings. Integrated into USQ Moodle/StudyDesk.
<b>Voicethread</b>	A cloud-based multimedia tool that can be used for content sharing, student interaction learning and collaborative group work.	Student-student Student-content Student-teacher Collaboration Group work Multimodal responses Asynchronous	Integrated into USQ Moodle / StudyDesk.
<b>WordPress</b>	Free and open-source content management system used for creating websites and online portfolios.	ePortfolio - individual student use Employability First Year Experience Asynchronous	Hosting outsourced to CampusPress as part of the ePortfolio Create@USQ pilot.

## Outcomes and impact

The final reports, Appendix 1, share the context, aims, approach, evaluation method, project impact and recommendations as evidence of key interventions using chosen technologies. In conjunction with these, Table 3 shares the list of technologies used, number of students impacted and relative success of each intervention while Table 4 shares extracted and summarised details of purpose, impact and recommendations from individual project reports. All projects/reports indicate relative levels of success with the intervention based on contextual evidence, student feedback and analytics of engagement. Academic feedback (from a final online survey) and key points are shared here.

### Academic feedback

*I developed skills in the use of technology. It was also useful to be in a group with academics from other schools as you could get ideas for future teaching. The whole project gave me good insight into the time demands of introducing new technology into courses. (Sharon)*

*This Tech Dem project has built our capacities as educators to design curriculum that is 'Digital first'. It helped us experiment with different approaches to using the three technologies and we upskilled to assist students. (Eseta )*

*The project increased my knowledge and skills in how to establish and maintain a classroom that incorporates the use of engagement technologies. I commenced the project without having any prior experience, knowledge, or skill in how to use or set up Padlet, Mentimeter, Flip Grid or build HP5 activities. As a result of the project, I am now able to effectively use these educational technologies across a number of courses. I have also increased my knowledge and skill in course design and am now able to plan learning outcomes and identify appropriate engagement technologies to support the achievement of the identified learning outcomes. (Cecily)*

*The project also offered a supportive opportunity to build skills in the use of technologies and provided a collegial forum to discuss their affordances. (Bronte)*

*TechDems is such a great initiative that allowed me to explore technology that I probably wouldn't otherwise have explored. Being part of the TechDems CoP exposed me to technologies that other TechDems were using and has certainly motivated me to give more of those technologies a try. (Nancey)*

*I think that this was a significant help [L&T Assistant support] and hope that this continues for future Tech Dems. I was very helpful to have the ability to bounce ideas around and also to have support with the project implementation e.g., reporting, which can save academics valuable time. (Lisa)*

### Preparation for and ability to use edtech tools

At times both staff and students needed support with the edtech tools used and in some instances the tool was an inhibitor to successful engagement. The LTAs provided much of this and effectively supported increased digital literacy and fluency. Some academics shared the impact of preparation time for creating learning artefacts and designing new learning approaches in conjunction with StudyDesk integration. Once again, the LTSs filled in some of this gap through their support, but the question remains as to how we acknowledge innovation at USQ and potentially providing time allocation to staff. A positive outcome was the increased ability of academics to integrate new learning approaches using one or more edtech tools.

*Academic integration needs to include appropriate workload allocation relative to the enhancement being implemented. Outcomes determined in this TechDem Grant opportunity determined that through a well thought out and focused implementation, positive student learning was apparent. Time allocations are needed to be considered into the future to enable further enhancements. The need to have a community of practice to engage with colleagues in and across faculties was a driver to the success of the project. The team of support staff, learning and teaching staff and educational designers provided guidance and mentorship as new technologies were tried and tested. This support requires further*

*expansion as the limited capacity of an academic team and Course Examiner to plan, map and integrate such change does require consideration of development hours minimalistically of an additional 50 hours. (Melissa)*

### *Analytics and data collection*

Many projects were challenged with gathering adequate analytical data. Methods used included:

- Voicethread provided users and viewings e.g. Tutorial 2 - 129 views by 29 users
- MyOpinion data used to compare with previous years
- Padlet - some analytics came through from Padlet after they were contacted several times - otherwise academics analysed individual Padlet's for student responses
- Online student survey
- Panopto quiz data
- FlipGrid analytics provided #groups, #views, #videos

### *Student engagement and impact*

Most courses provided evidence of increased engagement through the designed interventions. This is contextual to each cohort and pertinent to how the technologies were implemented. For example, evidence of impact reveals that a tool like Padlet supports all aspects of the engagement framework with a focus on collaboration, selective contribution, and critical thinking. Many observed a reduction in student engagement with the technology(ies) as the semester progressed and cited attrition and assessment priorities as the main reasons. EDM8014 found that students appear to prefer engaging in technologies that are highly visible and easily and directly accessible on the StudyDesk. MGT8077 found the cohort preference was not to engage so much although teacher presence was improved using Adobe Spark videos.

Table 3: List of interventions (technologies used) and relative success for each course

	Student numbers	Adobe Spark	FlipGrid	Google docs	H5P	Mentimeter	Padlet	Panopto Quizzes	Video	Voicethread	WordPress ePortfolio
ANP5001	21										
CIS8500	79										
COU8101	109										
EDM5010 & EPM4100	126 74										
EDM8014	60								360 videos		
ELE1301	195										
MGT8077	26										
NUR1100	424										
NUR1102	448										
NUR3020 & ANP8003	368 22										
VIS1010	52										
TOTALS	2004 / 26	1	2	1	3	4	7	1	2	3	2

Colour intensity relates to the level of success of each intervention for student engagement from light colour (some success) to more intense colour (more successful). Note, these ratings were determined through narratives and evidence found in the individual reports.



Table 4: Collation and summary of educational technologies, purpose, impact and recommendations from individual project reports.

Tool	Who used	Purpose	Engagement Framework	Student feedback / impact	Recommendations
<b>360 Video</b>	EDM8014	A suite of asynchronous technologies was embedded in the course to promote co-constructed learning, and opportunities for interactions with course teaching staff, or other students. The video was embedded in a Course Module Workbook later in the course.	<i>Cognitive and Emotional</i> - Used by Course lecturers to expose students to an immersive learning experience where they experience a Neurologically Diverse Person's 'Meltdown'.	A large number of students (43%) engaged with the 360 Video technology that illustrated a personal experience of a person with ASD from a 360 perspective.	<ul style="list-style-type: none"> <li>It was good for maintaining engagement later in the course</li> </ul>
<b>Adobe Spark</b>	MGT8077	Teacher-student Teacher presence To build connection with the students through a series of mini videos for guidance, instructions, material wrap-ups, discussion prompts.	<i>Social</i> - provided a break from textual or other interactive content.	Some drop-off as the semester progressed. The first Adobe Spark was accessed by 12 students, the second by 10 students, but the final Adobe Spark was only accessed by 3 students.	<ul style="list-style-type: none"> <li>An effective tool for quickly creating mini videos (that don't require a 'face to camera' record) which can enhance teaching presence.</li> <li>Include Adobe Sparks in other courses to provide quick videos which contextualise, make links to workplace practice, or provide useful tips relating to learning</li> </ul>
<b>FlipGrid</b>	NUR1100 EDM8014	To increase students' social, emotional and collaborative engagement with their peers through collaboration.  The FlipGrid activity involved students uploading 1min 30sec videos for eight topics throughout the semester (NUR1100).	<i>Social</i> - groups to develop a relationship with other students in preparation for participation in the on-campus residential school (NUR1100). <i>Emotional</i> - opportunities to articulate their assumptions and manage their expectations about the residential school, to motivate each other in preparation for the res school experience and help them develop greater confidence in and commitment to learning throughout the semester. <i>Collaborative</i> - online with their peers. <i>Cognitive</i> - through critical thinking, developing deep discipline understandings, and justifying decisions.	There was very little uptake of FlipGrid by students in the Semester 1 cohort (NUR1100).  One student provided an email indicating that Flip Grid was a very good activity that she would use with her future students. Very few students posted a video response within the activity, although many viewed what was posted. Such behaviour indicates the presence of lurking behaviour in some students in the cohort. Student: "Hi. I've uploaded my FLIP GRID elevator speech now (what a great classroom tool!)"(EDM8014)	<ul style="list-style-type: none"> <li>Train teaching staff who are required to trial the use of a new technology.</li> <li>Become familiar with the features and functionality of FlipGrid and undertake prototype testing.</li> <li>There was a high administrative/technological load of setting up large sets of FlipGrid groups for each new cohort/semester - maybe a simpler solution is needed (NUR1100)</li> <li>While the Flip Grid activity was valued by the few students who engaged with the technology, it would be discarded as too few students engaged with it (EDM8014)</li> </ul>

			<i>Behavioural</i> - related to academic skills and agency, as students can receive feedback from both the course examiner and peers.		
<b>Google Tools (Docs)</b>	EDM5010 EDM4100	Used primarily in tutorials but also in Moodle lessons and available asynchronously. Activities included math problem-solving and discussions of pedagogy and curriculum in Zoom breakout rooms. Also incorporated within Moodle lesson activities for mind-mapping activities. Not used for assessment tasks.	<i>Cognitive, Collaborative and Social</i> - students working in small groups to complete tasks such as exercises on Google Sheets, presentations on Google Slides, or group work on Google docs.	Across both surveys, students highlighted the value of Google docs. for cognitive engagement (thinking critically, developing deep discipline understandings, using expertise from other courses and developing academic skills). Student: <i>"Lectures were engaging and breakout room exercises were great to enhance my understanding of content"</i> .	<ul style="list-style-type: none"> <li>• Works well for focused small-group activities in recorded tutorials.</li> <li>• Give students clear directions and provide worked and unworked examples for all students - especially when using in Zoom breakout rooms</li> <li>• Use a variety of activities to engage students.</li> </ul>
<b>H5P</b>	NUR3020 MGT8077 EDM8014	To undertake a series of asynchronous, short self-check quiz activities throughout the course to test their understanding of course content and assessment, and to determine their progress. Activities scaffolded across all course objectives and located in specifically targeted StudyDesk Moodle books. Students engage in theoretical content that they may otherwise choose to skip over. Aligned with the VoiceThread design and was focused on providing a more professional, inclusive and collegial approach to learning (NUR3200).	<i>Social</i> - students engage in weekly module content with simple activities that promote deeper thinking with reflective exercises, or reinforced core learning through word searches and fill the blank type activities. <i>Behavioural</i> - regular engagement with key course content through activities designed to explore content with immediate feedback. <i>Cognitive</i> - students can think critically about core concepts, retain key principles and content, and provide a space for formative feedback.	Implementation of H5P activities in study desk content assisted in bringing theoretical concepts into learning journeys for students.  HP5 activities promoted high levels of engagement from a range of students.	<ul style="list-style-type: none"> <li>• Keep H5P in NUR3020 to maintain and further enhance H5P integration with weekly activities</li> <li>• Activity development must be scaffolded to ensure alignment with content</li> <li>• The inclusion of H5P's coincide with a standardised digital curriculum development workload of 20 hours per annum to encourage staff to develop, implement and monitor digital enhancements in undergraduate and postgraduate courses (NUR3200).</li> <li>• Consider how to create questions that are quick to answer but probe for understanding.</li> <li>• Provide constructive feedback for incorrect answers to support formative assessment.</li> <li>• HP5s offer a wide variety of interactive elements and engagement activity types and are also easy to setup, maintain and 'roll over' from semester to semester once set up.</li> </ul>

<b>Mentimeter</b>	CIS8500  EDM8014	Platform for students to engage with. Platform for the lecturer to collect real-time survey, feedback and polling data with a cohort of students. Used at the very beginning of S1 to simply encourage students to contribute online to the cohort; it was included as a warm up exercise. Asynchronous responses.	<i>Cognitive</i> - critical thinking and integration of ideas <i>Behavioural</i> - greater online contributions from students, both individually and when working in their teams. <i>Emotional</i> - developing student agency and helping the course lecturers in supporting student expectations.	Task in Wk 1 was not assessed therefore little engagement took place (CIS8500).	<ul style="list-style-type: none"> <li>● Use for optional tasks, e.g. icebreaking-style activities, for the Course Examiner and students to gain a better sense of the nature of the cohort's expertise and interest.</li> <li>● Embed into Zoom and directly in the StudyDesk rather than within Moodle workbooks for high visibility</li> <li>● Mentimeter activities would be retained but only used during synchronous and recorded Zoom sessions</li> </ul>
<b>Padlet</b>	CIS8500  EDM5010 EDM4100 EDM8014 ELE1301 MGT8077 NUR1102 VIS1010	<p>Group work Student-student Student-lecturer Students learn and practice teamwork and develop their soft skills and communication skills.</p> <p>A mandatory task that was marked and used as evidence for students' genuine contribution to their team (CIS8500).</p> <p>Used to collect student artefacts related to children's literacy, student reflections on their knowledge and to facilitate communication between online students and on-campus students. Artefacts and ideas were subsequently discussed in weekly tutorials so the Padlet became a learning artefact and not just a repository (EDM5010)</p> <p>To promote co-constructed learning, and opportunities for interactions with course teaching staff, or other students.</p>	<p><i>Cognitive</i> - students to think critically, integrate their ideas and justify their decisions (particularly when working in teams), and to support the distribution of expertise between peers. To scaffold students' completion of the assessment.</p> <p><i>Behavioural</i> - model online learning norms <i>Collaborative</i> - encourage students to engage online with faculty members and ultimately, learn with peers. Provide teams with a platform where they share resources, identify what tasks each team member was working on, and learn with peers. Acted as an iterative process for students to collaboratively reflect on their own work and that of others, as well as reflexively developing confidence, capability and community.</p> <p><i>Social</i> - build community and create a sense of belonging for students</p>	<p>Mandatory activity resulted in increased student engagement. Provided authentic evidence of individual students' contribution to group work and increased collaborative activity. Platform was an appropriate choice to support students' online collaboration and engagement. The increase of student participation and engagement was obvious compared to previous cohorts (CIS8500). Data from EDM5010 indicate that when used optionally and asynchronously, using Padlet has limited impact on student engagement.</p> <p>Far greater engagement with Padlet with traditional Forums, although several students seemed not confident using Padlet, are not conformable with engaging in collaboration or sharing learning, or would prefer traditional methods of engagement (EDM8014)</p> <p>The social introduction Padlet was not well used. Weekly polls were used by just</p>	<ul style="list-style-type: none"> <li>● Keep Padlet as an online collaboration tool for group tasks and team work.</li> <li>● Enhance the scaffolding for Padlet activities through careful design</li> <li>● Embed in your StudyDesk - it breaks up the standard moodle layout</li> <li>● Use for both synchronous and asynchronous activities across different devices</li> <li>● Improve the scaffolding of the social Padlet to encourage greater student use.</li> <li>● Padlet is really useful when you need to create an instant webpage. For Orientation it was used as part of the "Orientation Challenge",</li> <li>● A strength of the Padlet platform is the quality of Padlets as they are presented on students' mobile phones.</li> <li>● Using Padlet in a course requires a cohort who wants to share information about themselves and/or their learning (and to connect with peers) in a classroom environment. If a cohort is not doing this in traditional forums, this project showed that changing the technology did not guarantee a change in students' online behaviour or greater engagement.</li> <li>● Key to the success of the Padlet was teacher engagement, which was an iterative process. Initially, teachers modelled the process of posting their</li> </ul>

		<p>First year experience through loosely structured, visually engaging, simple social interactions and sharing with lecturers and between students. To address gaps in online engagement seen in previous iterations of this first year course (limited posts in forums).</p> <p>For students to nominate and discuss case assignments and receive feedback from the Course Examiner.</p> <p>Week 1 as part of an 'Introduce Yourself' activity.</p>		<p>under half the cohort. Most popular topics, <i>"The thing I am most worried about in the course is..."</i> and <i>"The thing I am most looking forward to in this course is..."</i>. Student outcomes have been difficult to measure but the increase in non-academic engagement is demonstrable (ELE131)</p> <p>Survey result - students felt that a StudyDesk should not mandate that they engage with the Course Examiner nor their peers as part of the learning experience. Student: <i>"I found the padlet to not be as useful as the mini videos, quizzes"</i> (MGT8077)</p> <p>80% strongly agreeing they preferred Padlet to social forums, and 80% strongly agreeing that the Padlet enhanced the quality of, and their engagement in, the course (VIS1010).</p>	own works-in-progress.
<b>Panopto Quizzes</b>	EDM5010 EDM4100	<p>Enmeshed as part of the lecture viewing experience (the video could not proceed without attempting the quiz) in six lectures in each course, with two at the beginning of the lecture recording, two in the middle and two at the end. The quizzes were made up of three or less questions formatted as true/false, multiple choice, multiple select or fill in the blank.</p>	<i>Cognitive and Behavioural</i> - to help students develop deeper discipline understandings and critical thinking skills and instill agency and independence with learning.	<p>Panopto analytics shows students tend to attempt the quizzes when they are located at either the beginning or middle of the video. Having the quizzes embedded within lectures provided a seamless and low-stakes teaching approach for providing formative feedback. Student: <i>"I think they were great! Quizzes in particular really helped when going through the coursework."</i></p>	<ul style="list-style-type: none"> <li>• Embed these in lectures so that students are actively learning and not passively watching</li> <li>• It also slows down the students that are watching the video at faster speeds.</li> </ul>

Voicethread	ANP5001	Teacher presence Student-student Student-content Asynchronous interactive study group activities (tutorials) to support new course design of online synchronous tutorials. All students completed a task to post their group discussions in a tutorial at least once (ANP5001).	<i>Social</i> - relationships and sense of belonging; explore real life scenarios as prompts that initiate conversation and reflection. <i>Collaborative</i> - working as a team. <i>Cognitive</i> - through critical thinking, integrating ideas, and negotiating decision making; to scaffold students' completion of the assessment.. <i>Behavioural and Emotional</i> - students worked in groups and learned how to interact with each other online, negotiate activities within the group, and support each other; students develop agency as they transition into the real world of nursing as practitioners.	93% of students viewed every VoiceThread, with 100% of students viewing the Tutorial 2 VoiceThread, Student: <i>"the voicethread and tutorials are very helpful"</i> Academic: <i>The technology achieved the aims that I wanted to achieve in allowing students to contribute to a tutorial at a time and place that suited them.</i>	<ul style="list-style-type: none"> <li>● Start development well before the semester begins and preferably have Voicethreads already completed for students to access when they are ready.</li> <li>● Anyone starting to use VoiceThread to have someone who has experience in using it to provide support.</li> <li>● Ideally have some practice in advance of embedding the technology into the course on StudyDesk.</li> <li>● To use VoiceThread effectively, a course requires a cohort who are willing to share information about themselves and/or their learning (and to connect with peers) in a classroom environment. If a cohort is not doing this in traditional forums then changing the technology will not necessarily guarantee a change in students' behaviour or engagement in a course.</li> <li>● Discard as an activity for students to engage asynchronously whilst on placement.</li> <li>● Staff and students were overwhelmed due to the large enrolment numbers and the enormity of the files that present. This strategy has been removed from the Course in S2 2021 (NUR3020)</li> <li>● Keep in ANP8003 to maintain and further enhance VoiceThread utilisation in the course as a source of asynchronous tutorial presentation combined with some synchronous teaching activities.</li> </ul>
	MGT8077  NUR3020 & ANP8003	For students to examine assignment guidelines and assessment criteria and seek feedback on their understanding of assessment requirements from their peers and the Course Examiner (MGT8077)  Flipped classroom model and asynchronous verbal interaction		<p>Not effective in increasing peer-to-peer or peer-to-Course Examiner interaction (MGT8077)</p> <p>Approx. 46% of students did engage in one VoiceThread activity with a marked increase in student overall satisfaction (NUR3020) ANP8003 - engagement of 81% The integration of voice threads has impacted the curiosity of students and increased their engagement in course content. Student: <i>'am not liking the format that this is being presented. It is difficult to go back and review things again as you have to go through so many screens to find it.'</i></p>	

WordPress (ePortfolio)	VIS1010 COU8101	<p>For students to create an emerging artist website. Focus on employability.</p> <p>A space to record, reflect, and display student journals, competencies and knowledge. To solidify their professional identities, enhance their employability, showcase their professional competencies to potential placement providers and employers, and build their digital literacy skills to facilitate the creation of their own business website. The development of program-wide eportfolio resources.</p>	<p><i>Cognitive, Behavioural and Emotional</i> - to think critically about creative identity and how this could be communicated to others in a digital platform. To enhance reflective learning opportunities. <i>Collaborative</i> - shared activities and the eportfolios providing an enhanced means for students to get to know each other. <i>Behavioural and motivational</i> - content that enhances students' professional identity and confidence for employability.</p>	<p>Many students have created highly engaging artist websites. Student survey indicates that 100 percent of respondents either agree or strongly agree that having an artist website would be an asset to their future career and/or professional undertaking. Only 50% of respondents, however, found the technology easy to engage with.</p> <p>60 students have expressed interest in becoming part of the ePortfolio Community of Practice at the program level (COU8101) Use in S1 was not compulsory. Student feedback:  <i>"I think there may be more interest if the ePortfolio was promoted with the focus on real world application."</i>  <i>"Producing a very quick and easy to read fact sheet about its use and benefits."</i>  <i>"Embed course assessments that assist us to develop portfolio and prepare for professional Registration and employment"</i></p>	<ul style="list-style-type: none"> <li>• Students found this technology the hardest to use as it did not rely on previously existing behaviours and is somewhat more complex in its initial set up phases.</li> <li>• It is recommended that additional live classes (both face-to-face and Zoom) be timetabled at the beginning of the course to allow students to work through the initial set up stages with the support of both teaching staff and relevant support staff.</li> <li>• Provide students with a clear rationale at both program and course levels, outlining the reasons why students should be developing a portfolio, and the value it will bring to them as a counselling professional and addressing employers' expectations.</li> </ul>
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## Key recommendations

The following recommendations apply to educational software purchase and support and ongoing support for innovation at USQ.

### *Educational software purchase and support*

Outcomes from the 2020 TechDem interventions reveal the need for additional software purchase as well as support for academics to enmesh into their courses and learning environments. This includes:

- University-wide purchase of Padlet - strong evidence of the benefits for student engagement and a wide variety of uses shared. Anecdotally this tool is already used widely for student-student, student-content, student-teacher interaction and collaboration, for academic development, and for interaction with those outside of USQ when needed
- Purchase of Mentimeter - this tool was trialled in Sem 1, 2021 and a subsequent report delivered to the Learning and Teaching Environments Working Party recommending purchase of limited licenses for distribution
- Create an edtech portal to support whole university needs in this area that includes a list of tools used for student engagement and within courses, examples of how they are used at USQ, case study material from TechDems and others, and support for others to learn and implement contextually into their learning environments. This includes collaborating with ICT on updating current training programs (e.g. Voicethread) and providing links to additional resources and the TechDem CoP activity

### *Innovation support*

Provide a seamless pathway for academics to participate in new and innovative learning and teaching approaches. This should not be confined to the early adopters of technologies. This could include:

- Continue to build on the Technology Demonstrator model with CoP activities for cross-discipline knowledge sharing and creation
- Develop a mentor-mentee program
- Fund ongoing support through Learning and Teaching Assistants
- Determine clear pathways for scaling an initiative (such as Padlet adoption across disciplines)
- Determine the structure for how we support and acknowledge those who are innovative and improve student engagement, success and learning outcomes using educational technologies
- Look at microcredentialling as a pathway for academic upskilling and acknowledgement of innovative practice

## References

Redmond, P., Heffernan, A., Abawi, L., Brown, A., & Henderson, R. (2018). An online engagement framework for higher education. *Online Learning*, 22(1), 183-204. doi:10.24059/olj.v22i1

# **APPENDIX 1: 2020 Technology Demonstrators Project Reports**

## **ANP5001 - Introduction to Rural and Remote Nursing Practice**

Dr Sharon Rees  
Senior Lecturer (Nursing)  
School of Nursing and Midwifery

**TITLE:** Introducing asynchronous tutorials to an online postgraduate nursing course

**PARTICIPANTS:** 21 postgraduate students

**CONTEXT:** Postgraduate education in nursing faces particular challenges due to Registered Nurses working in diverse areas and their work requiring them to work shift work covering a twenty-four-hour period. This makes synchronous tutorials difficult as the students are unable to attend due to their constantly changing work hours. In addition, nurses undertaking USQ's Rural and Remote specialisation are often working in areas where they have little support in undertaking further study. Social engagement is therefore difficult as the students mostly study alone and at different times of the day/night. The Introduction to Rural and Remote Nursing Practice (ANP5001) course is part of the Graduate Certificate, Graduate Diploma, and Master of Nursing's Rural and Remote specialisation and is taken within the first year of commencing in the programs, so designing coursework to support student retention is also of priority.

### **Aim of the initiative**

The aim of this project was to increase student engagement by way of interacting with course content, the Course Examiner and with other students in the ANP5001 course using VoiceThread as the central intervention to facilitate a series of asynchronous tutorial experiences. This course was redesigned for teaching in Semester 1, 2021. Given student attendance to regular online synchronous tutorials via Zoom is difficult for a cohort of this demographic (as outlined above), the course was redesigned to include two to three asynchronous interactive study group activities as VoiceThreads for students to actively engage with course content, the Course Examiner and fellow students within each of the three course modules throughout the semester, without students needing to attend an online tutorial at a specific time each week.

Each VoiceThread was launched with a short instructional presentation from the Course Examiner to increase teacher presence and build greater rapport with the cohort, encourage student contributions and facilitate in building a community of learners. Student responses could be uploaded as either video, voice or text, and the use of VoiceThread's mobile phone app allowed students to contribute to tutorial activities at any time of the day or night while 'learning on the run', whether that be at work, home or while commuting.

### **Educational Technologies**

VoiceThread was chosen as it had a similar approach to a discussion which is normal in tutorials. In Voice Thread I could pose questions and at times share a link to other materials and then give the students a voice overview of what was required. The students were able to respond in a method they felt comfortable, either in verbal or written form, and view other students' responses.

### **Online engagement framework**

The redesign of this course addressed the following Online Engagement Framework elements and indicators based on Redmond et al (2018):



- Participating in video- and audio-based activities to help students build social engagement by developing relationships within the cohort and developing a sense of belonging as they complete other courses throughout their nursing program.
- Collaborative engagement by encouraging learning as a team with the examiner and students, and also contributing to students' cognitive engagement through critical thinking, integrating ideas, and negotiating decision making.
- Given these students are nursing professionals, this collaborative approach also supported distribution of expertise through the sharing of students' nursing experiences across different communities and contexts.
- Behavioural and emotional engagement was also encouraged as students worked in groups and learned how to interact with each other online, negotiate activities within the group, and support each other.

## **Project approach**

The following three new aspects were introduced to the course design for Semester 1, 2021:

1. Prior to Semester 1, 2021 the course was totally online with the use of forums for some discussion. Through the introduction of tutorials the students received greater input from the Course Examiner.
2. Asynchronous tutorials were introduced using VoiceThread because hosting regular tutorial times would not allow nurses doing shift work equal access.
3. Group activities were included to allow students to experience rural locations other than their own through sharing in the group activities and assignment tasks.

Tutorials were introduced to this course for the first time in Semester 1, 2021. Given postgraduate nurses work shift work, previous experience has shown that it is impossible to organise a time for synchronous (online) tutorials where every student has the opportunity to attend. VoiceThread was introduced to create a series of asynchronous tutorials.

The student cohort of 21 was divided into seven groups to allow the students to meet to undertake the tutorial activities at a time suitable to them. The Examiner posted the tutorial activities via Voicethread and then one student from each group was required to provide their group's feedback to the VoiceThread. The aim of this activity was to build community and encourage students to learn from each other. Students were encouraged to view other students' posts on Voicethread and individual feedback was given to each group from the Course Examiner.

## **Evaluation method**

Four tutorials were added to StudyDesk using voice thread. The lowest percentage of students accessing the VoiceThread was 85%.

Voicethread analytics provided statistics on views of tutorial VoiceThreads and responses posted by students on each of these as well. In results for each included:

- Tutorial 2 - 129 views by 29 users
- Tutorial 3 - 76 views by 20 users
- Tutorial 4 - 66 views by 16 users
- Tutorial 5 - 60 views by 16 users

All students were required to post their group discussions in a tutorial at least once. All 21 students completed this task.

As can be seen by the above numbers, the number of users reduced throughout the semester due to some attrition. In discussing reasons for leaving with those students, they all stated that there were life issues that made them withdraw. It should be noted that all students were postgraduate nurses who are currently working and therefore impacted by the ever changing COVID-19 environment.

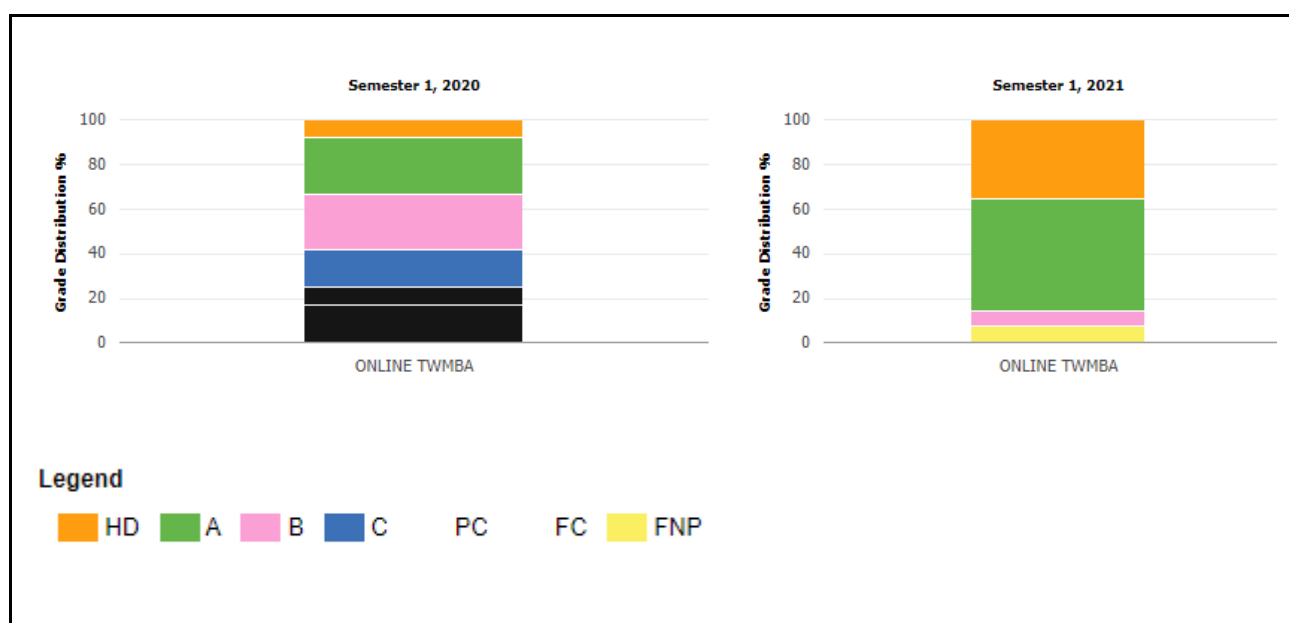
MyOpinion data was also analysed, comparing S1 2021 results with S1 2020 results. Mid Semester MyOpinions for the course were 2.5 in 2021 compared to 4.0 in 2020. Only one comment was received and that expressed a dislike for undertaking group activities. The group activities were not able to be changed due to the final assignment being already set as a group assignment. Interestingly, the end-of-semester MyOpinion improved, being 4.5 for 2021 compared to 3.3 in 2020. Anecdotally, students became more comfortable with the group activities throughout the semester, and ultimately, could see the benefits of the group-based tutorial task by the end of semester.

## Project impact

93% of students viewed every VoiceThread, with 100% of students viewing the Tutorial 2 VoiceThread, which does demonstrate that students were engaging with this new intervention.

Students appeared more knowledgeable in my discussions with them in 2021 and seemed more engaged in using the materials. The grades were reflective of this (as presented below); however from available data, I cannot determine if this was due to the addition of tutorials, or the technology, or both.

Term	Grade	Count	Percentage %		Term	Grade	Count	Percentage %	
Semester 1, 2020	12	HD	1	8.33	Semester 1, 2021	14	HD	5	35.71
		A	3	25.00			A	7	50.00
		B	3	25.00			B	1	7.14
		C	2	16.67			C	0	0.00
		PC	1	8.33			PC	0	0.00
		FC	2	16.67			FC	0	0.00
		FNC	0	0.00			FNC	0	0.00
		FNP	0	0.00			FNP	1	7.14



I developed skills in the use of technology. It was also useful to be in a group with academics from other schools as you could get ideas for future teaching. The whole project gave me good insight into the time demands of introducing new technology into courses.

The technology achieved the aims that I wanted to achieve in allowing students to contribute to a tutorial at a time and place that suited them. Based on feedback from S1 2021, I have been able to improve on this in the following semester to make it more flexible.

## Recommendations

For course integration...

I am now using VoiceThread in all the courses I am running in S2 2021 as it allows students to participate when it suits them and allows all students the same opportunities in relation to the tutorials.

There were benefits in mixing metropolitan students with those working in regional areas. Some students commented to me in private discussions that it was good to work with someone from a different area as they felt they had learnt from that experience.

Although students seemed to be more comfortable with the group work by the end of the course, I will probably remove the group assignment but keep an option to meet with other students in the course rather than mark it compulsory, as this caused some initial stress for students. The following comment by a student in the mid-semester MyOpinion represents this view:

*"As nurses, we should already have the ability to communicate and work alongside our peers effectively. I do not believe that group assignments are a particularly easy or effective form of assessment for an online course..."*

I will also remove the need for students to complete certain tasks each week as this also seems to add extra stress to busy postgraduate students. The tasks will be put up at the beginning of the semester for students to access when they want or are able to. I have done it this way in Semester 2 in a different course with good results as per the following comment in mid-semester MyOpinion:

*"the voicethread and tutorials are very helpful"*

In terms of enhancements in the future, I will ensure all VoiceThreads are made available at the beginning of the semester, in effect creating a 'toolbox of tutorials' which will provide flexibility for students to engage with the asynchronous tutorials at a time and pace that best suits their study patterns.

For the chosen educational technology...

It takes time to prepare the VoiceThreads, so start development well before the semester begins and preferably have them already completed for students to access when they are ready.

We were very well supported with the use of the technology and always had someone to go to if we had issues. I would recommend anyone starting to use VoiceThread to have someone who has experience in using it to provide support.

It would also be good to have some practice in advance of embedding the technology into the course on StudyDesk.

# CIS8500 - Applied Research for Information System Professionals

Dr KC Chan  
School of Business

**TITLE:** Design of course activities for improving behavioural and collaborative engagement for the CIS8500 Applied Research for Information System Professionals course

**PARTICIPANTS:** The CIS8500 cohort in Semester 1, 2021 consisted of 79 postgraduate students with Dr KC Chan as the Course Examiner.

**CONTEXT:** CIS8500 is a core course of the Master of Information Systems program (MISP) and has been delivered as a flipped course with extensive private reading and weekly discussions through workshops and Zoom sessions. However, student engagement in previous semesters has been minimal and most students skip the interactive sessions.

To address this issue, the Course Examiner initiated a revision of the course with significant input from the Program Director and a colleague from learning and teaching. A major task was to redesign the assessments in order to promote teamwork and provide more opportunities for lecturer-to-student and student-to-student interaction. One of the course objectives was modified to explicitly state that students will “Interact and collaborate effectively in teams”. This course objective also aligns with (and is the same as) the renewed MISP program objective 6 “Interact and collaborate effectively in teams”.

As a result, this Tech Dem project involved the introduction of Padlet, Mentimeter and VoiceThread into CIS8500 course-based activities to improve students’ online and collaborative engagement in Semester 1, 2021.

## Aim of the initiative

The Course Examiner selected Mentimeter and Padlet to increase student online engagement and collaboration. It was anticipated that Mentimeter features and functionality would encourage students to start engaging with the class and their lecturer, and get students interested in learning and using new online tools in their studies.

It was anticipated that Padlet features and functionality would:

- provide an easy to use and intuitive online platform for students to collaborate in groups, and develop their teamwork skills;
- meet all the needs for genuine collaboration, such as keeping records, communications, sharing files, references, drafts, project planning, and comments, for each group; and
- provide the lecturer and markers with evidence of the contribution of individual students, and as a consequence, resulting in fairer marking of individuals’ contributions to group work.

In the original project design, the Course Examiner also had planned to trial VoiceThread, as it was anticipated that VoiceThread features and functionality would:

- enable flipped learning;
- offer innovative multimedia, interaction and collaboration features that are not currently available in StudyDesk;
- seamlessly integrate with StudyDesk, offering convenience and potentially excellent user experience;
- allow students to invite participation and collaboration, thus helping students develop their teamwork skill; and
- provide analytics to help the lecturer track and monitor usage (useful for evidence-based decision making).

However, after some initial testing and trialling of VoiceThread in early S1, the Course Examiner decided to withdraw the use of VoiceThread with the CIS8500 cohort for S1.

While the original idea was to set up one VoiceThread slide for each student to promote their research problem and to seek research team partners, the Course Examiner discovered that the time and effort required to set these up was significant because VoiceThread's functionality did not allow students to set up their own VoiceThreads. Thus requiring the Course Examiner to ask students to email their slides to the lecturer, and have the lecturer set the slides up as a VoiceThread presentation for the student. Given this cohort consisted of 97 students, the amount of work involved in having the lecturer create 97 VoiceThreads could not be justified and the Course Examiner decided to use StudyDesk forums for this activity in S1.

## **Educational Technologies**

The interactive polling and quiz platform, Mentimeter, was chosen as it was easy to set up and be embedded into the CIS8500 StudyDesk. Its simple user interface was considered to be a relatively easy platform for students to engage with, and an effective platform for a lecturer in collecting real-time survey, feedback and polling data with a cohort of students.

The collaborative productivity platform, Padlet, was selected to support students undertaking online group work. The Course Examiner was interested in using Padlet as an interactive digital notice board with the functionality of collating all types of information, including text, URLs, pictures, and videos on a group 'wall'. This platform was easy to use for both the lecturer and students. The Course Examiner created a YouTube video explaining how to use Padlet and found all students were able to start using it based on these instructions.

While Voicethread was included in the original proposal of this project, the Course Examiner decided not to use it as stated in Section 2.

## **Online engagement framework**

The use of Mentimeter and Padlet in CIS8500 was designed to enhance engagement for postgraduate online students in several ways based on Redmond et al (2018).

- Cognitive engagement  
To encourage students to think critically, integrate their ideas and justify their decisions (particularly when working in teams), and to support the distribution of expertise between peers.
- Behavioural engagement  
To encourage greater online contributions from students, both individually and when working in their teams.
- Collaborative engagement  
Padlet was used to provide teams with a platform where they could share resources, identify what tasks each team member was working on, and learn with peers.

## **Project approach**

In designing course activities, the goal was to integrate the non-native applications, such as Mentimeter and Padlet into the StudyDesk as seamlessly as possible. Making the user experience within StudyDesk 'as pain free as possible', with easy navigability in locating required resources, links and activities was of high priority for the Course Examiner. The left menu item "Study schedule" on the StudyDesk was highlighted and the lecturer emphasised to students that this should be used as the single point of entry to course content and activities, i.e., it acted as the main course 'gateway' from where all the necessary information could be found.

The screenshots illustrating how Mentimeter and Padlet were integrated into StudyDesk are shown below.

My courses
KC Chan

# Applied Research for Information System Professionals

[Course activity](#)
[Getting started](#)
[Forums](#)
[Assessment](#)
[Study schedule](#)
[Teaching team](#)
[Resources](#)
[Calendar](#)
[Participants](#)
[Hide](#)

## Study schedule

Your Study Schedule will provide you with an overview of CIS8500 at a glance.

Use this schedule to keep up to date with your study, and ensure you don't miss any important deadlines.

If you'd prefer a printed copy, you can print this study schedule from your browser.

Week	Module	Activities/Readings	Assessment	Assessment details
<b>Week 1</b> 22-26 February	Introduction to Research	<a href="#">Readings/Activities</a> <a href="#">Download Lecture Slides</a> <a href="#">Forum Discussions</a> <a href="#">Zoom Recording</a> <a href="#">Your Research Interests?</a>	Ungraded quiz (Ch. 1)	<a href="#">Assessment details</a>
<b>Week 2</b> 1-5 March	Selecting a Research Topic	<a href="#">Readings/Activities</a> <a href="#">Download Lecture Slides</a>	Ungraded quiz (Ch. 2)	<a href="#">Assessment details</a>

[Zoom Session](#)

**Week 8**  
26-30 April

Survey Research

[Readings/Activities](#)  
[Download Lecture Slides](#)  
[Forum Discussions](#)  
[Zoom Session](#)

[Ungraded quiz \(Ch. 5, 8 and 9\)](#)  

- ASST 2 (Research Proposal) (26 April)

**Week 9**  
3-7 May

Experiments

[Readings/Activities](#)  
[Download Lecture Slides](#)  
[Forum Discussions](#)  
[Zoom Session](#)

[Ungraded quiz \(Ch. 10, 14, and 15\)](#)

**Week 10**  
10-14 May

Case Study Research

[Readings/Activities](#)  
[Download Lecture Slides](#)  
[Forum Discussions](#)  
[Zoom Session](#)

[Ungraded quiz \(Ch. 11\)](#)  
[Team Padlets ...](#)

[Course activity](#)
[Getting started](#)
[Forums](#)
[Assessment](#)
[Study schedule](#)
[Teaching team](#)
[Resources](#)
[Calendar](#)
[Participants](#)
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## Assignment 3 Teamwork Padlets

Blockchain research

- Team 1a Collaboration Padlet
- Team 1b Collaboration Padlet
- Team 1c Collaboration Padlet
- Team 1d Collaboration Padlet
- Team 1e Collaboration Padlet

Social media research

- Team 2a Collaboration Padlet
- Team 2b Collaboration Padlet
- Team 2c Collaboration Padlet
- Team 2d Collaboration Padlet

Cybersecurity Research

- Team 3a Collaboration Padlet
- Team 3b Collaboration Padlet
- Team 3c Collaboration Padlet
- Team 3d Collaboration Padlet

Big data Research

- Team 4a Collaboration Padlet

USQ MyOpinion

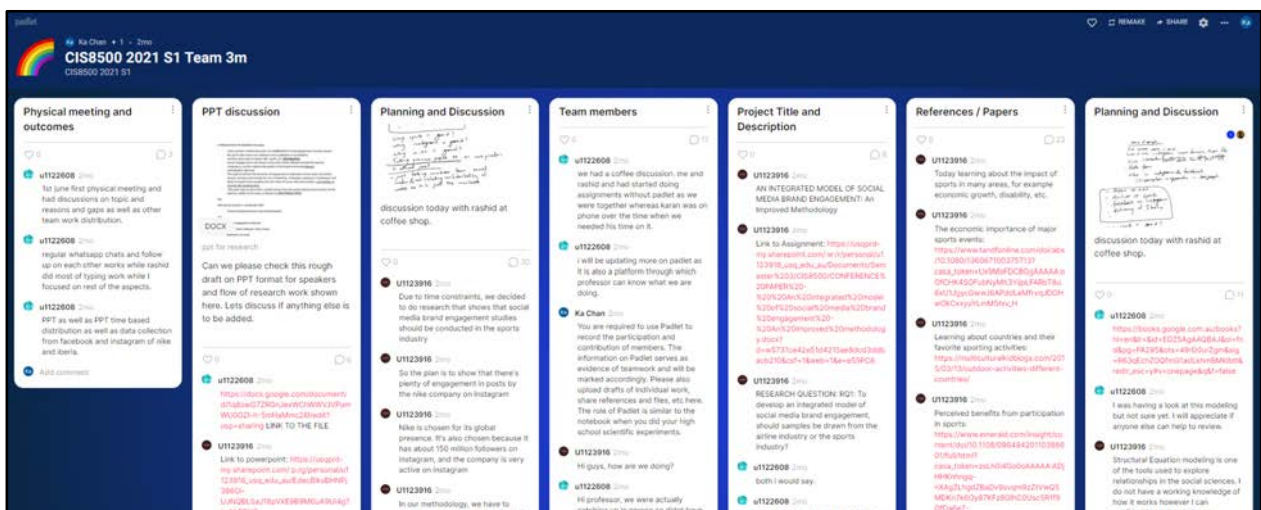
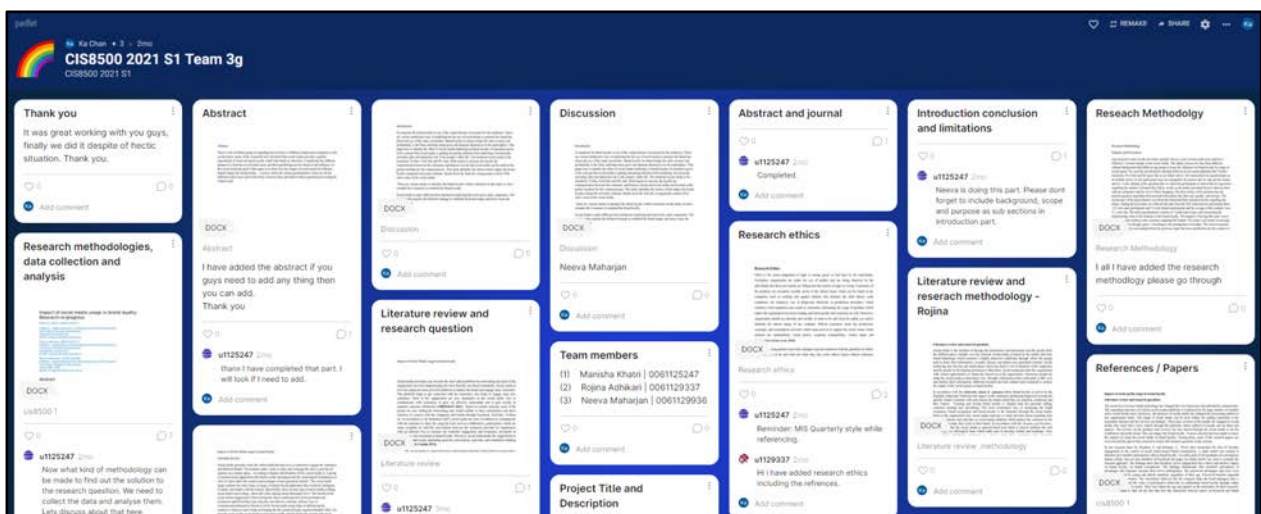
**2021, Semester 2 - Mid-Semester Survey**

As Course Examiner, my approach was designed to enable greater student-to-student engagement, as well as facilitate greater student-to-lecturer engagement. Thus, the two main activities that were introduced to CIS8500 in S1 utilised the features and functionality of Mentimeter and Padlet.

Mentimeter was used at the very beginning of S1 to simply encourage students to contribute online to the cohort; it was included just as a warmup exercise.

Padlet was designed to provide students with access to an “online wall” to support group work activities for students to learn and practice teamwork and develop their soft skills and communication skills. The Padlet was a mandatory task that was marked and used as evidence for students’ genuine contribution to their team. This Padlet activity clearly addresses the course objectives in teamwork and communications, and in research ethics.

The following two screenshots illustrate the use of Padlet to support all aspects of the group task:



## Evaluation method

The evaluation was based on the course survey (MyOpinion) administered by the university. MyOpinion sends out two surveys to students for each course. The first one was conducted around week 3; and the second near the end of semester. The historical survey results of the past three semesters for CIS8500 are summarised below:

1. The original course design that has been used for many years and by previous Course Examiners. In this design there was a final examination and no team assignment (2020 Semester 1), and the overall scores were:

Mid-semester score 3.3, End-semester 3.3 (No team assignment)

2. This was the pre-TechDem course design. In this design a team assignment (writing a conference paper) was introduced to replace the final examination (2020 Semester 2), and the overall scores increased considerably:

Mid-semester 4.2, End-semester 4.4 (Replaced final exam with a team assignment)

3. This was the TechDem course design which integrated Mentimeter and Padlet (2021 Semester 1), where the overall scores remained similar to the previous semester:

Mid-semester 4.0, End-semester 4.4 (Added Mentimeter and Padlet activity)

In addition to MyOpinion results, the Course Examiner analysed the student contributions and comments made to the team Padlets, the results of which are presented as findings in Section 6A.

### **Project impact**

As a result of the S1 experience using Mentimeter and Padlet, the Course Examiner has concluded that:

- A lecturer needs to be flexible with the type of cohort that one is working with, and in this case, it was an onshore overseas cohort of students. Traditionally, these students prefer to and tend to follow orders as online learners rather than taking their own initiative and proactively engaging. Even for a cohort such as this, Padlet did provide a platform for asynchronous interaction between students within their groups and all students did contribute to their team Padlet in some way. In this instance, Padlet was an ideal tool to encourage collaborative engagement.
- Due to very little usage of Mentimeter in the Week 1 activity, it was not possible to evaluate the impact of Mentimeter on students' online engagement.
- The Mentimeter activity was not assessable, thus, there was very little interest by students to complete this task, and data were not collected regarding the user experience of Mentimeter from the student perspective.
- The Padlet activities did have an impact on students' online engagement. Because these were designed to be compulsory, compared to previous course offerings, the Course Examiner observed a significant increase in online engagement of students in the S1 2021 cohort.
- The Course Examiner found Padlet provided authentic evidence of individual students' contribution to group work and their attitude. This was very helpful to the markers of the teamwork assessment, who could mark individual student's contribution to their team in a fairer manner, compared to previous offerings where this was not possible and a marker would allocate a 'blanket mark' for all team members).
- Padlet was worth the time and effort. The Course Examiner has now introduced Padlet in other courses where teamwork is required.
- Based on the S1 experience, the Course Examiner needs to provide students with more scaffolding in terms of how to publish on the Padlet and how to group information more effectively.
- The Padlet activities did have an impact on students' collaborative engagement. In comparison to previous offerings the Course Examiner saw improvements with the S1 cohort. Resulting in students making more of an effort to contribute.
- The user experience of Padlet from the student perspective was not evaluated, but this can be done in future offerings.



- While VoiceThread could be worthy of time and effort for other purposes, for this course design it ended up not being the right fit and it was more effective and efficient to shift the activity back to the Forum. If VT could allow students to set up their own thread, then it would be a good tool to replace forums for certain purposes.
- Overall, from a course design perspective the Course Examiner was happy with how both Mentimeter and Padlet could be integrated into StudyDesk.

In terms of the impact of this project on my skill development, undertaking this TD project certainly broadened my understanding of student engagement, and it helped me think about and plan learning activities from several perspectives such as students' technology capabilities, learning styles of students from different age-groups, and the need for continuous upskilling of teaching staff.

Overall, the Padlet platform was an appropriate choice to support students' online collaboration. Padlet was effective in enabling collaborative engagement, and the increase of student participation and engagement was obvious compared to previous cohorts.

Padlet was also an effective tool in documenting evidence on individual students' contribution to group tasks. Thus, making the marking process much easier for markers and ultimately, much fairer for individual team members. This is noted in the results of the end-of-semester student survey which increased from 4.0 (for the previous offering) to 4.4 for the S1 2021 offering.

## Recommendations

In future offerings of the CIS8500 course, as Course Examiner I have decided to:

- Keep Padlet as an online collaboration tool for team work.
- Discard the use of Voicethread as a technology to facilitate/establish group formation.
- Use Mentimeter for optional tasks, particularly for icebreaking-style activities, for example, "Do you have a technical or business background?" for the Course Examiner and students to gain a better sense of the nature of the cohort's expertise and interest. Also to be used as a quick way to gather information from the cohort, for example asking a question like "Which one of the following topics interests you most: big data, IoT, or cybersecurity".
- Enhance the scaffolding for Padlet activities, for example, provide students with additional tiles or columns on Padlet to support students' generation of content under such tiles as 'journal records' and 'continuous reflection'.
- Alternatively, provide students with a list of suggested tiles or columns as a guide and allow students to use their own creativity in organising content on their Padlet 'wall', rather than provide a standard template.

For any lecturer using VoiceThread, one important practical issue is being able to get students to create their own VoiceThread, instead of having the lecturer having to create a series of VTs for each student in a cohort.

Mentimeter provides tools for surveying and polling students, gathering informal data from students about different topics, and collecting data on students' preferences, needs and concerns throughout the semester.

As a Course Examiner, I highly recommend Padlet to support group tasks and teamwork.

# COU8101 - Counselling Skills and Applications and the Graduate Certificate/Diploma/Master of Counselling

Dr Nancey Hoare, Senior Lecturer  
Dr Nathan Beel, Senior Lecturer and Program Director  
School of Psychology and Counselling

## **TITLE: ePortfolio for a graduate counselling skills course**

**PARTICIPANTS:** There were 109 students enrolled in COU8101 in S1, 2021, and all were invited to participate in this project. The Course Examiner was Dr Elisa Agostinelli.

**CONTEXT:** Include any necessary contextual information. This should include the course information learning and/or teaching problem(s), challenge and/or alignment with the Academic Plan that motivated your participation in 2020 Tech Dem.

Counselling accreditation requirements emphasise that students engage in progressive monitoring and evaluation of their work, on becoming reflective practitioners, engaging in professional/personal development, and having a portfolio of work in placement. In addition, we believe a program-wide portfolio strategy may help enhance employability.

An eportfolio will assist in student's cognitive engagement by enabling them to see the development of their expertise and knowledge over time and to determine what is displayed and to whom, particularly if students use it as a digital CV. It will also provide a platform for social engagement if used as a means of introducing students to one another's virtual space. The eportfolio will assist students in developing agency in that while we expect it will be integrated into coursework, it can be used by the students for more than coursework, in that it can contribute to develop (and articulate) development of a professional identity.

The School's Academic Plan First Year experience lists the culmination of a portfolio of competencies from their studies as an employability goal:

*"Our plan is designed to enhance students' employability, not just through embedding new content throughout our curricula and delivering innovative learning experiences for our students, but through the creation of individual student portfolios. These portfolios will be populated from the students' first semester at USQ, demonstrating how the courses they have completed are contributing to their developing skill set, culminating in an eportfolio that showcases their professional competencies. This activity will not only benefit students by highlighting to prospective employers students' growing skill sets, but this enriched student experience should be augmented across the psychology and counselling disciplines as measured by positive course health check data and University QILT data, specifically in terms of enhanced skill development." (School of Psychology and Counselling Academic Action Vision Plan 2020 Final).*

Our primary motivation for this project was to create program-level resources and staff guidance, as well as piloting the integration of it into a course and exploring the benefits of its inclusion. The Course Examiner for COU8101 was originally Dr Nancey Hoare but this changed to Dr Elisa Agostinelli before Semester 1, 2021 commenced.

## **Aim of the initiative**

Counselling accreditation requirements emphasise that students engage in progressive monitoring and evaluation of their work, on becoming reflective practitioners, engaging in professional/personal development, and having a portfolio of work in placement. With the introduction of a program-wide portfolio strategy to help enhance students' employability (based on the School of Psychology and Counselling's Academic Action Vision Plan 2020), COU8101

Counselling Skills and Applications (a first-year course in the graduate programs) was identified as the logical course to pilot the integration of an eportfolio.

The School of Psychology and Counselling's Academic Plan First Year experience lists the culmination of a portfolio of competencies from their studies as an employability goal. Teaching staff were looking for an online portfolio platform solution to suit counselling students enrolled in the program (who in the past have struggled with technological complexity). In Semester 1, 2021, COU8101 students were invited to trial the creation and maintenance of an eportfolio using the CampusPress platform.

COU8101 students use the counselling lab to practice skills they learn each week, and for Semester 1 they were encouraged to use an eportfolio to reflect on their learnings, their skill application and development, receive feedback from their class colleagues, and to store documentary evidence (e.g., de-identified SRS and other "client" feedback, completed skills checklists, completed assignments). It was anticipated that some students could potentially use the content published in their eportfolio as evidence to support future job applications.

## Educational Technologies

ePortfolios provide a space to record, reflect, and display student journals, competencies and knowledge. This project focused primarily on COU8101 Counselling Skills and Applications students' creation of an eportfolio. The overall aim of this project was to socialise students to eportfolios and build their understanding of the value of using an eportfolio to solidify their professional identities, enhance their employability, showcase their professional competencies to potential placement providers and employers, and build their digital literacy skills to facilitate the creation of their own business website.

The course eportfolio strategy was designed within a secondary goal in mind, that of the development of a program-wide eportfolio. The aim of embedding it into a larger design means that students can familiarise themselves with the eportfolio at the course level and can begin building a larger eportfolio to support record keeping and employability goals. In addition, staff will be able to add reflection and employability tasks to enhance the learning and employability goals that the eportfolio supports.

In preparation for this initiative, the Program Director and Course Examiner designed a counselling portfolio template using CampusPress which provided students with the following menu structure <https://create.usq.edu.au/counselling-portfolio/>:

- a Home page (front page of the student portfolio);
- an About Me menu with links to 3 pages titled 'My approach', 'My special interests' and 'My Curriculum Vitae';
- a My Competencies menu with links to 3 pages titled 'My knowledge', 'My skills' and 'My practice'; and
- A My Learning menu with links to 2 pages titled 'My blog' and 'My assessments'



## Online engagement framework


Redmond et al's (2018) Online Engagement Framework informed the design of the eportfolio initiative to enhance student engagement as per the following elements:

- **Emotional and cognitive engagement** through the creation of an eportfolio to enhance students' integration of learning (e.g. personal learning goals with course learning goals) and support greater self-directed learning throughout the course, and to enhance reflective learning opportunities and facilitate student recognition of learning progress over time and student perception of enhanced self-awareness;
- Increase students' **social engagement** as a result of student and staff comments on students' eportfolio content, and inclusion of professional recommendations and endorsements of student competencies;
- Encourage greater **collaborative engagement** of students through the provision of shared activities and the eportfolios providing an enhanced means for students to get to know each other; and
- **Behavioural and motivational engagement** through the creation of eportfolio content that enhances students' professional identity and confidence for employability, and students recognising the value of an eportfolio in establishing a CV and presenting a rich collection of content that assists in one's employability.

## Project approach

There was a soft launch of eportfolios in COU8101 in S1 with the main goal being to socialise students to the value of eportfolios and introduce them to the idea of developing their own eportfolio. Teaching approaches used throughout the semester included:

- Students received a link to their own eportfolios in Week 5 and were informed of this via a StudyDesk News forum post.
- The Course Examiner posted a series of announcements as illustrated below.

**Online Portfolio Site PDF of slides on portfolio information**  
by Elisa Agostinelli - Wednesday, 17 March 2021, 9:57 AM

Dear Students,

You may have noticed a new section on your COU8101 StudyDesk called "Online Portfolio Site" and a link to the Create@USQ portal <https://create.usq.edu.au>. The USQ is conducting a trial of a new eportfolio platform called Wordpress, with COU8101 selected as one of eight courses to trial this new eportfolio.

In Week 5, you will receive an email with a link to your own eportfolio website, so here is a little more information to get you started.

The USQ and the School of Psychology and Counselling are very focused on helping students to increase their employability. The eportfolio project supports student employability by assisting you to:

- build your professional identity,
- reflect on how your university learning and experiences align with the competencies and training standards required by the Counselling profession,
- extract evidence to demonstrate your knowledge, skills, experiences, and achievements to potential placement providers and/or employers (e.g., very useful for writing job applications and preparing for job interviews),
- identify skills gaps through reviewing and reflecting upon your learning and to formulate plans and strategies for continuing professional development, and
- build your digital literacy skills (e.g., one day you may want to create your own business website).


By using an eportfolio, you will be continually creating a useful product that curates a range of artefacts and showcases you as a professional. The eportfolio not only captures *what* you have learned, but also allows you to reflect on *how* you have learned. Reflective practice is a vitally important part of being a counsellor. Your eportfolio can be used for your reflective practice. Here is a link to a short video about reflective portfolios: <https://create.usq.edu.au/blog/2021/03/03/reflective-portfolios/>

The Create@USQ website has some information and resources, including some short videos:

- What is a portfolio <https://create.usq.edu.au/blog/2021/02/28/what-is-a-portfolio/>
- Why create a portfolio <https://create.usq.edu.au/blog/2021/02/28/why-create-a-portfolio/>

Your eportfolio uses the Counselling eportfolio template <https://create.usq.edu.au/counselling-portfolio/> which has been created especially for counselling students. It contains categories aligned with the ACA and PACFA training standards, so you can start using your eportfolio to provide evidence of how your learning maps onto those standards.

Your use of the eportfolio is optional and not attached to any of your COU8101 course assessments, but we hope that you are willing to try it out.

 [Counselling students presentation.pdf](#)

[Permalink](#) [Edit](#) [Delete](#) [Reply](#)

 **More information about the Portfolio**  
by Elisa Agostinelli - Friday, 2 April 2021, 10:20 AM

- What is a portfolio? <http://create.usq.edu.au/blog/2021/02/28/what-is-a-portfolio/>
- Why create a portfolio? <http://create.usq.edu.au/blog/2021/02/28/why-create-a-portfolio/>
- Reflective portfolios <http://create.usq.edu.au/blog/2021/03/03/reflective-portfolios/>

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- Julie Lindsay (Associate Director, Digital Learning Innovation) and Neil Martin (Digital Pedagogy Curriculum, Digital Learning Innovation) from USQ's Academic Division presented information about the eportfolio to COU8101 students during an online tutorial in Week 6 (31st March 2021).

At a program level, Nathan Beel promoted the idea via a program StudyDesk announcement post, flagging the eportfolio idea in November 2020. In March 2021 Nathan posted again giving advance warning of the eportfolio opportunity, and in the same month, created and posted videos of two counsellors showing their webpage and describing the decisions in content design and the impact of their site. In May 2021, Nathan set up an ePortfolio Community of Practice, which has received more than 40 students requesting to be part of it. Three Zoom meetings were scheduled but only one student came to only one of the meetings.

To spark interest, Nathan has been setting up his own eportfolio and sharing examples of updates with the students (see [Dr Nathan Beel Portfolio – Counselling portfolio of Nathan Beel \(usq.edu.au\)](https://usq.edu.au)). He has also invited students individually for 30 minute meetings to help them begin setting up their own eportfolios and discussing their own aspirations for setting them up. Three out of the five students invited attended, had previous IT knowledge, and in the meeting, they asked questions, set up or showed their pages, and agreed that they would contact at least one other student to meet with them to pass on the knowledge.

The next strategy to be tried is to piggyback online tutorials to invite those already attending to stay for another 15 minutes to discuss and progress their own eportfolios.

The ePortfolio Strategy for the program was geared towards helping students recognise the potential value for their professional development and potential careers. In Semester 2, 2021 Nathan has started adding eportfolio to reflective recommendations in COU8103 study content.

## Evaluation method

Ethics approval was granted to evaluate the use of eportfolios in COU8101 as part of this Technology Demonstrators project (approval H21REA087). Data was collected using an online survey which closed on 18<sup>th</sup> June, 2021. The survey was available to all 109 students enrolled in

COU8101, regardless of whether or not they had used the eportfolio template on CampusPress. The survey asked students whether or not they accessed their eportfolio, their reasons for accessing or not accessing their eportfolio, and, if they did access it, how often they accessed it, how useful they found it, how satisfied they were with it, and how confident they felt using it. 19 students responded to the survey.

### **Project impact**

To date, approximately 60 students have expressed interest in becoming part of the ePortfolio Community of Practice at the program level.

Of the COU8101 S1 cohort, 19 students responded to the online survey (17% response rate). Of these responses, three students indicated that they did access their eportfolios, while 16 students of respondents did not. The main reasons for not accessing the eportfolios included students being unsure of how to use it and unsure of its benefits and purpose, needing to put studies first, being too busy, and its use in S1 was not compulsory.

Students who did not access their eportfolios reported that they might be influenced to use an eportfolio in the future if it was graded as part of a course, if they could use it during the uni breaks, or pre- or post-semester, if they were looking for work, if it was embedded in compulsory tutorials, and if there was more information on how to use it.

Of the three students who accessed their eportfolios, one accessed it once, one accessed it twice and the other three times. Their main reasons for accessing it was to give it a go, to see what it had to offer, and to see if it would be of benefit. The two ratings for usefulness were “slightly useful” and “moderately useful”, with the ratings influenced by not really giving it a chance and not yet having fully explored it.

The satisfaction ratings were “slightly” and “very” satisfied, with the ratings influenced by having barely used it and it seeming like it would be helpful and a good asset. The confidence ratings were “not at all” and “slightly”, with the ratings influenced by not knowing how to use it and not yet having spent much time working out how it worked.

Overall feedback from the COU8101 students focused on making eportfolios “incredibly simple” because (a) students are busy and the extra work might turn people off using it; (b) there needs to be a discussion with students about the real world benefits and applications of an eportfolio, (c) students could see value in embedding the eportfolio in course assessments and coursework, and (d) students needed access to clear and concise instructions about the use of an eportfolio. For example, the following student comments reflect this:

*“I think there may be more interest if the ePortfolio was promoted with the focus on real world application.”*

*“Producing a very quick and easy to read fact sheet about its use and benefits.”*

A number of students suggested that if compulsory tasks were embedded in tutorials and some eportfolio content was assessable (with marks going towards their final grade), then there would be greater uptake of using an eportfolio, as described:

*“Having it as part of a course or even a compulsory online tutorial to allow time to go through it and ask questions in real time.”*

*“Having more information about it inbedded [sic] into compulsory tutorials would have given me the space to explore its benefits”*

*“Embed course assessments that assist us to develop portfolio and prepare for professional Registration and employment”*



Some students did see the value an eportfolio that they can use upon graduation, therefore any portfolio platform that USQ provides must have the functionality of being exportable in a format that can be imported to a compatible platform (e.g., CampusPress is compatible with WordPress):

*"On the surface it appeared to need a lot of time. Between full time study and work, I didn't prioritise this as I was told it wasn't a site we could take with us when we graduate. I had to prioritise my time and since it would only be a practice site I didn't see it as serving me in the short term."*

*"I actually really liked the idea. I could see how this could be useful as a tool to add to across the years I may be studying, so at the end I had a wonderful portfolio to enter the job market with, however I was advised in an info session you can't take the site with you, then it made more sense to work on my own privately. If there was a way to use the site post studies (even if the payment for the site is transferred to the student for example) - sort of an alum perk perhaps?? then I could see great value in the project."*

Regarding the effectiveness of the eportfolio and CampusPress platform, due to low engagement of students in S1, the effectiveness of the technology is uncertain. While it looks like the eportfolio has great potential to be a valuable resource for student development and professional preparation, if students have difficulty engaging with the technology, and/or if it costs too much time and energy for both staff and students to establish and maintain, then its usefulness is questionable. Clearly, the ePortfolio Strategy Team need more time in trialling the introduction of an eportfolio to the program and specific course, and evaluating staff and students' use of the CampusPress platform.

Staff involved in this trial have identified the following barriers or challenges faced during S1, 2021. These included:

- **An intimidating learning curve**  
Nathan and Nancey had initial learning attempts and abandoned these quickly once they ran into problems. Nathan felt confident once he had returned to it with the aid of Neil Martin (Digital Pedagogy Curriculum, Digital Learning Innovation). Once sufficient momentum was gained, Nathan felt it became fairly user friendly.
- **A late start in terms of the timing of the CampusPress pilot**  
Nathan had agreed to the pilot on the understanding that it would be ready to launch before the semester commenced. The late start missed opportunities for both staff and students once the semester workload was underway.
- **The learning bumps**  
Two of the three students who did try to create their eportfolio ran into issues that the teaching staff could not resolve. Once Nathan alerted the CampusPress pilot facilitators these were quickly resolved, however, students may not have the same confidence to seek help.
- **The voluntary nature and time conservation**  
Students are strategic in time allocation and will go with the least costly wins. For example, one student reported, "If I need to do a self-reflection and I can use MSWord or learn how to use WordPress, I will use MSWord. I'm familiar with that." If it was made mandatory, at least in an early course, then this could increase students' willingness to continue using it, once the initial reluctance has been overcome.
- **Staff knowledge**  
Given the goal is to eventually implement a Program-wide eportfolio initiative, the eportfolio strategy will need to be integrated across all courses in the program which, therefore, requires Course Examiners and teaching staff to become familiar with the eportfolio platform, feel competent using it, and see its value in the development of the students.
- **Marking**  
As staff members, we are reluctant to mandate a technology for which we do not know what impact it will have on lecturer's time in marking.

- **Less is more**

The teaching and support team scrambled to make resources available in a timely fashion, but we wonder whether there might have been so much information that it just looked too hard for students. In other words, the challenge is to find the right balance between providing sufficient information that is targeted and concise versus providing too much detail that might turn students off.

## **Recommendations**

As a result of the S1 experience, we have agreed to continue to work with CampusPress as the eportfolio platform for counselling students. We will keep any of the support material created in S1 to continue the roll out for S2, and look forward to further development of the portal at <https://create.usq.edu.au/counselling-post-grad/> which is now providing bespoke support resources specifically designed for USQ's counselling programs.

There are a number of enhancements that need to be made in preparation for S2 and subsequent counselling course offerings, including:

- We need to ensure the URL to the CampusPress @create portal in course StudyDesks is changed from the graphic with an embedded URL used in COU8101 in S1 to a StudyDesk URL link (using text) to ensure that StudyDesk analytics can be collected regarding student views.
- We need to integrate eportfolio creation in first-year, first-semester courses and make this mandatory for all students, and introduce new or revised learning tasks and/or assessments that require the use of the eportfolio in all courses within each postgraduate counselling program.
- We need to explore the possibility of having portfolio pages with no published content not being shown in the menu tabs of the portfolio until a page has been populated with content.
- We need to develop a screenshare of a Course Examiner providing a step-by-step walkthrough for students, showing them how to set up their portfolio as part of an assessment task, including advice on how students are supported in completing a blog post as an assessment task.
- The Program Director and Course Examiner need to be provided with the necessary permissions that allow them to access a student's dashboard to assist with any eportfolio troubleshooting.
- We need to provide students with a clear rationale at both program and course levels, outlining the reasons why students should be developing a portfolio, and the value it will bring to them as a counselling professional and addressing employers' expectations.

The COU8101 project team recommend the following with regard to using the CampusPress platform supporting eportfolios at USQ:

- Develop an evidence-based guide on how to successfully design and implement a program and course-based eportfolio which is informed by existing scholarly literature on eportfolios in higher education (rather than having individual academics reinventing the wheel).
- Continue to develop the infrastructure at USQ to support a CampusPress rollout for both the program and course levels. This includes the provision of professional development for Course Examiners involved in teaching courses that require the integration of portfolio-based learning tasks and assessments, preferably with a 6 month lead time before the commencement of the first semester where a portfolio is to be implemented. Also include as part of this PL scaffolded workshop-style sessions to support Course Examiners in creating their own eportfolio and learning how to populate the eportfolio with content, categories, tags, etc.
- Recommend that USQ adopt the domain of portfolio.usq.edu.au to replace the current create.usq.edu.au domain, which is not representative of the nature of a portfolio creation and support website.
- To effectively integrate a program-based portfolio into curriculum, there needs to be some



kind of mandatory requirement in at least one early course within a program to encourage and support students' creation of an eportfolio. We believe a compulsory assessment will help leverage students' motivation to undertake the steep learning curve required in establishing their portfolio. This also needs to be reinforced throughout an entire program where students are encouraged to build content on their eportfolio as part of learning activities in course modules that address core knowledge and skills within professional standards and USQ's graduate attributes and competencies, and requires students to map these throughout their portfolio pages and blog posts.

- Consider integrating student eportfolios as part of the professional placement program, where it is used as a resume for placement host organisations, and where students record learning journal entries as well as placement hours and tasks undertaken/completed while on placement.
- Program Directors and Course Examiners need to maximise learning analytics data to support the evaluation of a portfolio strategy. Ensure that the link to USQ's portfolio portal in StudyDesk uses a Moodle URL to make sure that all clicks are reported. Course Examiners also need more detailed analytics provided from CampusPress platform.

## **Appendices**

[Online Survey questions](#)

[Hub for Counselling Post Grad Student Portfolios](#)

# EDM5010 - Literacy Learning in the Early Years and EPM4100 - Mathematics in Context

Dr Eseta Tualaulelei

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Dr Seyum Getenet, Senior Lecturer of Mathematics Curriculum and Pedagogy

School of Education

## **TITLE: Promoting student engagement with embedded technologies**

**PARTICIPANTS:** All students in EPM4100 and EDM5010 participated in this technology demonstrator project. EPM4100 is a fourth year math course in the Bachelor of Education (Primary) with 74 students enrolled in 2021 S1. EDM5010 is a first year literacy course in the Masters of Learning and Teaching (Early Childhood) with 126 students in 2021 S1.

**CONTEXT:** Video lectures give students the flexibility to study according to their own schedule and at their own pace (Crook & Schofield, 2017; Thomson, Bridgstock & Willems, 2014), yet StudyDesk reports for education courses show that students are more likely to access lecture notes rather than watch lectures. In EDM5010 2020 S1, some lectures were viewed by as few as 50% of students. Similarly, less than 65% of the students in EPM4100 2020 S1 accessed the lecture recordings. These low percentages meant that students were missing opportunities for **cognitive engagement** (Redmond et al., 2018) through receiving information audio-visually and in detail as lecture notes rarely contain all the necessary details for understanding concepts and ideas in depth. Students also missed opportunities for **collaborative engagement** (Redmond et al., 2018) through hearing from faculty directly and being able to relate to them, and for **behavioural engagement** (Redmond et al., 2018) by developing their academic skills through the widely accepted norm of online lectures. In EDM5010, a student suggested that a weekly quiz would “ensure they [students] are getting the required content” (Student evaluation, 2018 S1). This suggested that students would like more interaction with lectures rather than a one-way transfer of information. USQ’s School of Education offers teacher education programmes that “model the latest teaching approaches and innovative communication technologies to ensure maximum support for students in face-to-face and blended learning modes” (USQ, 2020). The School prides itself on graduating job-ready teachers skilled in assessment and technology-enhanced teaching among other skills. This year, the School has a priority of enhancing graduates’ employability skills and this Tech Dem project contributes to this goal by giving students the opportunity to experience formative assessment with immediate feedback (quizzes) and multiple chances to engage with technologies that they may potentially use in their professional lives (video-embedded quizzes, Padlet and Google docs).

Student engagement is a key factor in effectively completing courses in Initial Teacher Education. However, course analytics and school-level data from our courses show that students are not engaging with key resources. To enhance student engagement, we embedded Padlet into the courses EPM4100 and EDM5010. Ellis (2015) used Padlet to reduce barriers to students contributing to a discussion, and make lessons more interesting and engaging by introducing student-generated content. This study found that using Padlet made lessons more engaging (83%), suggestions posted by other students enhanced students’ experience (79%), and students were more likely to contribute to discussion via Padlet than verbally (42%). We also employed Google collaboration tools (Google docs, sheets, slides) to encourage students to contribute to learning in various ways.

## **Aim of the initiative**

Tutorials are the main interactive tool on StudyDesk but few students access these, limiting their opportunities to socially and collaboratively engage with the course. Online educators therefore need to find ways to increase these dimensions of student engagement. This Tech Dem project trialled Padlet, Google collaborative tools (docs, slides, sheets) and Panopto quizzes to gauge

their impact on student engagement. We anticipated that these technologies would enhance students' collaborative and social engagement in online learning and the study experience. We also expected that using these technologies would help students develop technological skills to support their current studies and for their future profession.

## **Educational Technologies**

Padlet, Google collaborative tools and Panopto quizzes.

### **Online engagement framework**

The Online Engagement Framework (Redmond et al, 2018) has informed the complete integration and use of these technologies in our courses. Across all three technologies, we are gauging impacts on all five dimensions of the framework.

The intent of this project was to increase student engagement in EPM4100 and EDM5010 by giving students the opportunity to engage with Padlet, Google collaborative tools and Panopto which they may potentially use in their professional lives, given the courses require students to develop a deep understanding of key discipline concepts, skills in assessment, and knowledge about using ICT to expand curriculum learning opportunities in the early childhood and primary contexts.

Three key interventions were trialled to enhance student engagement based on Redmond et al's (2018) Online Engagement Framework elements and indicators:

#### **Intervention 1: Padlet for Cognitive and Collaborative Engagement**

We used Padlet to encourage students to think critically as they were provided with real world examples of children's language and literacy development and asked to respond to math tutorial activities. It was believed that students can develop deep discipline understandings when they learn from examples provided by their peers.

<https://techdem.padlet.org/EdTechUSQ/lt08crzgfbsea5xv>

#### **Intervention 2: Panopto Quizzes for Cognitive and Behavioural Engagement**

A series of quizzes were integrated into Panopto video lectures (of 10-15 minute chunks) to increase opportunities for cognitive engagement to help students develop deeper discipline understandings and critical thinking skills, as well as behavioural engagement through instilling in students agency and independence with their learning. The quizzes further helped the interactivity of lectures by incorporating opportunities for formative self-assessment and for students to receive immediate feedback on their learning.

#### **Intervention 3: Google Collaborative Docs for Cognitive, Collaborative and Social Engagement**

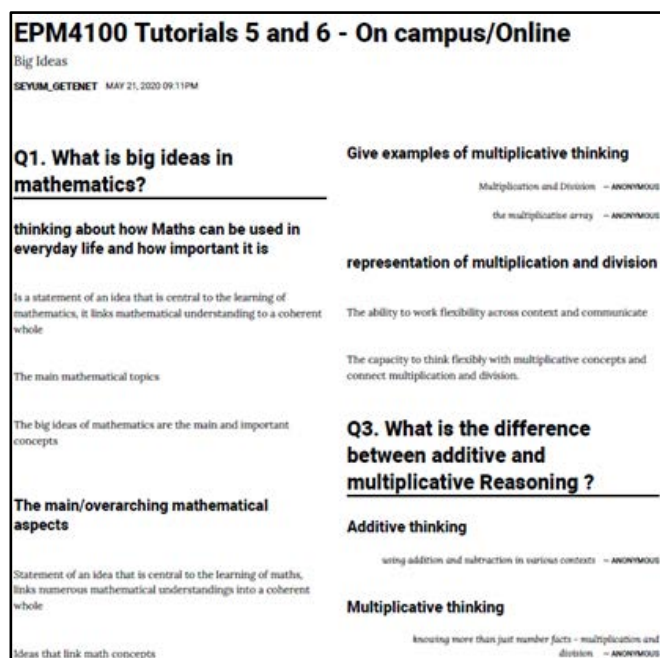
Tutorial activities using Google collaborative tools were used to increase cognitive, collaborative and social engagement within each course. These activities involved students working in small groups to complete tasks such as exercises on Google Sheets, presentations on Google Slides, or group work on Google docs. The Google activities were uploaded alongside the tutorial recordings (a blank and worked version) so that students who did not participate in the tutorial could refer to and contribute to these artefacts asynchronously.

### **Project approach**

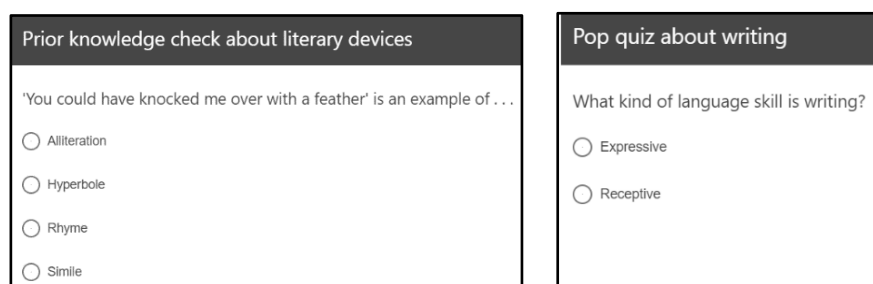
Each technology was integrated seamlessly into StudyDesk activities from tutorials to Moodle lessons to weekly learning activities.

**Padlet** was used in EDM5010 on the course activity page to collect student artefacts related to children's literacy and within a Moodle lesson to collect student reflections on their knowledge of First Nations languages, cultures and histories. Artefacts and ideas were subsequently discussed

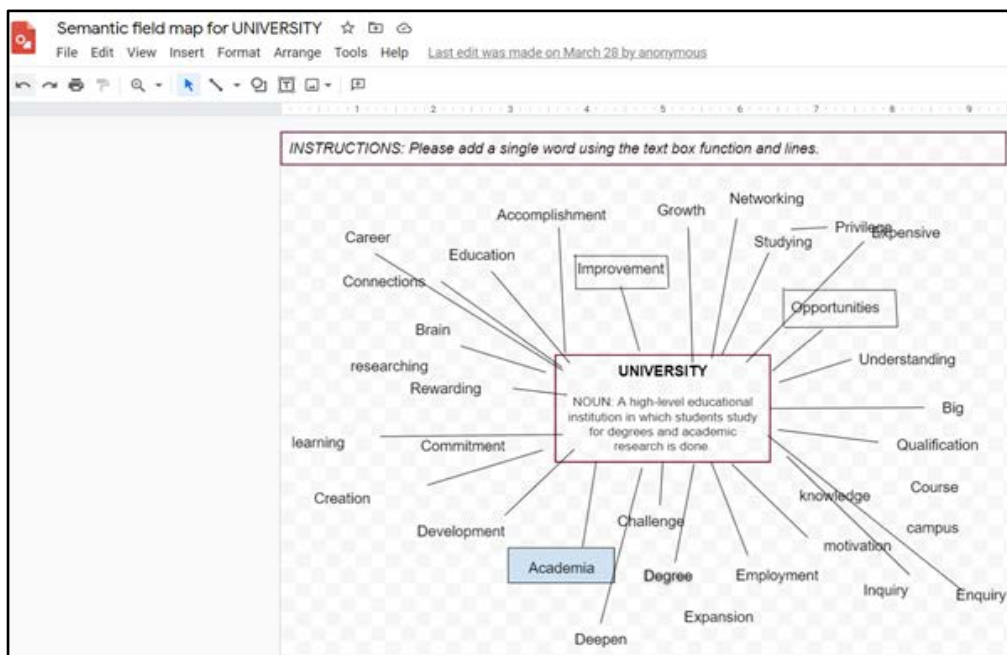
in weekly tutorials so the Padlet became a learning artefact and not just a repository. In EPM4100, Padlet was used to gather student feedback anonymously throughout the course and as a forum for students to ask questions or comment on what they were learning. It facilitated communication between online students and on-campus students and students could contribute whenever it suited them, as shown in the screenshot below:



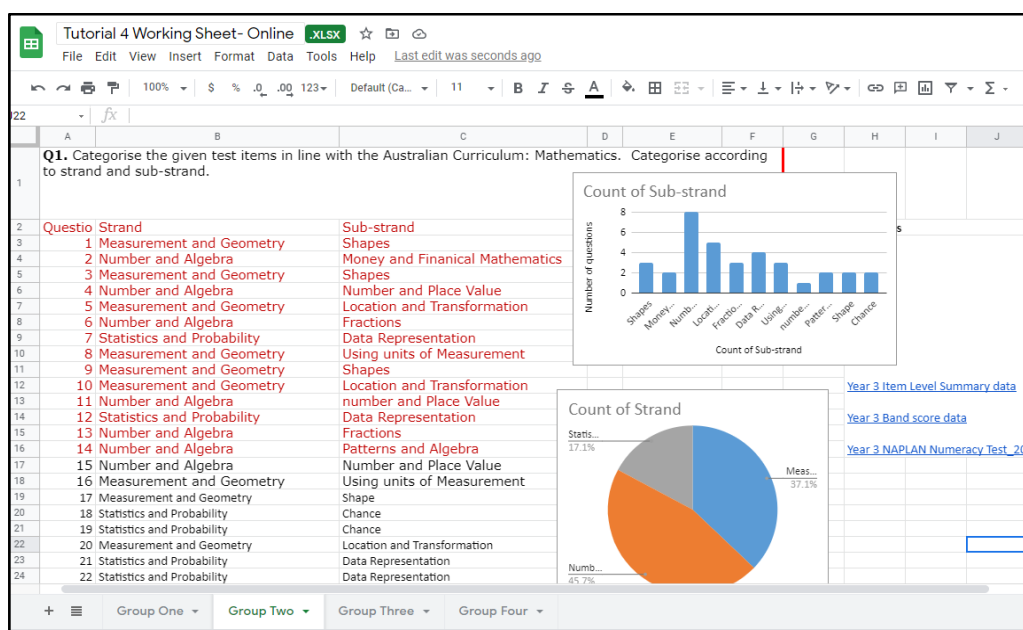
**Panopto quizzes** were used in six lectures in each course, with two at the beginning of the lecture recording, two in the middle and two at the end. The quizzes were made up of three or less questions formatted as true/false, multiple choice, multiple select or fill in the blank. These were enmeshed as part of the lecture viewing experience (the video could not proceed without attempting the quiz) and they offered short, sharp activities that did not distract students too much from the lecture recording.



**Google docs** were used primarily in tutorials but also in Moodle lessons. In EPM4100, for example, tutorial activities were centred around students' group work in Zoom breakout rooms. Activities included math problem-solving and discussions of pedagogy and curriculum. Google docs were similarly used in EDM5010 for group work, but they were also incorporated within Moodle lesson activities for mind-mapping activities as shown in the images below:



Using google docs for asynchronous activity



Using google docs for group activities

None of the technologies were used for compulsory learning tasks or assessment; however, activities were used during tutorials (which are optional for education students). All technologies were also made available for asynchronous participation for students who did not attend the tutorials live.

Our approach was designed to help students view technology as a natural part of their online learning experience. We enmeshed the technologies within teaching and learning. We also promoted and modelled the technologies and assisted students with any access or use issues as they arose. Our approach emphasised the social, emotional and collaborative aspects of the technologies with the idea that cognitive and behavioural engagement would increase as students became more familiar with each other and the technologies.

The following were the suggested learning activities using each technology:

- **Padlet:** Collect student ideas via images and multimedia, and collect student feedback anonymously.
- **Panopto quizzes:** Use at the beginning of lecture recordings to check students' prior knowledge; use in the middle of lecture recordings to provide students with formative feedback; and use at the end of lecture recordings as knowledge checks.
- **Google docs:** Use in tutorials for group work in breakout rooms, and use for mind-mapping or other asynchronous collaborative activities.

## Evaluation method

Students were invited to complete two short questionnaires in Semester 1, 2021 (at the beginning and end of each course). The survey asked students about their views of using Google docs, Panopto quizzes and Padlet in online learning. Students rated each technology using 12 statements about the five dimensions of online learning engagement.

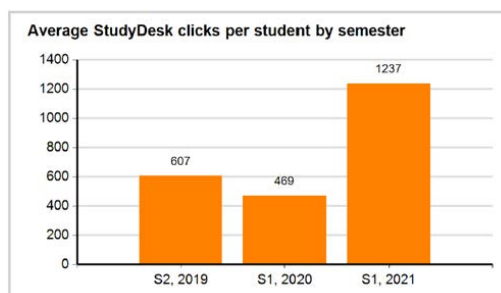
We also collected learning analytics data from StudyDesk and Panopto quiz data.

We had assumed that Google analytics would be available for native Google applications; however, we discovered that Google analytics is only available for external websites.

During our course, we used Padlet, Google docs and Video quizzes. Did these technologies help you learn or did they just get in the way? If you get a chance, please answer our brief survey about *Using interactive technologies*. Your responses will help us improve how we integrate technology into courses here at USQ. <https://forms.gle/Fv4J1CRjdxRRdW2q9>

## Project impact

**Use of educational technologies:** The three technologies presented some challenges regarding scalability across devices or operating systems. While students who participated in tutorials on their mobile phones were able to access and use Google docs, in the post-survey a student commented that, "Padlet was difficult to access during tutorials. I had to use my old computer to access Panopto without having to create an account and search through to find course work relevant. With my new Mac it was a long process". Another student also highlighted that it was, "Important to allow for some instruction/working out how to use the technology time whenever you use a new technology for people who haven't used them before".



## Use of analytics:

- **Padlet** analytics showed that 31 EDM5010 students (18.5%) contributed to Padlet 1 which was on the course activity page, and 16 students (9.5%) contributed to Padlet 2 which was embedded in a Moodle lesson. In EPM4100, 13 students (17.6%) contributed to a Padlet used in tutorials. The low numbers suggest that Padlet, when used as an optional activity, will not necessarily impact behavioural engagement. From USQ's StudyDesk, there was no way to tell how many students had accessed the Padlet.
- **Panopto** quiz results provide a results summary with student-specific and results per question available for download. Like Padlet, we were not able to tell how many students had accessed the quizzes from USQ's StudyDesk. The Panopto analytics shows an indication that students tend to attempt the quizzes when they are located at either the beginning or middle of the video. Table 1 shows an example for this in EPM4100.



Table 1. Quiz location and number of students engaged

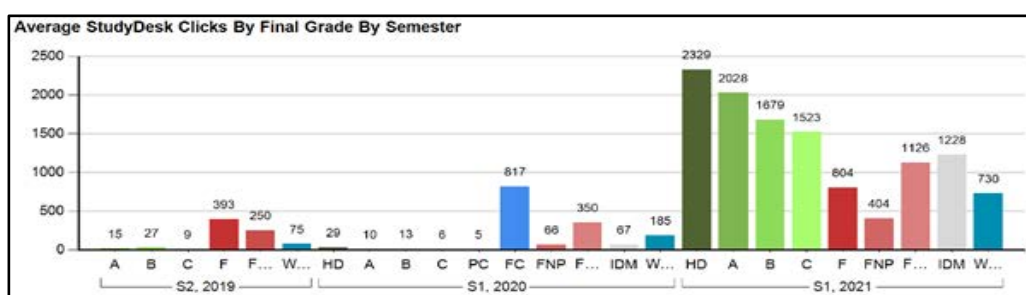
Quiz Location	Location the quiz in the video	Number of students who accessed the quiz
Beginning	00:23	24 (32.4%)
Beginning	00:12	37 (50%)
Middle	05:01	29 (39.2%)
Middle	07:38	22 (29.7%)
End	06:30	20 (27%)
End	05:37	0

### Teaching approaches to enhance interaction:

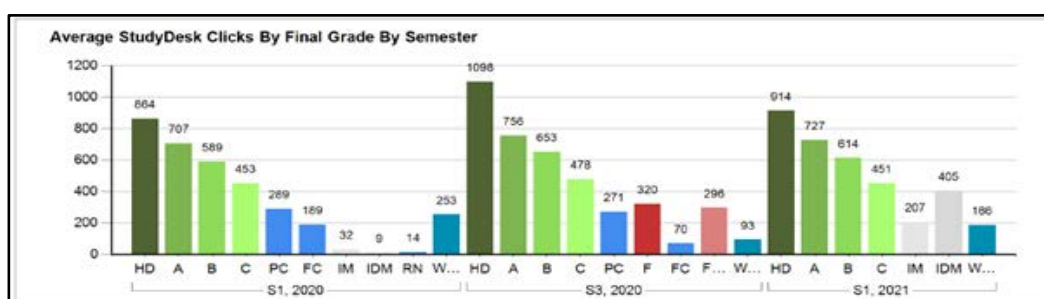
- **Padlet** appears to work better for real-time activities when it is front and centre in students' minds, as shown in EPM4100. It also assists students who do not wish to talk but wish to contribute anonymously. Data from EDM5010 indicate that when used optionally and asynchronously, using Padlet has limited impact on student engagement.
- **Google docs** in combination with Zoom breakout rooms work well for focused small-group activities in recorded tutorials. Clear directions must be provided before the activity, guiding students with how the activity will operate, what they must do and how long the activity will take. Students should also be briefed about what to do if they need assistance given that the lecturer can only be in one Zoom breakout room at any one time.
- **Panopto** quizzes provide quick feedback for students. In one student's words, "I think they were great! Quizzes in particular really helped when going through the coursework." The quizzes also provided good discussion points for students on the forums and in tutorials. Having the quizzes embedded within lectures provided a seamless and low-stakes teaching approach for providing formative feedback.

**Learning outcomes:** USQ analytics show that students who clicked into StudyDesk more often (behavioural engagement) were more likely to succeed in the course. As shown in the images below, there was a clear correlation in both courses between average StudyDesk clicks and grades.

### EDM5010



### EPM4100



Across both surveys, students highlighted the value of Google docs for cognitive engagement (thinking critically, developing deep discipline understandings, using expertise from other courses and developing academic skills). As one student noted, "Lectures were engaging and breakout room exercises were great to enhance my understanding of content". In the pre-survey, the self-reported impacts were less pronounced for social and collaborative engagement. However, anecdotal evidence from our involvement in tutorials showed that using Google docs provided strong support for social and collaborative engagement, as students became more familiar with their online peers and they worked together for the common purpose of problem-solving or discussion.

### **Skill development (e.g. technology use, learning design)**

This Tech Dem project has built our capacities as educators to design curriculum that is 'Digital first'. It helped us experiment with different approaches to using the three technologies and we upskilled to assist students.

### **Application of the online engagement framework**

The project has given us a deeper understanding of Redmond's Online Engagement Framework, particularly the dimensions beyond cognitive and behavioural. While we found little evidence for emotional engagement, technology certainly appeared to have value for social and collaborative engagement.

### **The effectiveness the technologies**

While all three technologies have the potential to enhance student engagement, in our course, Google docs appeared to have the most value for the diverse cohort of learners who study online. The artefacts were accessible to students through direct links on StudyDesk, they were easily manipulated due to their similarity to the Microsoft Office Suite which most students are familiar with, and asynchronous students are able to follow along with tutorials using unworked documents posted alongside the tutorial recording.

### **Student outcomes**

In terms of learning outcomes, no students failed EPM4100 this year compared with the small proportion that failed in 2019 and 2020. Student outcomes for EDM5010 were not comparable to previous years due to the significant increase in the cohort numbers (2021 had 168 students which is 5-10 times more than this course has had over the last 6 years).

### **Recommendations**

In the next iteration of this project:

- Google analytics is not available for Google docs, so observation data will be captured. Clear instructions for Google docs will be provided to promote group work.
- The use of Padlet will be adjusted to promote engagement.
- Panopto quizzes will be further explored in terms of how many questions are most effective, where to position the quizzes, and setting up strategies to access more analytics data.

**Padlet:** Embed in your StudyDesk. It breaks up the standard moodle layout and gives a quick way for students to contribute a variety of multimedia (Moodle does not have such a resource apart from Forums).

**Google collaborative tools:** Give students clear directions and provide worked and unworked examples for all students. Use a variety of activities to engage students.

**Panopto quizzes:** Embed these in lectures so that students are actively learning and not



passively watching (it also slows down the students that are watching the video at faster speeds).

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# EDM8014 - English Literacy and Special Educational Needs

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## **TITLE: Embedding Student Engagement Technologies**

**PARTICIPANTS:** EDM8014 English Literacy and Special Educational Needs is a core course in the newly accredited *Master of Learning and Teaching* (MoLT) program. Sixty postgraduate students commenced the course, with 88% of the student cohort in their final year of study. Though suggested enrolment patterns would recommend the course be undertaken in the final year/semester, 8% of enrolled students in the course were in their very first semester of study when undertaking the course. Dr Susan Carter [Course Examiner] also taught in the course.

## **CONTEXT:**

**Ensuring that online learning experiences enhanced and facilitated learning and engagement and reduced attrition.**

- The MoLT is a Master's degree designed for those who have undertaken a bachelor (or similar qualification) in an area other than education. As such, the course cohort has diverse academic and work background experiences. Students enrolled in the Master of Learning and Teaching (MoLT) program tend to be non-traditional students from diverse vocational and industry backgrounds, ranging from accounting to engineering, science, business, and health. Catering to the learning needs and expectations of students from this diversity of academic backgrounds has previously proven to be challenging. Problematic also is that students have three specialisations (early childhood, primary, and secondary) and thus course specifics need to address each in equal depth in order to enhance employability and student engagement. Students within the course cohort also face many competing demands, including juggling the demands of study commitments, family responsibility and work commitments. These competing demands have a significant impact on student engagement and increase the risk of attrition (McCluskey et al, 2019; Willcoxson et al., 2011). In past iterations of the course, this manifested in terms of minimal to no responses/posts in traditional forum activities and non participation in the traditional StudyDesk surveys and quizzes.
- Participation in the 2020 Tech Dem project was motivated by the intent to promote co-constructed learning that embedded opportunities for interactions with course teaching staff, or other students, to support cognitive engagement, social engagement, and connectedness. It was anticipated that feelings of online isolation could also be reduced using a digital approach, which incorporated interactive elements that promoted opportunities to build a class community and a sense of belonging.
- This aligned with the Student Success and Retention Action Plan's focus on knowing your students.

**Ensuring that the course content and pedagogy provided was clear, motivating and challenging so that online students received the same level of support as would face-to-face students.**

- The emotional, intellectual, and financial investment made by students needs to be respected in online pedagogy.
- Participation in the 2020 Tech Dem project was motivated by the intent to provide quality pedagogy that would maximise engagement of online students and provide positive learning outcomes from their study.
- This aligned with the Academic Plan's focus on innovative learning and teaching.

**Ensuring that MoLT students experience and engage in using digital pedagogical approaches and tools that can be utilised in their future classrooms.**

- As the course targets preservice teachers, the intent was to provide opportunities to use and engage with digital pedagogical approaches and tools that can later be utilised by students, when they themselves become teachers.
- This aligned with the Academic Plan's focus on employability.

## **Aim of the initiative**

### **Aim 1: Ensure that online learning experiences enhance and facilitate learning and engagement and reduce attrition.**

- Technology Demonstrators mentoring provided the opportunity to embed digital technologies that encouraged both students and lecturers to engage in a more interactive and collegial way with both the content and each other. A suite of asynchronous technologies was embedded in the course to promote co-constructed learning, and opportunities for interactions with course teaching staff, or other students. The intent was to support cognitive engagement, social engagement, and connectedness in an endeavour to build a class community, create a sense of belonging for individual students, and to reduce students' feelings of online isolation.

### **Aim 2: Ensure that the course content and pedagogy provided is clear, motivating and challenging so that online students receive the same level of support as would face-to-face students.**

- As part of the newly accredited *Master of Learning and Teaching* program, the course EDM8014 was redesigned. This provided the opportunity, through Tech Dems mentoring, to move the course from a more passive, to active, learning environment, encouraging both students and lecturers to engage in a more interactive and collegial way with both the content and with each other. The quality of pedagogy presented needed to provide positive learning outcomes by embedding opportunities for students to support engagement and connectedness within the cohort.

### **Aim 3: Ensure that MoLT students experience and engage in using digital pedagogical approaches and tools that can be utilised in their future classrooms.**

- As the course was for preservice educators, there was the opportunity to make the use of online technologies an explicit part of the course design, in addition to providing modelling for students on how to use these technologies in their future teaching practice. Online technologies were not just embedded tools to enhance engagement and understanding of course content. Students were alerted as to why and how each online technology was used. Instructional videos and resources were included on how to set up and interact with each, facilitating their use within the student's own teaching practice.

## **Educational Technologies**

This newly designed course was taught for the first time in Semester 1, 2021 and included the enmeshing of five learning technologies to enhance student engagement based on Redmond et al's (2018) online engagement framework elements and indicators.

### ***Intervention 1: Padlet for Social, Cognitive and Collaborative Engagement***

There were two Padlets used within the course: the EDM8014 Course Padlet and the EDM8014 Resources Padlet. These were used by the course lecturers to build community and create a sense of belonging for students through the curation of relevant resources to support course content. They were also used to encourage students to: articulate assumptions and beliefs about inclusion, activate metacognition, gain feedback from others on their learning, establish trust, and develop relationships with peers as a community of learners.

### ***Intervention 2: Flip Grid for Cognitive and Behavioural Engagement***

Used for students to complete learning tasks that encouraged cognitive engagement through critical thinking, developing deep discipline understandings, and justifying decisions. Supported behavioural engagement related to academic skills and agency, as students can receive feedback from both the course examiner and peers.

### ***Intervention 3: Mentimeter for Behavioural and Emotional Engagement***

Used by the Course lecturers to seek student feedback on their learning experience within the first few weeks of the Semester in terms of: developing academic skills; navigating the online learning environment; developing agency as they encounter course content and assessment requirements; as well as helping the course lecturers in supporting student expectations. This feedback was then used as a formative tool by course teaching staff.

### ***Intervention 4: Embedded 360 Video for Cognitive and Emotional Engagement***

Used by Course lecturers to expose students to an immersive learning experience where they experience a Neurologically Diverse Person's 'Meltdown'. This is designed to challenge students to think critically and recognise their own motivations and assumptions, and feel more connected to their peers as part of this learning experience.

### ***Intervention 5: H5P for Cognitive and Behavioural Engagement***

Used by students to undertake a series of short, self-check quiz activities throughout the course to test their understanding of course content, and develop academic and multidisciplinary skills. Here, immediacy of feedback was key to support student learning.

## **Online engagement framework**

The online engagement framework for higher education was used both to guide the selection of intervention objectives and to measure their effectiveness. A more detailed analysis of the intervention (below) will highlight that many elements of the framework were considered. In the main, however, aligning with the aims expressed above, there were two main engagement elements targeted: social engagement (most especially building community) and cognitive engagement (thinking critically and activating metacognition).

Each of the educational technologies provided limitless possibilities within course design. The engagement framework allowed the use of these technologies to be focussed and targeted to the specific intervention objectives. Take for example the course Padlet, 'Let's build our knowledge together,' which was designed specifically to focus on cognitive engagement through targeted reflection after the completion of each module, and to enhance social engagement through the opportunity to read, post, and respond collaboratively.

## **Project approach**

When redesigning the course, learning activities were initially identified that would allow students to achieve the desired course outcomes and address the contextual challenges that impacted on student engagement. Technologies that have the ideal affordances to deliver those learning activities were then selected and embedded in the course content and directly on the StudyDesk. Learning activities were grounded in Constructivism via student-centred active learning (Marek, & Wu, 2020) and enmeshed in the following ways:

### ***Intervention 1: Padlet***

The two Padlets, the EDM8014 Course Padlet and the EDM8014 Resources Padlet, were embedded directly into StudyDesk as tools to: support knowledge development and construction; encourage the aggregation and internalisation of content knowledge; and offer opportunities for

multi-user interface. The Padlets enabled flexible learning, supported autonomy, and supported the active engagement of students in the learning process (Park, 2013).

### ***Intervention 2: Flip Grid***

Two Flip Grid activities were used. Both activities were embedded within the course workbooks.

### ***Intervention 3: Mentimeter***

Mentimeter activities were enmeshed in a number of ways in the course. A Mentimeter scaling activity, used as a check in to gauge how the students were travelling in regards to understanding Assignments Task requirements, was directly embedded into the StudyDesk. This activity provided 'quick' feedback to teaching staff that further information/explanation needed to be provided to students. A range of different types of Mentimeter activities were also embedded throughout each of the Module workbooks. Word clouds, scaling, questions and answer, and short answer questions were utilised, which provided students with ways to demonstrate their knowledge and understanding. Mentimeter was also used during live Zoom tutorial sessions, with short answer and open ended questions used to promote active engagement opportunities in place of passive listening to tutorial discussions. Mentimeter activities from the live Zoom sessions were also embedded in the Zoom session recordings which provided students who had not attended live sessions, with opportunities to engage in the Mentimeter activity up to 2 weeks after the live session. This would not have been possible without the Mentimeter.

### ***Intervention 4: Embedded 360 Video***

One 360 Video was embedded in one of the course workbooks.

### ***Intervention 5: H5P***

Three H5P activities were embedded directly on the StudyDesk where students engaged in a series of short, self-check quiz activities throughout the course to test their understanding of course content.

The approach was designed to promote engagement, build community and create a sense of belonging for students by fostering collaborative learning, where students actively interacted by sharing experiences, clarifying ideas, and evaluating other students' ideas by engaging. This approach encouraged students to establish trust and develop relationships with peers as an active community of learners. This focus on engagement and community was important in the course as it was a Masters course that drew students from diverse academic and professional backgrounds.

More than a method of enhancing engagement, the approach undertaken by this initiative is also linked to employability. The enmeshing of the technologies was designed to model, and explicitly teach their use as part of an online learning environment. In this way, the students could engage with the technology as learners, but also learn how to use them as future teachers.

## **Evaluation method**

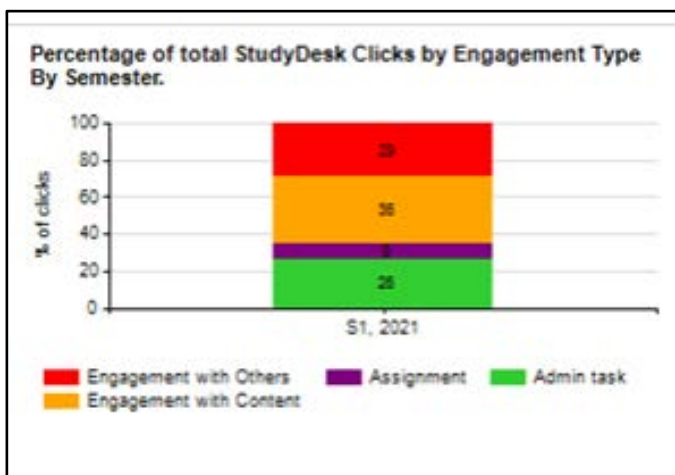
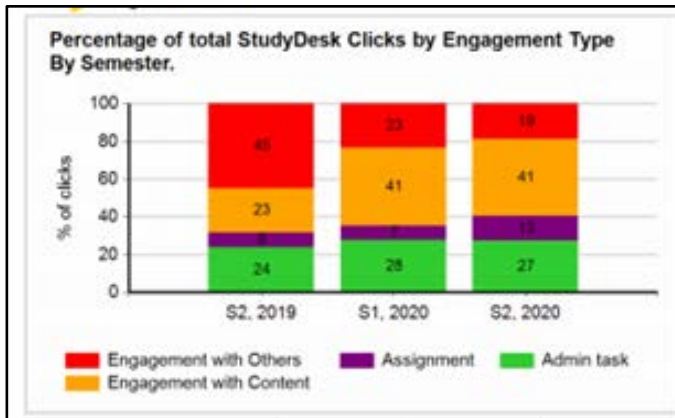
Evaluation of the success of the implementation of the project utilised Redman et al.'s (2018) online engagement framework for higher education, the University of Southern Queensland's Student Feedback Survey Semester 1 results, EDM8014 and EDM8002 StudyDesk Learning analytics, and each Educational Technology's participation analytics to determine the type of engagement, student opinion, engagement patterns, and numbers of engagements.

## **Project impact**

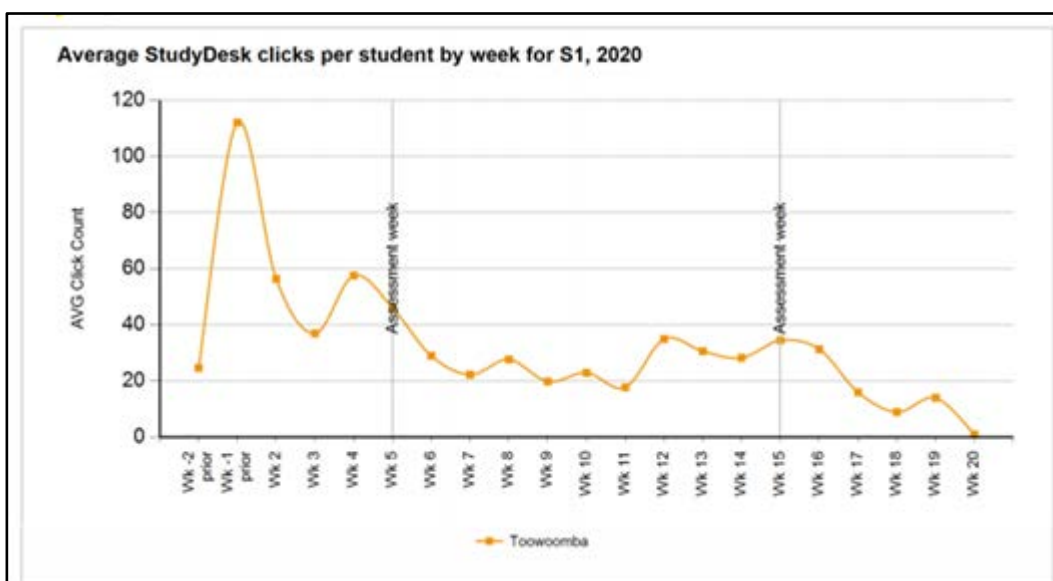
### **Curriculum Design**

- While student engagement in the educational technologies was less than expected, engagement in the Padlet activities [47% and 31% of students] was greater than engagement in Traditional Forum activities [at an average of 30 % of students] in previous course iterations.

- In Semester 1, 2021, student engagement was spread across engagement technologies, content workbooks, videos, and online pre-recorded lectures with associated activities.
- Engagement technologies promoted student engagement with each other more often than in previous iterations of the course. In EDM8014 Semester 1, 2021, students engaged more with each other than in Semester 1 and 2, 2020 where students tended to engage more with content than with each other. (Please see tables below.)



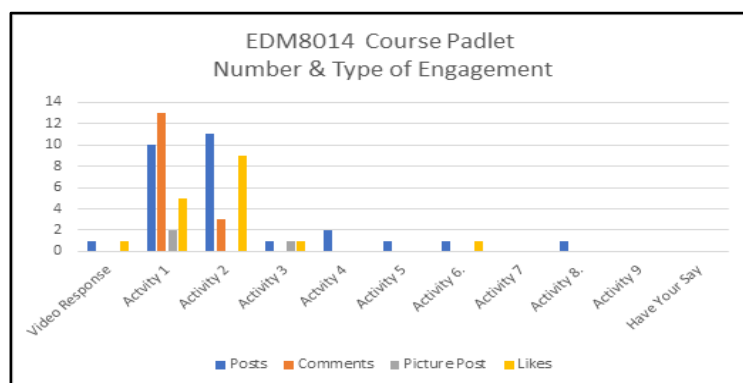
Engagement in educational technologies declined over the course of the semester. However, this was mirrored in overall engagement with the StudyDesk which also declined over the course of the semester. This decline is a typical profile for StudyDesks.



## Use of educational technologies and how they were enmeshed into the course

### Padlets - EDM8014 Course Padlet

- 47% [28] of students engaged in the EDM8014 Course Padlet. There were 64 [in total] engagements [posts, comments and likes] in the EDM8014 Course Padlet. There were 28 student posts in total, 16 student comments in response to students' posts, 3 student picture posts, and 18 likes. This indicates the development of a class community and online promotion of belonging within the group.

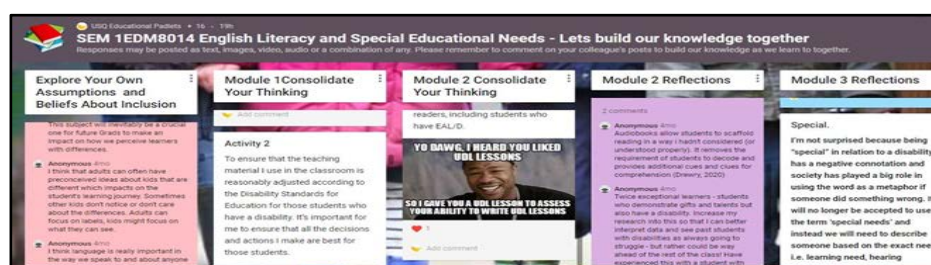


- Activity 1 *Do you think people's perceptions of others play a role in the success of learners with disabilities?* and Activity 2: *What is one key concept from Module 1 that you will include in your professional practice and why?* had the most engagements. Both activities were emotive 'challenge' activities which seemed to connect and resonate with students and thus promoted responses [posts, picture posts or like] to the activities. engagements .
- While there were some posts and likes in Activities 3, 4, 5, 6, and 8, overall engagement in the resource declined as the semester progressed and students undertook professional practice.
- Engagement overall, however, was noteworthy, with the course Padlet receiving 1369 views from 58 visitors, and the Resources Padlet receiving 208 views from 48 visitors.
- Whilst the number of engagements with Padlet was far greater than previous engagements in Traditional Forums, there still appears to be a number of students who are either not confident using Padlet, are not conformable with engaging in collaboration or sharing learning, or would prefer traditional methods of engagement.

### EDM8014 Course Padlet – Course Commencement No Responses 17.2.2021



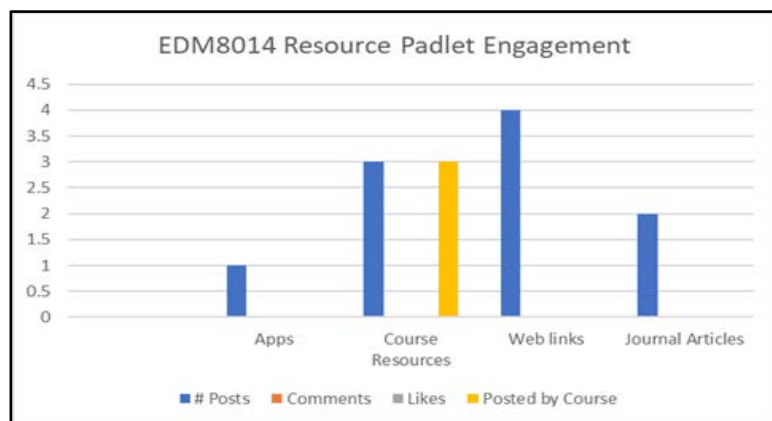
### EDM8014 Course Padlet – Course Completion 1.7.2021





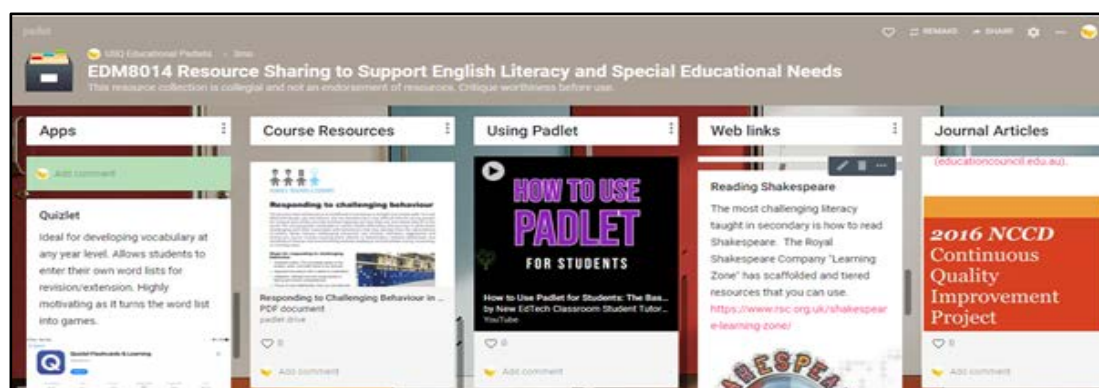
## Padlets - Resources Padlet

- 22% [13] of students engaged in the EDM8014 Resources Padlet. Of the 13 students who engaged in the Resources Padlet, there were 21 views in total, with 9 students viewing once only, 2 students who viewed twice, and 2 students who viewed 3 times over the semester.

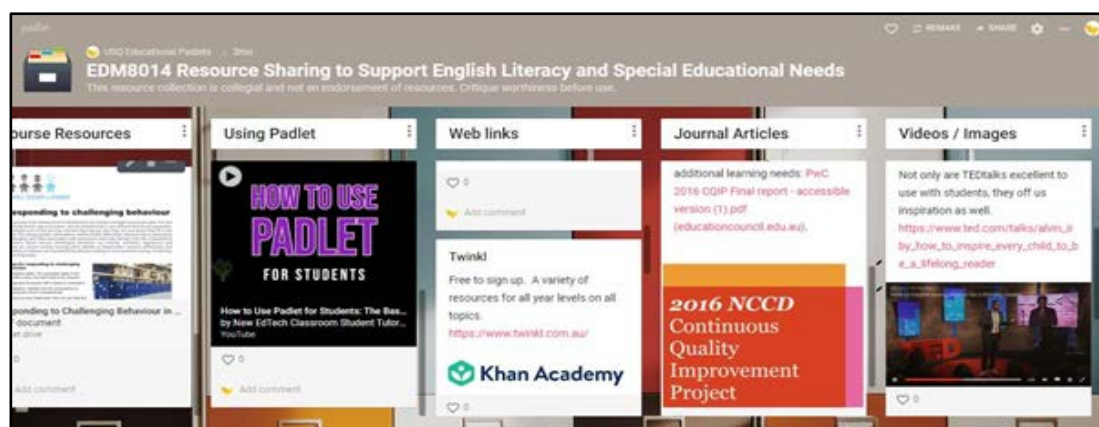


- Of the 13 students who engaged in the Resources Padlet, only four of those students posted in the Padlet, with each only posting once. Of the post types, there were 15 posts, 0 likes and no comments in the EDM8014 Course Padlet.
- This suggests that students were interested in the idea of accessing a resource base, but were not yet far enough into their professional practice to be able to contribute.

## EDM8014 Resources Padlet – Course Commencement No Responses 17.2.2021



## EDM8014 Resources Padlet – Course Completion 1.7.2021

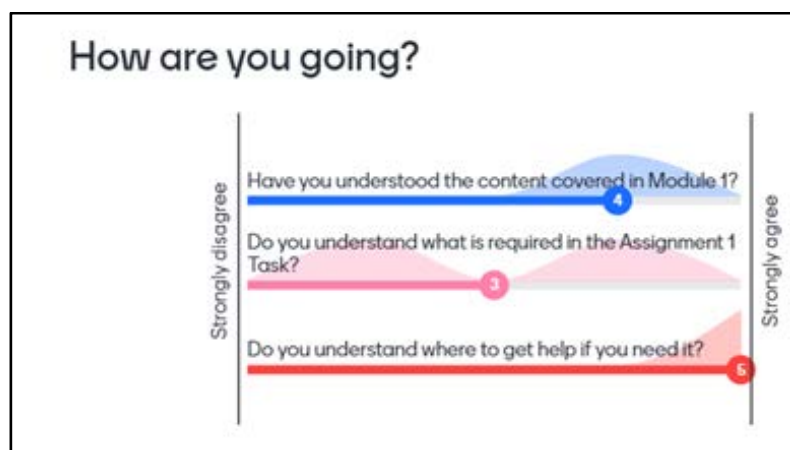
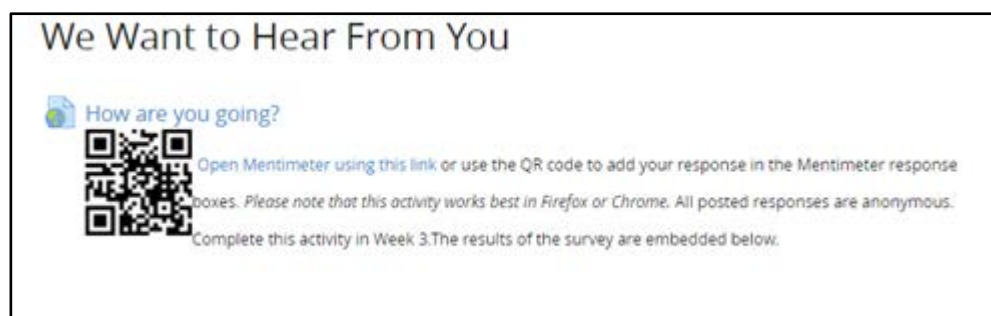




## Mentimeter


- 25 % [15] students accessed/viewed the Mentimeter Activity '*How are you going*' embedded on the StudyDesk, with 12 students posting a response. Of the 76.2% [32] students who accessed the Module 4 workbook, no students completed the Module 4 Mentimeter activity.
- Of the 54% [27] of students who accessed the Module 5 workbook, no students completed the Module 5 activity. Mentimeter activities embedded in workbooks are not accessed by students.
- In the Zoom Tutorial Activity, all 8 students who engaged in the live Zoom session engaged synchronously with each of the 3 Mentimeter questions that were presented in the Zoom session. The links to the Activity were embedded in the Zoom Tutorial recording and the 3 Mentimeter Activities remained open for 3 weeks after the live Zoom session. An additional 7 students of the 13% [8] students who engaged with the Zoom tutorial recording, also engaged in the 4 Mentimeter Activities.
- Easily accessed technologies embedded directly in the StudyDesk or into a Zoom session were accessed more by students than technologies embedded within course Moodle workbooks. Students appear to prefer engaging in technologies that are highly visible and easily and directly accessible on the StudyDesk. In the main, Mentimeter activities only engaged the industrious students willing to try something new.

## Mentimeter Example



## Flip Grid


- While only **4 students posted** in the Module 1 Flip Grid activity *Make an elevator speech*, the posts were viewed **21 times in total**. One student provided an email indicating that Flip Grid was a very good activity that she would use with her future students.

**Make an elevator speech** 



3 responses • 9 views • 0 comments • 0.5 hours of engagement

As an inclusive teacher you may find yourself advocating for the use of inclusive practices or the inclusion of a learner. Put your argument forward by making an elevator speech [no more than 90 seconds] on why inclusion is important?

Join Code: [a133facc](#)



**Responses (3)** [Export Data](#) [Print QR Codes](#)

<input type="checkbox"/>	<input type="checkbox"/>	Name	Date	Comments	Feedback			
<input type="checkbox"/>		Kellie W 3 views	Mar 2, 2021	-	-	Active	Share	Actions
<input type="checkbox"/>		Brooke S 3 views	Mar 1, 2021	-	-	Active	Share	Actions

- No students engaged in the Flip Grid Activities *Module 4 Reactions to the video Meltdown* and *Module 5 What is your reaction on Removed?*
- While a number of students were happy to view the few Flip Grid responses that were posted, very few students posted a video response within the activity. Such behaviour indicates the presence of lurking behaviour in some students in the cohort.
- The non-engagement in later Module technologies, mirrors overall course patterns of student disengagement with course material as the students shift their focus towards assessment, rather than a *disengagement with the technologies themselves*.
- The Flip Grid activity engaged industrious students willing to try something new and students who were comfortable 'lurking' in the activity.


## HP5 Activities

- The self-paced nature of the HP5 activities supported students in that they could engage in the activities in their own time with 50% to 95% of students engaging with the activities [95% in the *Getting Started* activity, 60% in the *People First Language* activity, and 50 % in the *Test Your Knowledge of Legislation* activity]. The activities enabled students to test what they had learnt which promoted active learning engagement.
- The interactive content was embedded directly into the StudyDesk. The activities provided non threatening instant feedback which promoted students to actively participate in their learning by answering a variety of question types related to the content.
- HP5 activities promoted high levels of engagement from a range of students.

## Embedded 360 Video

- 26 [43 %] students viewed the embedded 360 Video in Module 4.
- A large number of students engaged with the 360 Video technology that illustrated a personal experience of a person with ASD from a 360 perspective. This is particularly noteworthy as the video was embedded in a Course Module Workbook later in the course. Typically, there has been a decline in engagement at this time.

The video provides a 360° focus on the overload of cognitions and external inputs for a 16 year old girl with autism. Navigate around the video using the <> toggles in the upper left hand side.



## Project impacts

### Your skill development (e.g. technology use, learning design)

The project increased my knowledge and skills in how to establish and maintain a classroom that incorporates the use of engagement technologies. I commenced the project without having any prior experience, knowledge or skill in how to use or set up Padlet, Mentimeter, Flip Grid or build HP5 activities. As a result of the project, I am now able to effectively use these educational technologies across a number of courses. I have also increased my knowledge and skill in course design, and am now able to plan learning outcomes and identify appropriate engagement technologies to support the achievement of the identified learning outcomes.

### Application of your chosen elements from the online engagement framework

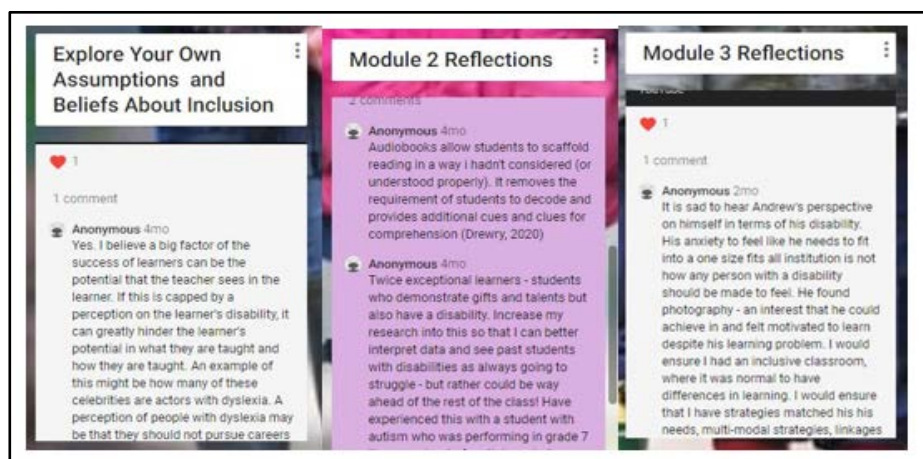
The element of **social engagement** was achieved in terms of building community and cohort connectedness. It was strongly evident in students' engagement in Padlet activities. **Emotional engagement** was also evident in the way that 'likes' were used in Padlet posts which mimicked existing ways of working and online social networking behaviour (Marengo et al., 2021). This type of emotional engagement and behaviour provided a non-threatening way in which to share support for discussion and presentation of ideas. While evidence suggests that only a small number of students in the cohort posted or actively engaged with Padlet, Flip Grid and Mentimeter technologies, a larger number of students viewed the posts that were made, which demonstrated an element of **behavioural engagement** by mirroring the lurking behaviour evident in social media networking behaviour (Mazuro & Rao, 2011). **Cognitive engagement** was evident in the promotion of critical thinking, activation of metacognition, and integration of ideas in students' Padlet posts. **Collaborative engagement** was evident to a lesser degree, with only a small number of participants engaging in collaborative sharing of resources and ideas in the Resources Padlet.

### The effectiveness of the educational technologies used to achieve your project aims

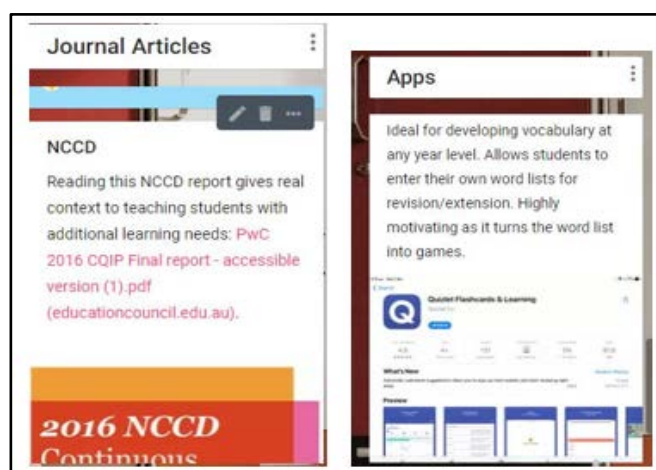
#### Aim 1: Ensuring that online learning experiences enhance and facilitate learning and engagement and reduce attrition.

- While the level of engagement in the educational technologies from the 2021 Semester 1 cohort was not as high as anticipated, there was evidence of engagement in Padlet, Mentimeter and the first Flip Grid activities.
- The HP5 activities were the educational technology that students most engaged with, closely followed by engagement in Padlet activities.
- Despite the use of engagement technologies, 30% [18] students from the Semester 1 2021 cohort withdrew from the course by the time the second assignment was due. (The use of engagement technologies is only one method in a repertoire of strategies targeted at decreasing the risk of disengagement from learning.)
- Student posts in the Course Padlet provided evidence of co-constructed learning which supported cognitive engagement, social engagement, and connectedness between students.  
Student posts in the Course Resources Padlet provided evidence of building a community and a sense of belonging where students shared curated resources and information.

## EDM8014 Course Padlet Examples of Posts



## EDM8014 Resources Padlet Examples of Posts



**Aim 2: Ensure that the course content and pedagogy provided is clear, motivating and challenging so that online students receive the same level of support as would face-to-face students.**

- The engagement technologies Padlet and Mentimeter attracted the most engagement when embedded directly onto the StudyDesk and not embedded into course workbooks or PDF documents. Embedding links to the engagement technologies Flip Grid, Mentimeter, and 360 Video within course workbooks was not a successful strategy as students did not use any of the links within the workbooks to engage with the technologies. An exception to this were HP5 activities with students engaging in activities when embedded within course workbooks and directly onto the StudyDesk. This is likely more reflective with students' engagement with workbooks than the introduced technology.
- Use of Mentimeter in live Zoom tutorial sessions increased active [rather than passive] participation.

**Aim 3: Ensure that MOLT students experience and engage in using digital pedagogical approaches and tools that can be utilised in their future classrooms.**

- Students were alerted as to why and how each online technology was used. Only one student provided feedback that the educational technologies would be useful in future practice. *"Hi. I've uploaded my FLIP GRID elevator speech now (what a great classroom tool!). Regards K."*

## Recommendations

- Padlets would be retained with use expanded to embedding in both live and recorded Zoom sessions/lectures. Padlets provide a means for all students to contribute to discussions even those who may not have attended a synchronous session, whereby they can include their responses at a later time and read the responses provided by others.
- Mentimeter activities would be retained. However, their use would be decreased and only used during live and recorded Zoom sessions/lectures as they can be quite labour intensive to maintain/roll over when embedded on the Study Desk. Mentimeter has great value in recorded Zoom sessions/lectures, as the activities can remain open for a number of weeks after a live session/recorded lecture, thus enabling students who view a recording to also engage in the activities that were presented in synchronous sessions/lectures.
- The use of HP5 activities would be expanded more widely across course content. HP5 activities are easily maintained and offer a wide variety of interactive elements and engagement activities.
- While the Flip Grid activity was valued by the few students who engaged with the technology, it would be discarded as too few students engaged with the technology.
- Padlet is recommended as it is free and is a device agnostic technology which can be used on a range of device types. It can be used both synchronously and asynchronously, and is simple to 'roll over' from semester to semester. A link to a Padlet can be easily embedded on the StudyDesk.
- The use of HP5 activities would be recommended as HP5s can be set up quite easily after learning the techniques for doing so. HP5s offer a wide variety of interactive elements and engagement activity types and are also easy to maintain and 'roll over' from semester to semester once set up.

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# ELE1301 - Computer Engineering

Catherine Hills

School of Mechanical and Electrical Engineering

## **TITLE: Using Padlet to Support Development of a Sense of Belonging in First Year Engineering Students**

**LEAD ACADEMICS:** Catherine Hills, Dr Jason Brown, Matthew Quinton

**PARTICIPANTS:** 163 undergraduate students completed the semester. The cohort is typically early career Engineering Students, with some Information Technology students who typically take this course later in their studies.

**CONTEXT:** A key aim of the First Year Experience project at USQ is to ensure that students feel that they belong (University of Southern Queensland, 2020). There are many aspects to this though they can perhaps be summarised into:

- academic (“I am able to do the work”);
- social (“I have friends here”); and
- alignment with future goals (“I can see how this course will help me in my future career”).

The course under consideration (ELE1301 Computer Engineering) is nominally a first year, first semester course. For many students, it is one of the first courses studied with USQ. Consequently, students may enter the course without a strong sense of belonging in any of the areas identified above.

With a large component of students studying online (around 78% in 2021), early and consistent online engagement with first year students is critical to the development of a student’s sense of belonging.

The goal of this project was to encourage online social engagement as a way to foster a sense of belonging for each student, where students feel part of a trusted and supportive community.

### **Aim of the initiative**

ELE1301 (Computer Engineering) is typically taken as a first year, first semester course by students enrolled in several engineering programs. The course also includes students enrolled in an IT degree. The course has had an average enrolment of 195 students over the past 5 offers. In 2021 around 78% of the students were studying online, with the remainder distributed across Toowoomba and Springfield campuses.

While students interact with each other and the Course Examiner when needed, it has proven difficult to establish a sense of community within the course.

Possible reasons for this include:

- Many students are busy with other commitments;
- Students may not feel confident in themselves and their abilities;
- Students may tend to introversion and see social interaction as unnecessary; and
- The StudyDesk forums do not lend themselves to casual interaction and simple sharing of items as social media does.

ELE1301 was identified as an important course in the First Year Experience for students in the electrical and computer engineering areas. As the course was moving to a digital first format, it was critical to include within the course design a focus on creating and maintaining the sense of community amongst students, and between students and the university.

### **Educational Technologies**

Padlet was identified as a suitable tool to facilitate loosely structured, visually engaging, simple social interactions and sharing with lecturers and between students.

Key reasons for this choice included:

- A simple, flexible interface allowing students (and staff) to easily share photos, videos, web links, documents, etc;
- The provision for anonymous posting where students might feel embarrassed to ask questions;
- Compatibility with Google and Microsoft sign-ons;
- An attractive web interface that renders on large and small screens alike and may be embedded into StudyDesk pages;
- The flexibility of different Padlet templates for different tasks; and
- The ability to link from one Padlet to another.

The use of Padlet in ELE1301 was designed to enhance engagement for first year, first semester students in a number of ways based on Redmond et al's (2018) Online Learning Engagement elements, including:

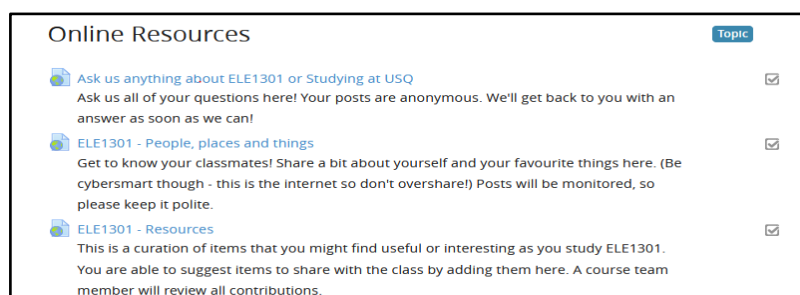
- Using Padlets to support **social engagement**  
To encourage first year, first semester students to develop relationships with their lecturers and students within the cohort and establish trust within the cohort, to provide a socially engaging online experience to contribute to students' sense of belonging as a new student to USQ, to develop relationships and ultimately, build community.
- Using Padlets to support **collaborative engagement**  
To encourage students to engage online with faculty members and ultimately, learn with peers.
- Using Padlets to support **behavioural engagement**  
To model online learning norms including supporting and encouraging one's peers, and provide opportunities for students to develop agency as first year university students.
- Using Padlets to support cognitive engagement  
To encourage students to think critically, justify one's ideas and/or decisions, and support critical reflection (metacognition).
- Using Padlets to support emotional engagement  
To provide students with opportunities to articulate their assumptions and manage their expectations in their first semester and first year of university study, and motivate these students to become more engaged with and about their learning journey as a university student.

## Project approach

Padlets were used in a number of places within the course. It was hoped that the use of Padlets in multiple places would encourage repeated engagement with the site, and enhance students' confidence regarding their skill development, and more importantly, their place within the course, faculty and university communities.

Padlets were introduced to students in two different ways.

The Padlets that were relevant to the entire course were included on the course StudyDesk as general resources (as illustrated below), and introduced in the introductory lecture:





Other Padlets, relevant to the current week's discussion, were introduced first in the lecture using a link and/or a QR code on a PowerPoint slide (shown below), which students were able to scan using their phone from their seat in the lecture theatre:



**1. Getting Started**  
– Warm up!



[https://padlet.com/usq/ELE1301\\_010](https://padlet.com/usq/ELE1301_010)


There were a couple of opportunities for students to engage in low stakes social interaction or ask questions anonymously. For example, the ELE1301 course utilised:

- A *Social Padlet* where students introduced themselves and shared a photo of themselves or of something they love. This Padlet was created with the ability for students to make comments and react to posts.
- An *Ask Anything Padlet* where students were able to anonymously post questions about the course or studying at USQ without fear of judgement or shame.

Each week, a theme was used to gain input, either casual or serious. Some of the casual topics asked about hobbies, or a favourite item within a category, such as favourite computer movie. This was used to make students comfortable with the technology, and student posts were anonymous to encourage greater interaction.


More serious questions included asking what students were most looking forward to in the course, and what they were most worried about. This provided a point of commonality for students as they could identify other students who felt similar to themselves. This also allowed the lecturer to take any appropriate actions and/or discuss these concerns with the group. Contributions were made during each workshop, and the link was also included in the summary of the workshop for other students to engage with asynchronously post-workshop (as illustrated below).


### Workshop Recordings

 [Week 7 Workshop](#)

Welcome back from the mid-semester break! We started out by sharing the best bits of the break.

Then we worked through Learning Activity 7.1 (a) and (b), planning the flow charts and then implementing in TinkerCad - first using blocks and then in code.

 [Best Bits - Mid Semester Break](#)

 [Workshop 7 Notes](#)

## Evaluation method

Statistics for student engagement on the social Padlet was compared with the social forum for previous cohorts.

Data on the number of students who used the links of StudyDesk and/or posted on Padlet was analysed. There was no existing data to compare this to previous cohorts, so this data will form a baseline for comparison with future cohorts.






## Project impact

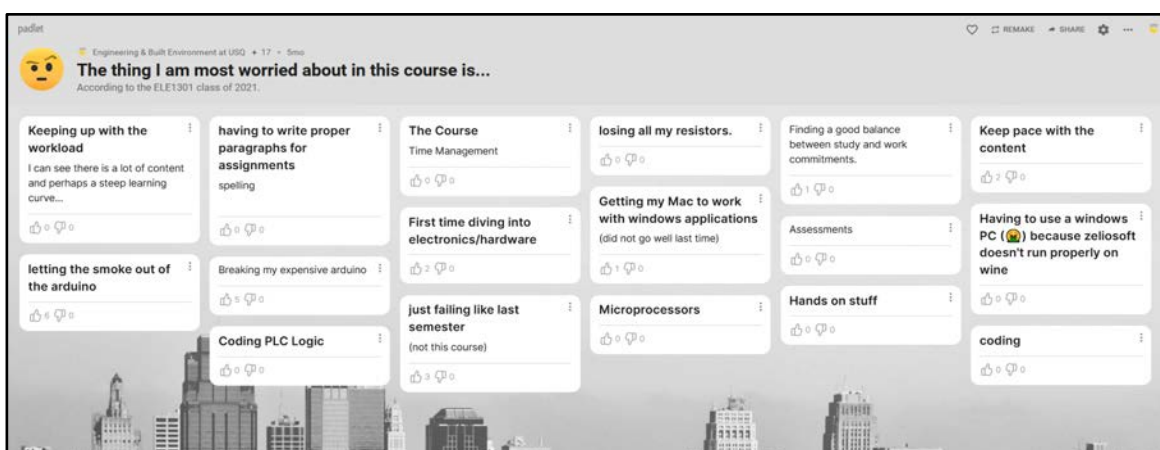
- The social introduction Padlet was not well used. This is possibly because it was one of the first Padlets introduced. In future, this will be preceded by some fun, informal Padlets to develop students' confidence with engaging online with lecturers and others. The social Padlet had 4 posts, which is comparable to the social forum from the previous cohorts, where 4 threads were started. That said, many students did visit the page as illustrated below:

Online Resources			
 Ask us anything about ELE1301 or Studying at USQ	74 views by 55 users	-	Wednesday, 12 May 2021, 6:33 PM (91 days 19 hours)
 ELE1301 - People, places and things	96 views by 63 users	-	Thursday, 5 August 2021, 2:30 PM (6 days 23 hours)
 ELE1301 - Resources	208 views by 125 users	-	Thursday, 5 August 2021, 2:29 PM (6 days 23 hours)

- The use of Padlet for weekly polls were engaged with by just under half the cohort, with some topics being more popular than others. This will inform future topic choice.

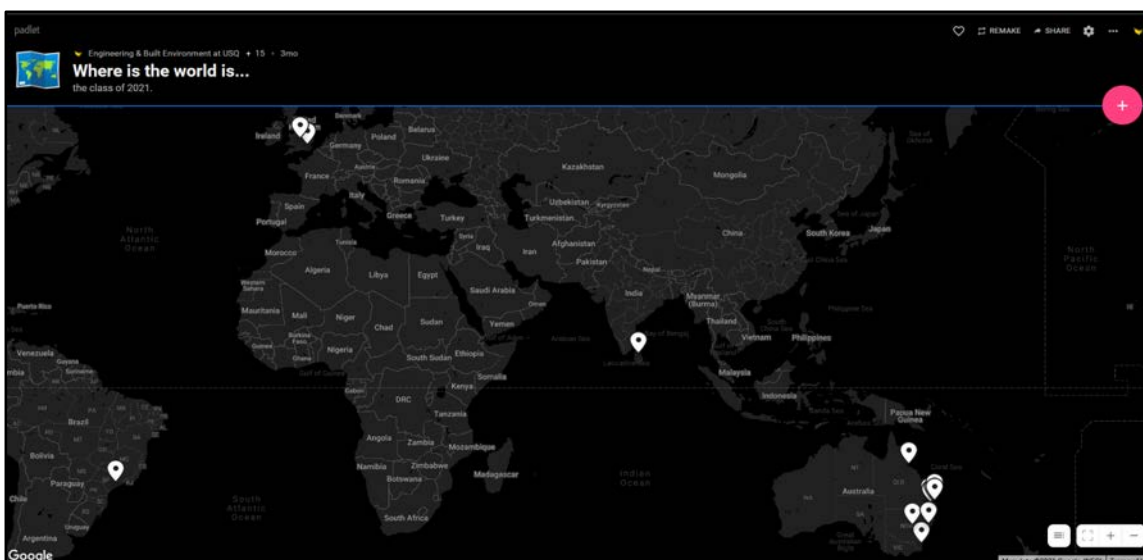
 Worst tech inventions... ever	96 views by 80 users	-	Thursday, 5 August 2021, 2:25 PM (6 days 23 hours)
 The thing I am most looking forward to in this course is...	76 views by 70 users	-	Sunday, 23 May 2021, 9:27 PM (80 days 16 hours)
 The thing I am most worried about in this course is...	69 views by 64 users	-	Sunday, 23 May 2021, 9:27 PM (80 days 16 hours)

- The most useful topics from the Course Examiner's point of view were, "The thing I am most worried about in the course is..." and "The thing I am most looking forward to in this course is...". The below screenshots provide examples of the type of responses provided by students:

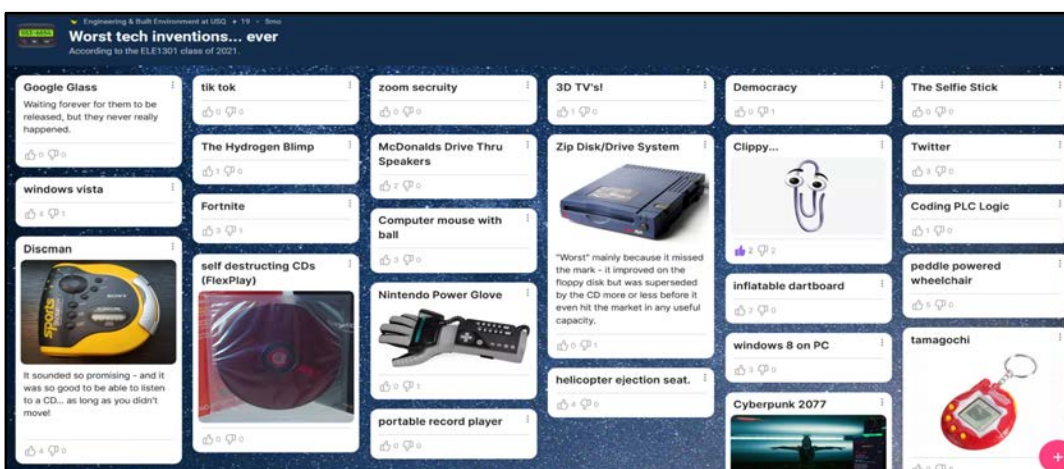


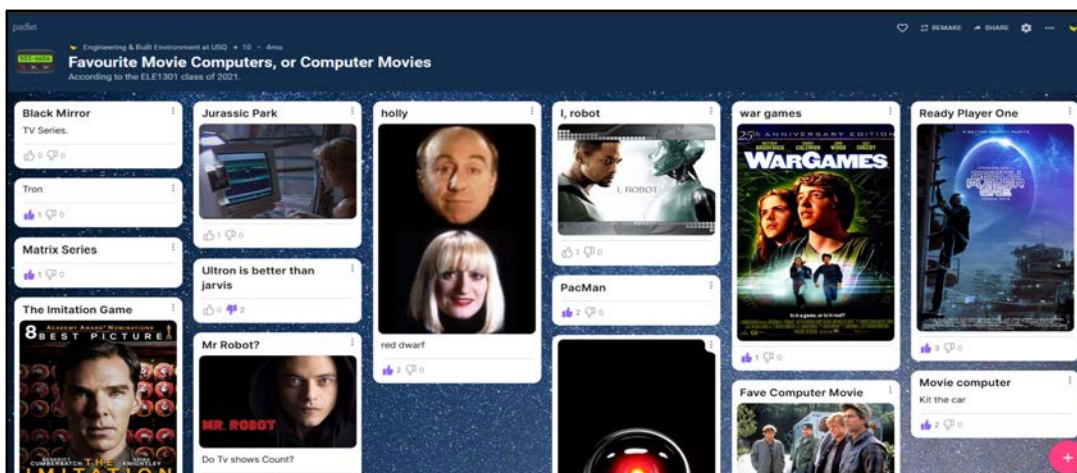


- The “Where in the world is...” Padlet was reasonably well engaged with, and it helped to highlight the distributed nature of our students, as illustrated below.



- A couple of the fun topics that were most popular are presented below, showing the range of responses from students.





- This project found that Padlet is a relatively easy platform to use from both the staff and student perspective. There was minimal skill development needed from a technological point of view.
- The use of informal topics in class supported the **social engagement** of students. Using relevant pop culture topics, such as computer movies, was a way for students to feel part of the group by way of the low stakes actions of anonymously posting a topic, or reacting to another's post. In both synchronous and asynchronous engagement methods, this style of Padlet use also develops **collaborative engagement** between the lecturer and students, as this is essentially a brainstorming session. Some of these topics were technology-related and provided an opportunity for the student (following a pattern modelled by the staff) to provide a rationale for their decision, demonstrating **cognitive engagement** with the topic.
- Transferring the same interface and approach to course-related topics facilitated further student engagement. The Padlets that asked what students were most looking forward to and most worried about in the course enabled students to articulate their expectations and concerns, and the staff to respond, developing the student's **behavioural and emotional engagement** within the course.
- Padlet was a low stake, simple addition to the course which added value with minimal effort and overhead.
- Student outcomes have been difficult to measure but the increase in non-academic engagement is demonstrable.

## Recommendations

The Course Examiner will retain the following for future cohorts:

- All general course Padlets, including the useful resources, social page and ask anything Padlets;
- "The thing I am most worried about in the course is..." and "The thing I am most looking forward to in this course is..." Padlets provided valuable information to the Course Examiner in terms of student readiness and concerns in a first year, first semester course; and
- The Weekly topics Padlets.

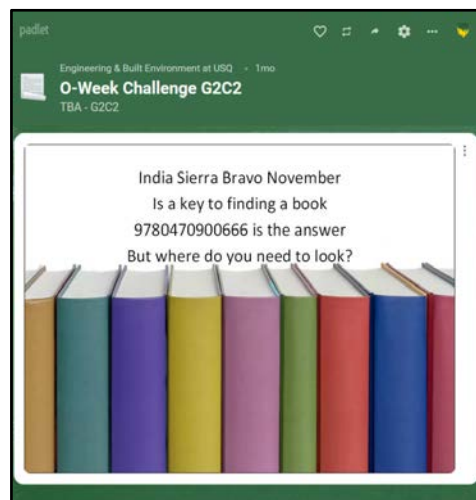
At this point in time, there are no plans to discard any of the Padlets used in S1 2021 for future cohorts.

As a result of the S1 2021 experience, the Course Examiner has identified the following enhancements to be completed in preparation for the next offering of ELE1301:

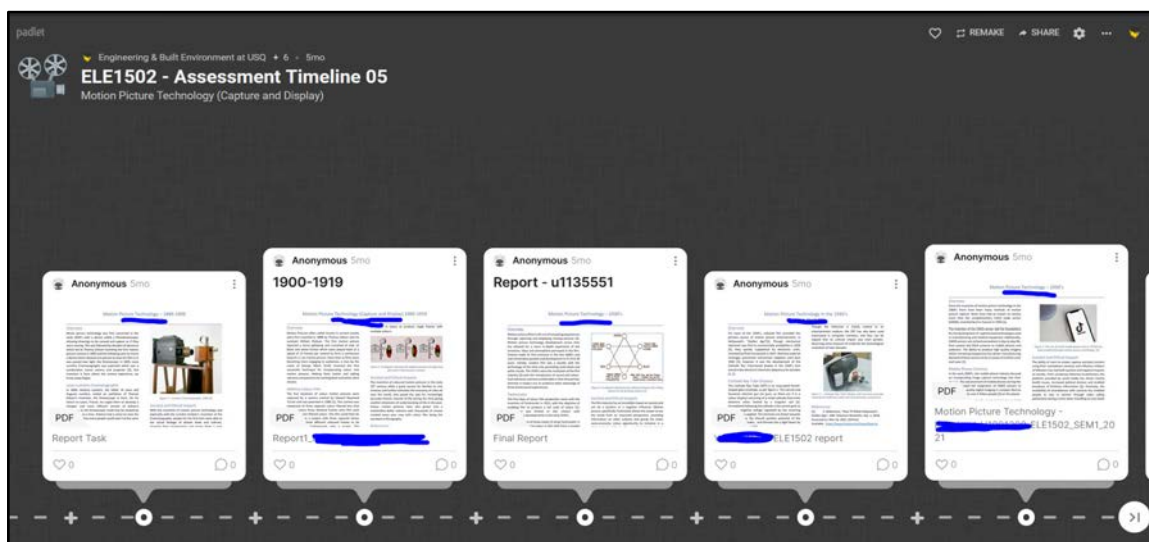
- Improve the scaffolding of the social Padlet to encourage greater student use, and consider returning to some of the Padlets periodically throughout the semester based on students' needs and where the Course Examiner identifies the need for either reinforcement or

encourage students to reflect on their learning journey throughout the semester (metacognition);

- Refer to the fun topics that were more successful this year to inform topic choice for the next offering;
- Include a link to the anonymous “Ask anything” Padlet near the top of the StudyDesk Forum page; and
- Explore the use of a Padlet timeline template to help display ELE1301’s course structure for the semester.
- Padlet has a simple interface, is easy to use and easy to master for both staff and students. The platform works well on desktop, laptop, tablets and phones, making it really flexible with the appearance changing to look attractive on whatever screen area is available.
- Padlet is also really useful when you need to create an instant webpage. For Orientation it was used as part of the “Orientation Challenge”, where students scanned QR codes to get clues for a scavenger hunt around the campus (as illustrated below):



- In S1 2021, the Timeline format was also trialled in the ELE1502 course for sharing student assessments that contributed to a topic timeline. This allowed students to see how their content related to contributions by other students.



- A strength of the Padlet platform is the quality of Padlets as they are presented on students’ mobile phones. It worked well due to the functionality of Padlet content and layout changing to fit the size of screens on the different devices used by students (and staff).



# MGT8077 - Project Risk Management

Dr Bronte van der Hoorn  
Senior Lecturer of Project Management  
School of Business

**TITLE:** An exploration of postgraduate management student engagement

**PARTICIPANTS:** 26 postgraduate students

**CONTEXT:** Project Risk Management (MGT8077) is a core course in the Master of Project Management. This program cohort primarily studies part-time and online. The StudyDesks are well set-up to enable anywhere, anytime learning and there are numerous multimedia resources to support learning. Traditionally, however, engagement in online text-based forums has been low, even when prompted and connections are made to assessment activities. Whilst student satisfaction scores and student grades are at acceptable levels, the lack of communication amongst the cohort and with the Course Examiner was of concern.

To address this concern, the Course Examiner decided to trial the use of some asynchronous tools to encourage greater student-to-student and teacher-to-student interaction. As a core course in the Master of Project Management program, it was believed that MGT8077 was well-suited to pilot the introduction of a selection of learning technologies with this program cohort.

## **Aim of the initiative**

The aim of this project was to increase (meaningful) asynchronous engagement amongst the students and with the Course Examiner in the MGT8077 course using a range of learning technologies. Through this increase in interaction it was hoped there would be increased connectedness and sense of community amongst the students and with the Course Examiner.

## **Educational Technologies**

Padlet and VoiceThread were introduced to increase the opportunities for the students to interact with one another and the Course Examiner regarding the course assessment tasks.

Adobe Spark was introduced to increase the Course Examiner's teaching presence and contribute to feeling connected with the teaching team.

The creation of H5Ps were designed to increase students' engagement with the course materials, provide students with immediate feedback on their progress in the course, and to inform students' choices regarding their learning journey.

## **Online engagement framework**

The redesigned course included four key interventions to enhance student engagement based on Redmond et al's (2018) Online Learning Engagement elements which recognises the multiple ways students can engage in learning:

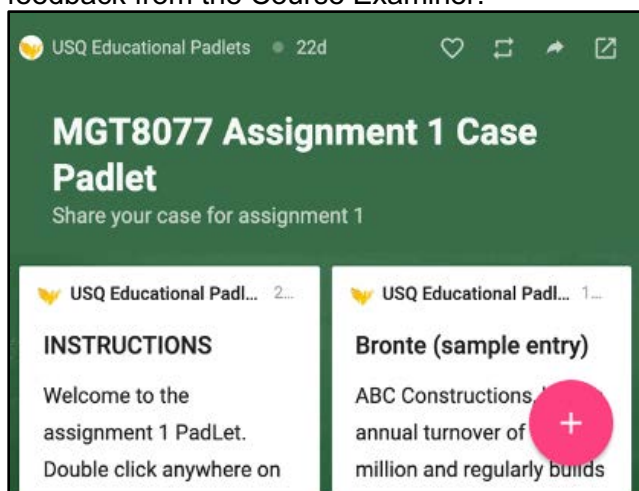
### **Intervention 1: Adobe Spark**

Designed for the Course Examiner to build connection with the students through a series of mini-videos (between 1-2 mins each) to present instructions and guidance in each StudyDesk module, and present weekly wrap-ups on course material, activities and discussion.



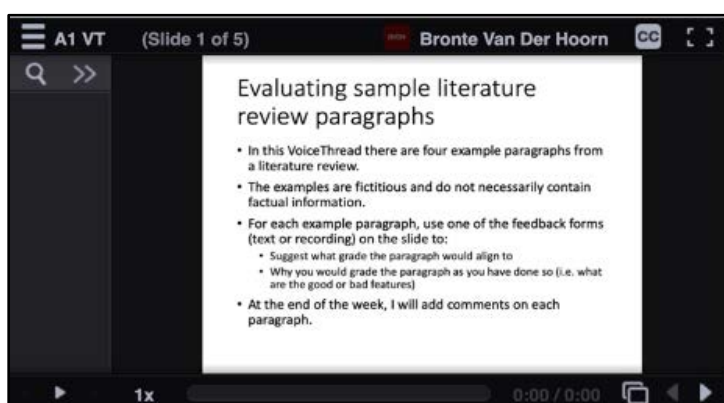
### Intervention 2: Padlet

Designed for students to nominate and discuss their case assignments and receive feedback from the Course Examiner.



### Intervention 3: VoiceThread

Designed for students to examine assignment guidelines and assessment criteria and seek feedback on their understanding of assessment requirements from their peers and the Course Examiner.



### Intervention 4: H5P

Designed for students to undertake a series of short self-check quiz activities throughout the course to test their understanding of course content and assessment, and to determine their progress.

**Self-check quiz: How am I going with the assessment?**


Take this quick self-check quiz (it doesn't count towards your grade!) to confirm that you are on track with your assignment... and building your risk management knowledge and skills!


---

I have a table in which I have about 4 articles per topic that I have classified as being highly relevant to both the assignment topic and my organisational context (if one or two of them are of medium relevance to the topic and/or organisational context, that's ok)

☐ Yes

☐ No





## Project approach

The VoiceThread and Padlet were embedded within a learning journey that scaffolded students' completion of the assessment. For example, each week there were a series of learning activities to help students build their assignment. The VoiceThread and Padlet were activities within this structure.

The Adobe Sparks were embedded as either introductory content, wrap-up content, or as an 'aside' (tip) within the weeks' learning journeys. They provided a break from textual or other interactive content.

The H5Ps were strategically embedded as checkpoints in various weeks. For example, they followed the provision of course content and enabled the student to confirm whether they had sufficient understanding to proceed to the next learning activity.

Recognising that postgraduate students focus on what is assessed, the interventions focused on supporting students' completion of their assignments. Completion of the activities (i.e., making a post on Padlet) were not directly assessed, although the Course Examiner believed that engaging with these technologies would support students in successfully completing their assignment, and allowed the provision of asynchronous formative feedback.

## Evaluation Method

A combination of learning analytics and an end-of-semester survey were used to evaluate the technologies and to understand the reason for student use (or otherwise). The analytics included views and use of the four technologies and the survey asked students to rate the impact of the technologies on aspects of their engagement and learning experience. The students were also surveyed regarding their preferred engagement methods and preferences for online learning.

## Project impact

Padlet and VoiceThread were not effective in increasing peer-to-peer or peer-to-Course Examiner interaction. For example, whilst 13 (of 26) students accessed the Padlet, no students chose to use the opportunity to post about their assignment case and receive feedback from their peers or the Course Examiner. Views of the VoiceThread were also low, with the most views being with the first VoiceThread from 5 students within the cohort. Two students did, however, contribute to the first VoiceThread and these were students who were prompted by the Course Examiner to contribute in order to confirm the technology was working as expected.

The use of Adobe Spark and H5P, which did not require peer-to-peer or peer-to-Course Examiner interaction, was more promising. However, access to these technologies experienced significant drop-off over the course of the semester. For example, the first Adobe Spark was accessed by 12 students, the second by 10 students, but the final Adobe Spark was only accessed by 3 students.

In terms of the H5P quizzes, 20 students used the first four quizzes, but this dropped to 12 students by the sixth quiz, and the last quiz was only accessed by 5 students.

These analytics can be better understood when considering the student survey responses (n=25; with only one student choosing not to submit a response) which revealed their learning preferences. When asked questions relating to whether a StudyDesk should meet all learning needs without, firstly engagement with the Course Examiner, and secondly engagement with their peers, no students disagreed or strongly disagreed. All responses to this question were neutral (3 and 8 respectively) or agree or strongly agree. This suggests that students felt that a StudyDesk should not mandate that they engage with the Course Examiner nor their peers as part of the learning experience. Furthermore, when the students were asked directly about their preferred channels for engagement, traditional methods such as StudyDesk forums, synchronous drop-in sessions and email were nominated. Some student responses to this question indicated that they would prefer not to engage with the Course Examiner (n=3) or their peers (n=9).

While these quantitative insights indicate a large number of this cohort do not seek peer and Course Examiner engagement as a priority, some qualitative feedback also supports these postgraduate students wanting privacy regarding their learning journey. Comments such as,

*"I didn't like the padlet - I felt this required me to share details about my project that I was not willing to share due to project confidentiality. I would rather discuss project concepts and leave my actual project details to assignment" and "I found the padlet to not be as useful as the mini videos, quizzes"* illustrate students making decisions about the appropriateness and/or value of some of the technologies.

Also of interest is the fact that a few students commented on not even being able to 'find' the technologies, thus suggesting that they did not utilise any of the technologies that had been introduced to scaffold students' learning experience throughout the semester. This correlates with the survey question regarding use of the learning journey, where only 7 students indicated that they used the learning journey on a week by week basis, with the remainder not using it at all (i.e., choosing to access resources directly rather than in the prescribed format), or using some of the learning journey and some activities. In summary, this cohort appears to prefer a learning experience which affords choice and autonomy, affords them privacy in their study, and does not mandate or require their interaction (unless they want to) with peers or the Course Examiner.

This Technology Demonstrator project provided an opportunity for confirming anecdotal knowledge of the student cohort which can inform future StudyDesk renewal. It supports the cultivation of evidence-based decision-making as it relates to course design.

The project also offered a supportive opportunity to build skills in the use of technologies and provided a collegial forum to discuss their affordances.

The outcomes of the evaluation have provoked my reflection (as Course Examiner) on students' perceptions of online learning, and how this aligns with or challenges my own teaching practices, as well as the expectations of tertiary institutions.

In conclusion, while these postgraduate management students identified that they enjoyed the multimedia components of MGT8077 that used H5P and Adobe Spark, their preference is for course designs that do not require them to actively engage with either their peers or the Course Examiner (unless they choose to do so).

## **Recommendations**

- The inclusion of Adobe Sparks in other courses to provide quick videos which contextualise, make links to workplace practice or provide useful tips relating to learning
- The inclusion of H5Ps in other courses as a way for students to receive immediate asynchronous feedback on their progress and to make decisions on their learning journey



- VoiceThread and Padlet will not be used as piloted in this course. Padlet may continue to be used in synchronous sessions with students

#### Adobe Spark

- An effective tool for quickly creating mini-videos (that don't require a 'face to camera' record) which can enhance teaching presence.
- Leverage design controls in Adobe to create a consistent look and feel for the videos in a course.

#### Padlet

- Using Padlet in a course requires a cohort who *want* to share information about themselves and/or their learning (and to connect with peers) in a classroom environment. If a cohort is not doing this in traditional forums, this project showed that changing the technology did not guarantee a change in students' online behaviour or greater engagement.

#### H5P

- Consider how you can create questions that are quick to answer but probe for understanding.
- Provide constructive feedback for incorrect answers to enable this tool to be an effective tool that supports formative assessment.

#### VoiceThread

- My recommendation echoes that of Padlet (as above). To use VoiceThread effectively, a course requires a cohort who are willing to share information about themselves and/or their learning (and to connect with peers) in a classroom environment. If a cohort is not doing this in traditional forums then changing the technology will not necessarily guarantee a change in students' behaviour or engagement in a course.

#### General Recommendations

- Ensure you are fully aware of any sign on/authentication requirements related to technologies and how this impacts anonymous versus named contributions.
- Be mindful of the technicalities of StudyDesk analytics, i.e., there may be trade-offs in terms of interactivity versus collection of analytics data.
- Consider surveying cohorts before implementing technologies to appreciate their learning preferences.

# NUR1100 - Introduction to Nursing Praxis

Dr Lisa Beccaria, Senior Lecturer  
Anne Brock, Lecturer  
School of Nursing and Midwifery

**TITLE:** Embedding online technology to build social and emotional engagement with first year nursing students: A pilot study

**PARTICIPANTS:** 424 undergrad students: NUR1100 S1, 2021: 415 and NUR1100 S2, 2021: 328

**CONTEXT:** NUR1100 Introduction to Nursing Praxis in Semester 1, 2021 is a first-year nursing course which provides students with an opportunity to attend an on-campus two day residential school to build foundational clinical skills. One of the challenges in students' preparation is that they typically meet their fellow residential peer group when they attend. Fundamental to the residential school is students' ability to work collaboratively together in relation to patient assessment and care, as well as practising health assessment skills on each other. A new initiative was introduced for Semester 1, 2021 to support the formation of online study groups with each residential school group so that students could interact, get to know each other before residential school, and continue to discuss aspects (such as course content and general information sharing) after the residential school and for the remainder of the semester. FlipGrid was the online technology that was introduced as the platform to support the above new initiative.

This proposed intervention aligned well with the University and School of Nursing and Midwifery priority of enhancing the first-year experience. Many of our students are first-in family at university, and/or come from culturally and linguistically diverse backgrounds, or have no previous work experience in health care, therefore, helping them to be exposed to and feel confident with our online environment (which can be explored in their own time) is seen as a real need in enhancing their learning experience. The course where this intervention took place is a large first-year foundational clinical skills course, typically with enrollments over 500. Students are expected to attend a mandatory clinical simulation residential school as part of this course, where they are able to develop their knowledge and skills in relation to basic physical assessment, e.g. cardiac/respiratory, as well as learn how to take patients vital signs, complete basic nursing documentation, and practice using standard communication techniques for handover. This course is run over Semesters 1 & 2.

## Aim of the initiative

Due to the ongoing impact of COVID and the fact that students may be spending less time together on-campus, this initiative was aimed at trying to build social, emotional and engagement between first-year nursing students. In NUR1100 (Introduction to Nursing Praxis) all students are required to attend a mandatory residential school, which is held over 2 days and involves students practising a range of foundational clinical skills. For students who do not have prior healthcare experience, attending a simulated clinical learning environment which contains high-fidelity mannequins, the need to practice some health skills on each other and also the need to undertake some skills together and be able to communicate health care information can be a challenging anxious before attending the on-campus residential school, and this can affect their engagement and performance. Creating an online opportunity, therefore where students can begin forming a connection with each other, was seen as an important aspect in terms of their clinical skills residential school experience.

Therefore, the aim of this project was to increase NUR1100 students' social, emotional and collaborative engagement with their peers using FlipGrid as the online collaborative platform.

## Educational Technologies

FlipGrid is an asynchronous platform designed to support group-based collaboration and communication online, where students can upload videos to share with other students in their group, and provide each other with feedback or comments about the ideas they present in their videos.

In Semester 1, 2021, 65 FlipGrid groups were created so that each residential school group could have their own FlipGrid page to communicate. Each group was provided with their own secure link to their FlipGrid group space.

In Semester 2, 2021, 29 FlipGrid groups were created for each residential school group.

## Online engagement framework

The use of FlipGrid in NUR1100 was designed to provide each residential school group with a platform that would encourage greater student engagement in a number of ways, based on Redmond et al's (2018) Online Learning Engagement elements, including:

- Using FlipGrid to support **social engagement**  
To encourage those students in each residential school group to develop a relationship with the other students in their group in preparation for participation in the on-campus two day residential school. FlipGrid's capability to support students uploading short videos with a comments feature supporting responses from members within each group was intended to assist in establishing trust and providing a sense of belonging between members of each group, so each group had already built a sense of community and understanding before they met face-to-face for the residential school.
- Using FlipGrid to support **collaborative engagement**  
To encourage students to engage online with their peers in the lead up to their face-to-face residential school, and provide a group space where they could debrief about their res school experience and continue to learn from and collaborate with members of their group throughout the semester.
- Using FlipGrid to support **emotional engagement**  
To provide students with opportunities to articulate their assumptions and manage their expectations about the two-day residential school, to motivate each other in preparation for the res school experience, and help them develop greater confidence in and commitment to learning throughout the semester.

## Project approach

FlipGrid was integrated into the Study Desk via the Getting Started Section. The information for students included a course instruction video (created using Adobe Spark), a link to a general FlipGrid video, a link to a FlipGrid research survey, and a link to the students' unique FlipGrid link to join their fellow residential school group members (as illustrated right).

FlipGrid was also mentioned in tutorial classes at the beginning of semester, and the course meet up leader also encouraged students to use FlipGrid.

FlipGrid was also discussed in General forum posts as illustrated below.

My courses

Lisa Beccaria

### FlipGrid - a way of meeting and connecting with other students

This semester, we are going to be trialling the use of FlipGrid.

[Click here to watch a brief course video on FlipGrid](#)

**What is FlipGrid?**

FlipGrid is a social learning platform that has been used by educators in schools and universities all over the world. As a video platform it enables you to see and hear other students online asynchronously (meaning not live). This means that you can post and then later view others posts in your own time, at a time that is convenient to you. It is free and easy to use. It can be used in many different ways by teachers such as for assessment, reflections, meeting other students, responding to discussion topics. In this semester we have created a FlipGrid link for each residential school class group.

Within each weekly content module you will find a heading for student engagement activity - FlipGrid and you will be able to access the list of residential classes and links to access your class FlipGrid.

**How to Get Started:**

[Watch a getting started student video about FlipGrid](#)

[Video: Everything you need to know about FlipGrid and NUR1100](#)

**How to Get the Most out of FlipGrid:**

- Follow instructions on getting set up
- Be patient with yourself, learning a new technology can take a little bit of time, but you will soon get familiar
- Use it regularly with other students
- Try the topic suggestions provided by the teaching team as prompts

**Advantages of using FlipGrid:**

Students that have used FlipGrid have reported the following:

- It's ease of use
- Feeling like you are having a more life-life conversation with other students rather than just using text
- Feeling more connected to other students
- Being able to use your phone or your laptop
- It can help to build communication skills
- May reduce feelings of isolation studying online
- It can help to have your voice heard - this is important in developing professional communication skills

**FlipGrid Feedback:**

We are extremely interested to hear your feedback about the use of FlipGrid this semester. Please refer to the research project this semester which includes the link to provide quick feedback.

**FlipGrid Research Project:**

Please refer to the following information about the FlipGrid Research Project this semester. This link takes you to more information and how to give feedback.

[FlipGrid Research Project](#)

**Accessing FlipGrid:**

Go to the weekly content resources on the study desk and refer to the student engagement activity. Click on the link below for further instructions on how to access.

[FLIPGRID](#)

My courses

Lisa Beccaria

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[FLIPGRID](#)

**GENERAL COURSE FORUM (ALL STUDENTS) -> Accessing FlipGrid Groups**  
by Lisa Beccaria - Monday, 22 February 2021, 3:39 PM

Hi everyone,

In this week's tutorial, your teacher will be talking about [FlipGrid](#).

Here is a short video that includes basic instructions on how to find more information, and how to get in contact with your fellow residential school students.

[FLIPGRID - HOW to ACCESS](#)

Happy [FlipGrid](#)ding

Kind regards

Lisa

Permalink Edit Delete Reply

[See this post in context](#)

[Help and documentation](#)  
You are logged in as [Lisa Beccaria](#) (Log out)  
[NUR1100\\_2021\\_1](#)

In addition, the residential school teachers were encouraged to use FlipGrid to introduce themselves to the student cohort, thus modelling the use of FlipGrid while trying to build social connections between residential school teachers and student groups.

The FlipGrid activity involved students uploading 1min 30sec videos for eight topics throughout the semester. These included:

Topic 1: “Experimenting with FlipGrid” - this is where students could practice using the platform without needing to share anything specific to the curriculum.

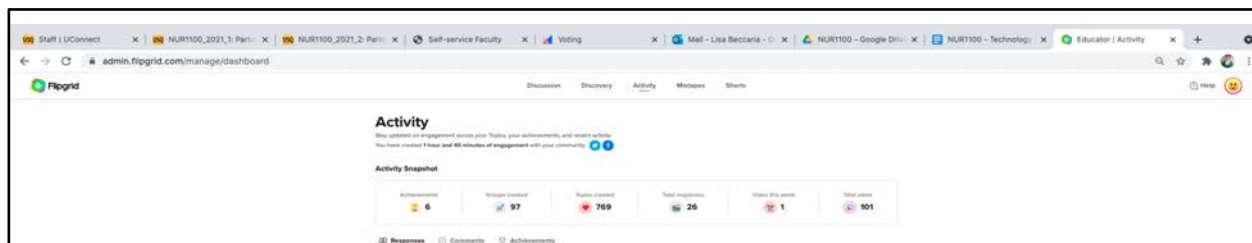
Topic 2: “Hello I am” - this is where students could introduce themselves. They were provided with some prompting questions to consider for their response, including “In your video, share: What your name is and perhaps how you pronounce your name, What is something you would like to share about yourself with others? In what country were you born? What made you decide to study nursing?”

Topics 3 - 8: Suggested things for the group to discuss as ideas, e.g. things in general they wanted to discuss, things they were excited about learning, things they were unsure about, hobbies and interests, and whether they were interested in forming a study group.

Overall, the FlipGrid was designed to: (a) build confidence and self-efficacy in using asynchronous communication tools; (b) build confidence in getting to know other students; and (c) at a cognitive level, consider what they needed to know to help them with their studies.

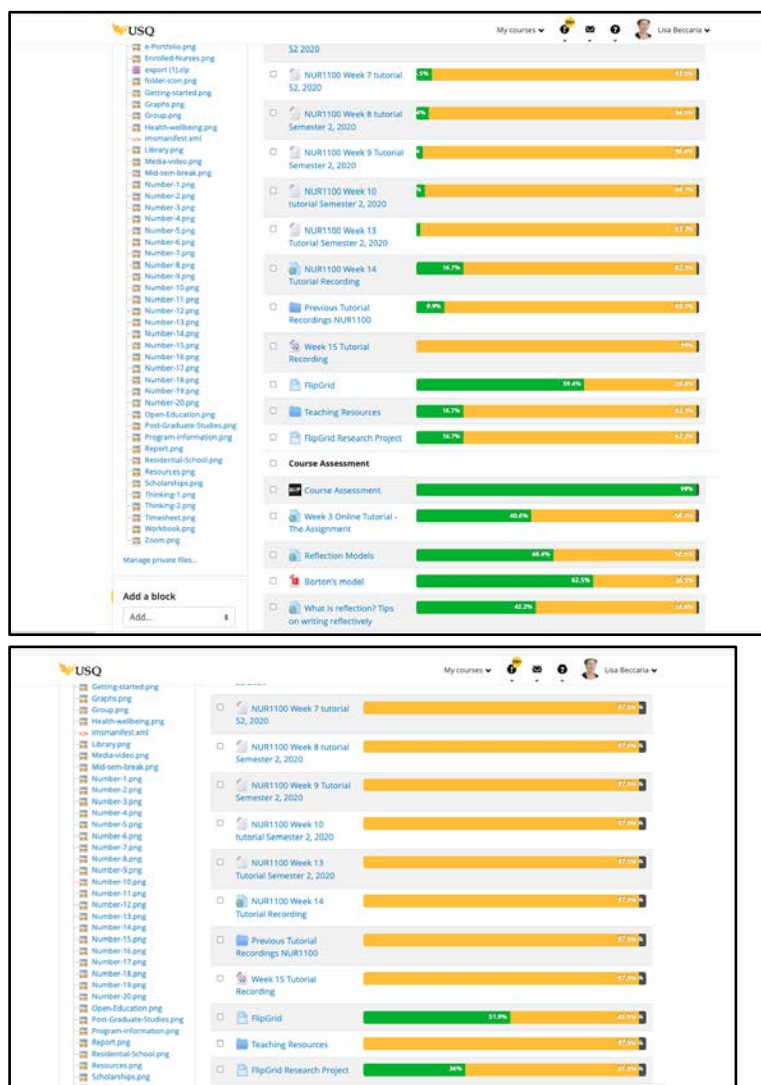
## Evaluation method

FlipGrid’s Analytics (2021) indicates how many separate groups have been created, the number of views, and the number of videos created. The only interactions that the students were using FlipGrid for was to introduce themselves, and other students were viewing their videos (some also responded with a direct comment/reply), while other students just viewed others’ videos. Most views were of the teaching staff’s FlipGrid videos. The following screenshot illustrates FlipGrid’s Activity Snapshot:



USQ StudyDesk analytics relating to the students’ use of learning objects were used to determine how many students accessed each FlipGrid, and to identify any other factors regarding course participation and overall study engagement. The image below indicates that a significant proportion of students clicked onto the FlipGrid information in S1, 2021, which was comparable with some assessment information links (green indicates the students who had accessed the study desk during the semester), 59.4% in total, and 16.7% accessed the FlipGrid Research Project Information.

In comparison to S1, we found in Week 4 in the S2, 2021 course that over half of the students had already accessed the FlipGrid information.



Data from Panapto's analytics showed 84 views of the brief course introductory video (as of 04/08/21).

Data was also collected from attendance at the residential school and course engagement data.

**Flipgrid Survey - Mentimeter** was used as a simple way of gathering data from students about their experience with using FlipGrid throughout S1 2021 (<https://www.menti.com/o9aeg48vdy/0>). In total seven students responded to the survey with two students including words to describe their experience of using FlipGrid, and one student added a comment about how it could be improved, including the ability to add options to reply to a p

**Mentimeter**

Please rate the extent to which you agree with the following statements in relation to using FlipGrid?

Overall it was easy to use

1 Strongly disagree ————— 7 Strongly agree

I feel more connected to other students before residential school

1 Strongly disagree ————— 7 Strongly agree

It has increased my confidence in getting to know others

1 Strongly disagree ————— 7 Strongly agree

I feel more connected with the course that I am studying

1 Strongly disagree ————— 7 Strongly agree

I have increased my knowledge of content by sharing with others

1 Strongly disagree ————— 7 Strongly agree

I feel more confident attending residential school having met others

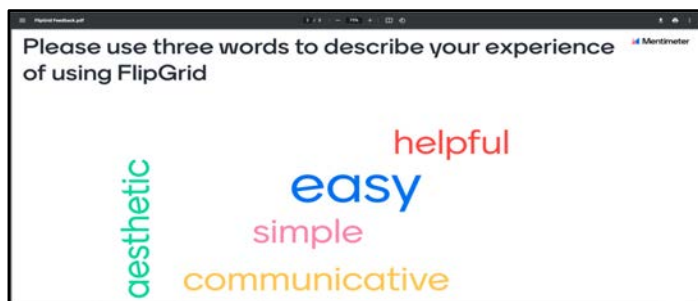
1 Strongly disagree ————— 7 Strongly agree

I feel satisfied that I used this technology to connect with others

1 Strongly disagree ————— 7 Strongly agree

**Submit**

Example of Mentimeter’s word cloud feature to summarise student feedback:



The following Session Dashboard screenshot indicates that students accessed most of the FlipGrid information within the first few weeks of semester and that according to course analytics, it was one of the most accessed resources, even compared with course and assessment information/material, indicating there was a clear interest in what FlipGrid had to offer students.





## Project impact

Analysis of both StudyDesk and FlipGrid data showed there was very little uptake of FlipGrid by students in the Semester 1 cohort. This may have occurred as a result of little development time to get things ready before S1 commenced and the time required to obtain ethics approval. Given that it was after the S1 had started that the FlipGrid was effectively embedded into the course, this may have been too much online information for students to deal with. In previous cohorts, teaching staff has also found that it takes students some time to fully comprehend what residential group they are enrolled in via their student centre, and this is a necessary prerequisite for creating the 65 residential school group FlipGrids for S1.

The main way students used FlipGrid in S1 was to record short introductory videos and to view other students' videos or recordings created by members of the NUR110 teaching team. For S1, there was no evidence of interaction in FlipGrid with the exception of two students responding to a teacher recording and one student commenting on another student's video.

Following on from the S1 experience, the NUR1100 teaching team are using FlipGrid again with their Semester 2, 2021 cohort and sent the following email to the cohort one week before S2 commenced:

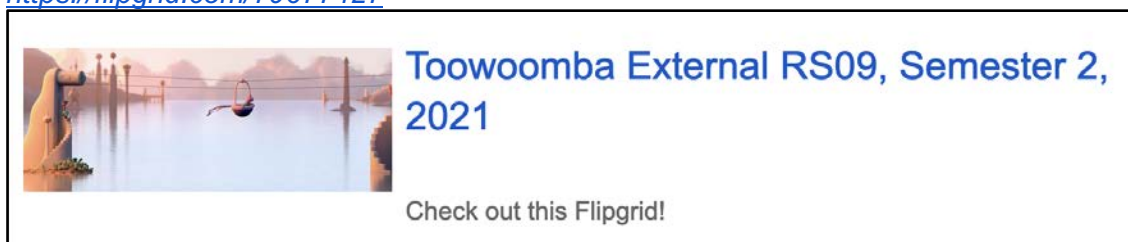
*Dear NUR1100 students,*

*Firstly a big welcome to you this semester in the course NUR1100 Introduction to Nursing Praxis. In preparation for the course which commences next week, I wanted to share some information with you.*

*This semester in NUR1100 Introduction to Nursing Praxis, all students have been placed into an online group according to your residential school group (as per your course enrolment). We are using a social learning platform called FlipGrid, and there is more information on the study desk in the Getting Started Section. You can use this link to get to know your fellow students, ask each other questions, share information, and you may even like to use it as an online study group. The good thing about FlipGrid is that it is free and easy to use. The link will remain open for you all semester. We would also ask that you provide feedback at some point during the semester about your FlipGrid experience.*

*You may like to firstly, click on this link (or copy and paste into your web browser) to create an introductory message to your fellow residential group members.*

<https://flipgrid.com/79677427>



*I hope you all have a wonderful semester*

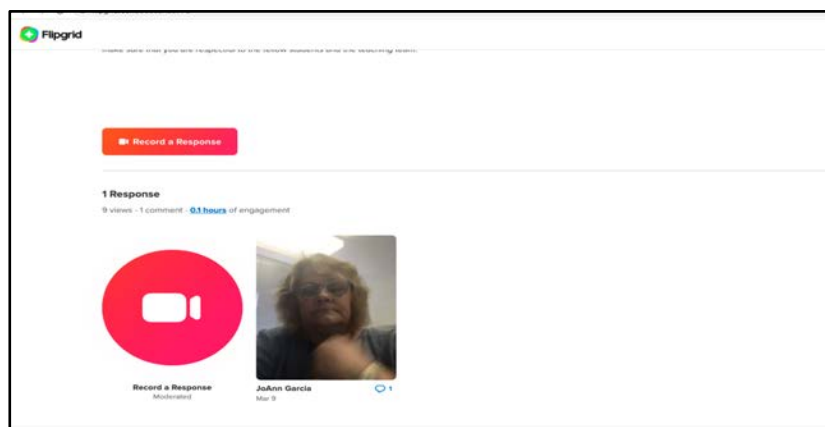
*Kind regards,*

*Lisa*

Students viewed the FlipGrid videos created by the Clinical Nursing staff (illustrated below), although from the Course Examiner's perspective it was a challenge to get all of the casual staff involved, partly due to the limited time but also some staff were uncertain what to do. For example, one staff member sought help from the Course Examiner to record their video using FlipGrid in her



office. This highlights the need for targeted training of any teaching staff who are required to trial the use of a new technology as part of their involvement in teaching a course.



FlipGrid was new to me as the Course Examiner which meant that I needed to invest time in becoming familiar with the features and functionality of FlipGrid and undertaking prototype testing. I also needed some discussions with the project team about best ways to foster this type of engagement and ideas for flipgrid activity. Participating in the Tech Dems workshop sessions also introduced me to additional technologies, such as Mentimeter and Adobe Spark which I learned how to use and found these to complement FlipGrid in NUR1100's course design.

For the purposes of NUR1100, I think FlipGrid is best used to support introductory-style engagement within a cohort platform, which is the way students have appeared to use it. They also viewed a short video getting to know their laboratory teacher, which is positive in preparing for their on-campus residential school.

In terms of the effectiveness of FlipGrid used to achieve this project's aims, whilst there was some uptake by students in S1, it was quite minimal. The results of S2 2021 might shed more light on students' interest in, and confidence in, using a technology such as FlipGrid to engage more with their peers. First year students such as those enrolled in NUR1100 are transitioning to university study, so whilst this type of technology may have a place, however it may require more work on behalf of the teaching team to identify the potential of FlipGrid in enhancing the student experience and demonstrating tangible benefits for students to invest the time in engaging with such a technology, and with their lecturers and peers.

While the intention of this project was not to test the effectiveness of FlipGrid with regard to specific learning outcomes, the results of this project has indicated that there is *some* desire for students to get to know each other, know about each other, and experience a more personal introduction (by way of short video) to their teacher, all of which may assist in building greater social and emotional engagement throughout a teaching session.

## Recommendations

In preparation for the next offering of NUR1100, I intend to keep using Mentimeter as a way of gathering simple feedback from a student cohort, and encourage the teaching staff to continue to create their own introductory videos at the beginning of the semester.

With regard to the current course design, I may remove many of the topic-based activities and focus future activities for social engagement. I also need to discard much of the information presented on StudyDesk, and rewrite this to be more clear and concise.

I'm not sure if I will continue to use FlipGrid for this purpose. I need to find a simpler solution to support students meeting each other to reduce the administrative/technological load of setting up large sets of FlipGrid groups for each new cohort/semester.

A number of aspects need to be improved or enhanced in preparation for the next offering of NUR1100. These include:

- Early communication with students, including just before semester commenced and reinforced in the first couple of weeks of semester, and try a more personalised approach in any emails or announcements informing students about FlipGrid;
- Develop a set of instructions for students that clearly takes them through a step-by-step process to use FlipGrid;
- Using Mentimeter in situ within the flipgrid environment to gain instant feedback
- Encourage more of the teaching team to record their own introductory videos at the beginning of the semester; and
- Encourage students to respond more readily to group contributions, even if at times they simply use emojis as acknowledgement of having read, liked or supported a student's idea, question, comment or response.

Some general recommendations about using new technologies in a course include:

- Seek advice from digital technology advisors and/or educational designers on the best ways to embed information in StudyDesk so that it is clear, concise and visually appealing;
- Obtain feedback from students early on in the semester to gain an understanding of how to best promote students' use of a technology;
- Consider getting students to test your technology before it goes live to the whole cohort;
- Explore if there is a notification feature where students would receive a message if someone replied to their FlipGrid video.
- Consider showing examples of student's video postings from a previous cohort (with the students' permission, of course) as a way of modelling student contributions; and
- As an administrator for the flipgrid groups, I did learn that having 2 accounts was problematic to access data or at least remembering which account would hold the data (e.g. either an initial set up from microsoft office or gmail). My advice is to make a note of which account you had initially set up and only use that account to manage your educator dashboard.

# NUR1102 - Literacies and Communication for Health Care

Jo Southern  
Lecturer & Outreach and Engagement Coordinator  
School of Nursing and Midwifery

**TITLE: Using Padlet and student attitude toward learning communication skills from teacher-made video vs generic YouTube video.**

**PARTICIPANTS:** 448 undergraduate nursing students. Teaching Team: Vick Horner (Assistant Examiner), Barbara Black (Tutor), Kirsty Matters (Sessional Tutor).

**CONTEXT:** NUR1102 Literacies and Communication for Health Care is a core course in the Bachelor of Nursing Program. Students are introduced to academic writing skills and the core communication skills required by all healthcare professionals, verbal and non-verbal. Students are also introduced to the nursing governances and the concepts of person-centred care and family-centred care. This course sets students up for academic success and inter/intra professional communication as they move through the Bachelor of Nursing program and clinical placements. It begins to prepare them for their future roles as registered nursing professionals.

It was anticipated that four out of the five objectives from the NUR1102 Course Specifications (Semester 1, 2021) would be met by this project. The relevant objectives included:

- Apply a range of communication theories and concepts and their application in nursing practice;
- Apply therapeutic communication knowledge to case studies;
- Identify and reflect upon factors that contribute to effective and ineffective interpersonal and inter and intra professional communication and the implications for patient safety; and
- Use and reflect on emerging critical thinking, digital literacy and health literacy using correct academic writing skills.

The proposed project also aligns with the Academic Plan in the following ways:

1. Innovative Learning and Teaching - First year experience
  - To engage students with teaching staff through the production of instructional videos (that feature staff in the videos).
  - To introduce students to Padlet as a digital communication tool.
  - To engage students by asking for their feedback.
2. Student Experience
  - To introduce students to digital literacy.
  - To partner with students in receiving feedback to inform future teaching practice.

## Aim of the initiative

In NUR1102 we discuss communication styles and use existing YouTube videos (mainly American) to explore communication in nursing, and we need to determine whether our first year students really understand what it means within the context of clinical handover, and overall, how vital good communication is for a nurse. Lee O'Malley (1st year coordinator) and I produced and acted in a video, taken from the patients' perspective, where the nurse is communicating in different styles when giving clinical handover. This video engaged students in a real-life communication scenario where handover went badly, leading to the oncoming staff being confused, followed by a good handover where the patient was involved and there was no confusion. The aim was to provide students with a good example of clinical handover that can inform the development of their own communication style and model exemplary practice when on clinical placement, as well as introduce students to digital forms of communication.

## Educational Technologies

A video was created by staff using a smartphone which presented two scenarios. The 'patient' was holding the camera and Lee O'Malley and myself acted as nursing staff, with one of us giving handover and the other receiving handover. The first handover was a demonstration of a poor clinical handover, which left the oncoming staff member confused.



The video was uploaded to USQ's Equella. [https://lor.usq.edu.au/usq/integ/gen/99546a34-9f1c-4de3-a837-c3a27c93849a/1/?attachment.uuid=53c8dd50-89d5-4ef8-8430-b891fe40458f&\\_int.id=1](https://lor.usq.edu.au/usq/integ/gen/99546a34-9f1c-4de3-a837-c3a27c93849a/1/?attachment.uuid=53c8dd50-89d5-4ef8-8430-b891fe40458f&_int.id=1)

The second was an example of a good clinical handover where the patient was involved in the process and there was no confusion felt by the oncoming staff member. The communication styles presented in the video demonstrated styles and approaches learned by students in the course content, thus supporting it.

Clinical handover is a vital function of a registered nurse in order to provide for the safety and continuity of care for patients. When nursing students first commence it can be difficult for them to grasp the importance of clinical handover. They also become very nervous when they are required to give handover when they are on placement. This project aimed to address these issues by showing a poor clinical handover followed by a good clinical handover. The video was shown in all tutorials which acted as a prompt for discussion with teaching staff and between the students in each tutorial.

Padlet had been introduced to students in Week 1 as part of an 'Introduce Yourself' activity, and in tutorials students were shown how to use Padlet and informed that it would be used again in the course.

## Online engagement framework

The use of teacher-made videos in NUR1102 was designed to enhance engagement for online nursing students in several ways based on Redmond et al's (2018) Online Learning Engagement elements, including:

- Cognitive engagement  
Where teaching staff demonstrated the way nursing staff should communicate at clinical handover to ensure the oncoming staff member is able to safely care for their patients. The locally-made clinical handover video that presented examples of good and bad handover scenarios was designed to encourage students to think critically and develop a deeper understanding of communication styles in clinical practice.
- Behavioural engagement  
To assist students in developing their own communication skills and recognising the difference

between a good clinical handover and a bad one, and to support students in feeling more confident about giving clinical handover themselves when they are on placement.

- **Emotional engagement**  
Demonstrate the expertise of the teaching team as they contribute to videoed roleplays of clinical handover scenarios as a way of motivating students and help them recognise how being prepared, knowing their patients, and involving their patients in a clinical handover are vitally important in the continuity of safe patient care.
- **Social engagement**  
Featuring the expertise and personalities of the teaching team in videoed roleplays as a way of helping students 'get to know' their lecturers, not just as people but as nursing practitioners, to help students become more familiar with teaching staff, contribute to students establishing trust in their teaching staff as experienced professionals, and helping students feeling more confident initiate communication with teaching staff.

## Project approach

Lee O'Malley and I consulted with the NUR1102 teaching team, and collectively we decided to show the video in tutorials in the week we covered clinical handover techniques (Week 10). The video was paused when the bad example of clinical handover had been shown, and the tutorial facilitators led a discussion on what was wrong with the handover and how a bad handover would affect the oncoming staff and the patient. The good handover was then shown and a discussion around what made the handover good ensued, including what the outcomes of a good handover would be, followed by a discussion on the handover tool that was used (SBAR), which students had learned about in lectures.

At the end of the tutorial students were shown the link to Padlet under the week's content in StudyDesk (as illustrated below) and asked to provide feedback on the teacher-made video versus a general YouTube as a learning tool.

Teacher made video v You Tube video

PADLET: Please comment on which you would prefer. All comments are anonymous.

Watch &/or listen

### Communication Lecture

NUR1102 Week Ten Communications for Health Care Lecture - ppt.

NUR1102 Week Ten Communications for Health Care Lecture - pdf.

NUR1102 Week Ten Communication in Health Care Lecture (recording).pptx

### Literacies Content

NUR1102 Week Ten Literacies in Health Care - lecture ppt.

NUR1102 Week Ten Literacies in Health Care- lecture pdf.

NUR1102 Week Ten Literacies in Health Care Lecture recording.pptx

Activity

NUR1102 Week Ten Readings

NUR1102 Week Ten Tutorial Activity Sheet

NUR1102 Week Ten Tutorial Activity Answer Key

SOAP Note template (assessment two preparation)

Week Ten reading for Tutorial activity: Using an SBAR: Keeping it real!

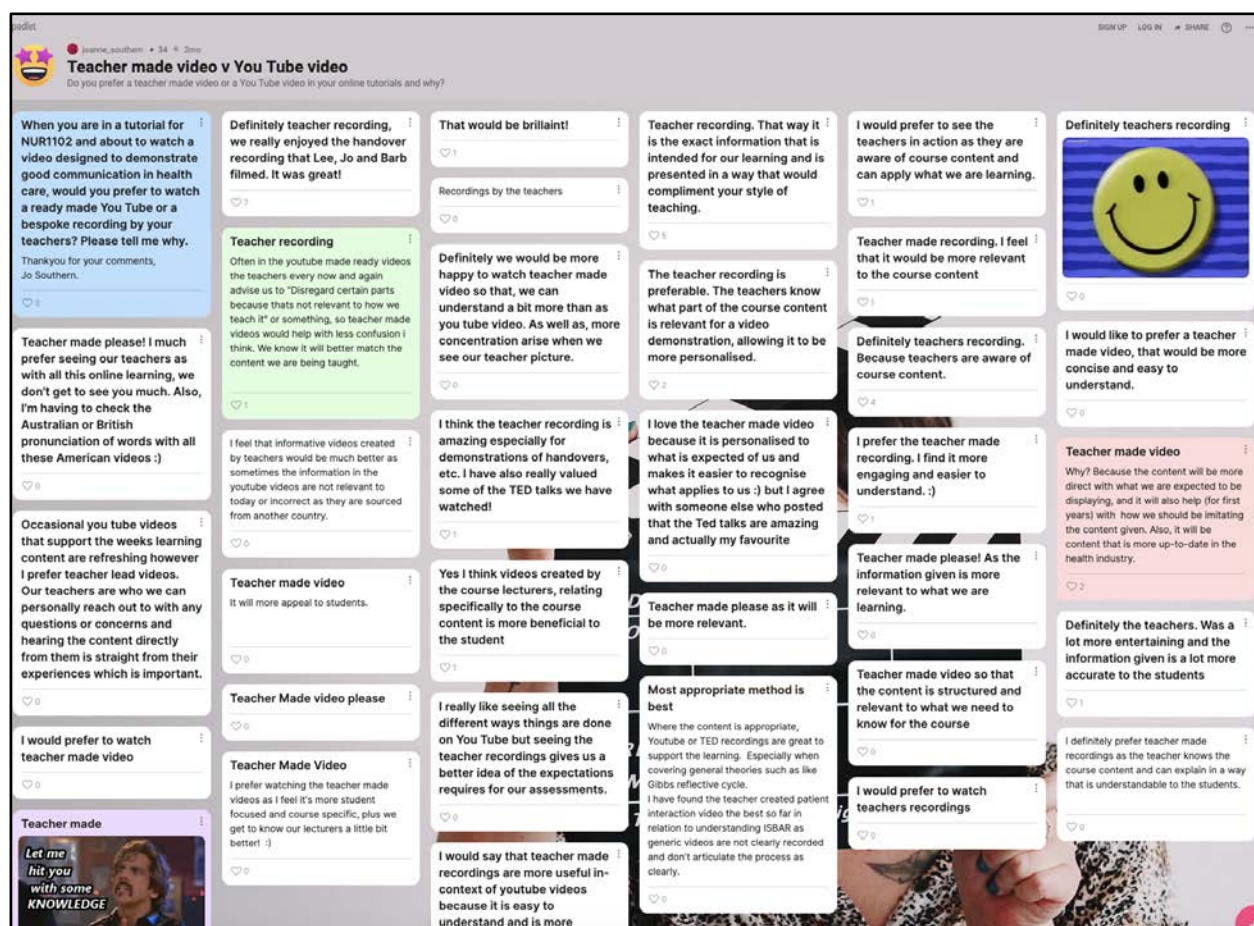


The teaching team decided to show the video in tutorials rather than simply placing a link to it on StudyDesk so that the tutorial facilitators could lead a discussion on the content of the video.

## Evaluation method

Unfortunately there were no StudyDesk analytics available regarding clicks or views of the video as the video link was incorporated into the tutors worksheet by the Course Examiner.

The main data collected was via Padlet (as illustrated below) where students were asked to provide feedback on whether they preferred to view local teacher-made videos versus those published on YouTube (created from other sources which are often American):



NUR1102 Padlet [https://padlet.com/joanne\\_southern/xi72ui5we3edlr0a](https://padlet.com/joanne_southern/xi72ui5we3edlr0a)

34 students added their feedback to the Padlet, with 13 of the student responses receiving likes from other students which shows that students did not just add their own feedback but showed they were engaged enough to read others' responses and use the like feature to show their support of the ideas and feedback provided by their peers.

## Project impact

The results of the student feedback via Padlet (n=34) showed that 100% of students who responded preferred watching teacher-made videos compared to the general YouTube videos embedded throughout modules in StudyDesk. Students reported they felt that they were learning exactly what the teaching staff wanted them to learn, as illustrated by these comments:

*"I prefer watching the teacher made videos as I feel it's more student focused and course specific."*

*"I feel teacher made is best because then you can display exactly what we need to know."*

*"Yes I think videos created by the course lecturers, relating specifically to the course content is more beneficial to the student."*

*"Often in the youtube made ready videos the teachers every now and again advise us to "Disregard certain parts because thats not relevant to how we teach it" or something, so teacher made videos would help with less confusion i think. We know it will better match the content we are being taught."*

*"...would prefer to see the teachers in action as they are aware of course content and can apply what we are learning."*

*"Definitely the teachers. Was a lot more entertaining and the information given is a lot more accurate to the students."*

This demonstrates how teacher-made video content can contribute to greater cognitive and emotional engagement of students with course content.

Given NUR1102 students are learning online, they also commented on videos featuring teaching staff as a way of "getting to know them better", as explained here:

*"Teacher made please! I much prefer seeing our teachers as with all this online learning, we don't get to see you much."*

*"Definitely teacher recording, we really enjoyed the handover recording that Lee, Jo and Barb filmed. It was great!"*

*"...more concentration arise when we see our teacher."*

*"I prefer teacher lead videos. Our teachers are who we can personally reach out to with any questions or concerns and hearing the content directly from them is straight from their experiences which is important."*

This feedback demonstrates an increase in students' emotional engagement with both teaching staff and course content when they see their lecturers roleplaying clinical practice-based scenarios. It can also contribute to students' social engagement in the course as they watch the expertise and personalities of lecturers in the videos, thus establishing students' trust in their teaching staff which can also contribute to students building better relationships with teaching staff via other online communications via forums or email.

Feedback also highlighted how students felt that teacher-made videos were more relevant to clinical practice in Australia and more up to date than those YouTube videos presenting similar information, as expressed by these students:

*"The teacher recording is preferable. The teachers know what part of the course content is relevant for a video demonstration, allowing it to be more personalised."*

*"I'm having to check the Australian or British pronunciation of words with all these American videos :)"*

*"...it is easy to understand and is more reliable."*

*"I love the teacher made video because it is personalised to what is expected of us and makes it easier to recognise what applies to us."*

Students reported that it was good to be able to discuss the bad and good handover with the teachers they saw in the videos. Students also reported that they felt more confident about giving



handover when on clinical placement after watching the videos, illustrated by the following comments:

*Because the content will be more direct with what we are expected to be displaying, and it will also help (for first years) with how we should be imitating the content given. Also, it will be content that is more up-to-date in the health industry.*

*I have found the teacher created patient interaction video the best so far in relation to understanding ISBAR as generic videos are not clearly recorded and don't articulate the process as clearly.*

In conclusion, the findings of this project highlight students' preference for teacher-made videos with local and targeted content, and demonstrate that teacher-made video content can enhance students' cognitive, behavioural, social and emotional engagement within a course. This project also demonstrates how Padlet can be used to gain critical and timely feedback from students to evaluate the student experience, and ultimately, inform course design and/or redesign to enhance student engagement.

From a Course Examiner's perspective, I learned a lot from undertaking this project. Some key impacts include:

- I found that it was important to check the video angles before recording and that having a dot point script kept actors on script. I learned how easy it was to record a video on my smartphone and then upload it to my portable harddrive and use it with students immediately. This was important as time was limited for me to be able to undertake this project (no WAMS time allocated). I also learned how to create a Padlet and link it to StudyDesk so that students can use it easily.
- This project was completely online. Tutorials where the video was shown and discussed were via Zoom. Padlet was easy to embed in StudyDesk and students reported no problems with finding, accessing, and using Padlet.
- Project aims were achieved. Discussions in tutorials were reported by all facilitators, including Lee O'Malley and myself, as being appropriate to the aims of teaching students how to give a good clinical handover. Student participation in Padlet feedback was low, with only 34/448 students providing feedback (less than 10% of the cohort). However, student participation generally in Semester 1 was poor so this was not considered to be a reflection on the use of Padlet because those who did use it reported that they had no issues.
- Overall, student outcomes matched the aims that were achieved, and the qualitative responses from students regarding their preference for teacher-created videos provides the teaching team with valuable feedback about, and insights into, how future offerings of NUR1102 can be revised to enhance greater cognitive, behavioural, social and emotional engagement of nursing students learning online.

## **Recommendations**

Since completing this project, I have created two new videos to use in future courses, based on the positive response from NUR1102 students in S1 2021. I will definitely continue to use the smartphone to record appropriate videos that I can share with students as part of their learning experience.

Tutorials were an excellent place to show the video as student engagement via StudyDesk has been poor. I will continue to incorporate teacher-made videos into tutorials where appropriate.

I will continue to use Padlet as a communication tool in future courses. I have introduced it into my postgraduate course in S2 and to date have found students are making good use of it.

At this point in time there is nothing from the course design in this project that I will discard but there are some enhancements that I would like to make. These include:

- Improving the quality of the acting in the videos (we were rushed in S1 due to time constraints);
- Explore the use of H5P to turn video content into quizzes for students to gain instant feedback and enhance cognitive engagement; and
- I need to find a better way to collect analytics on video files and will consider using a student survey to collect more targeted data regarding students' learning experience (instead of relying on discussions in the tutorials).

As a result of my experience throughout S1, I would recommend:

- using a smartphone to record a video and then upload it to an editing program to refine the recording, where possible;
- having a short script of what you want the 'actors' to say in a video to keep everyone on track;
- uploading a copy of video recordings to StudyDesk in a format where you can collect analytics easily; and
- creating a Padlet account to create learning activities that encourage greater student engagement because it is very easy to navigate and create a range of Padlets using its templates that support different forms of asynchronous communication that can be used to enhance teacher-student and student-student engagement.

# NUR3020 - Professional Transitions and ANP8003 Management in Health Care Practice

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**TITLE:** Increasing social and collaborative student engagement through interactive technology integration into online StudyDesks in an undergraduate and postgraduate course

**PARTICIPANTS:** 368 students were enrolled in the Bachelor of Nursing third year course NUR3020 Transition to Practice in Semester 1, 2021. The staff complement for the course consisted of the following teaching staff: Course Examiner Melissa Taylor, and Moderator Geraldine Roderick. Teaching staff in workshops and tutorials was inclusive of Tracey Tulleners, Kamal Singh, Michelle Cameron and Linda Stanbury.

Postgraduate students in the Master of Nursing program's Leadership and Management stream were also included in trialling components of VoiceThread to enhance students' online engagement. The course ANP8003 Management in Health Care Practice was targeted for this trial with a total of 22 students in Semester 1, 2021. Staff teaching into this course was the Course Examiner Melissa Taylor.

**CONTEXT:** Employability and career planning is a key construct for graduates in the Bachelor of Nursing program in a highly competitive employment market. NUR3020 Transition to Practice is concurrently offered concurrently with final third year clinical placements. It is a time in the student journey where students commence their transition into their graduate year as a registered nurse. Teaching priorities align with graduate attributes that prepare students for transition into the real world of nursing, graduate career programs, and registration as a registered nurse with the Australian Health Practitioner Regulation Agency (AHPRA). The NUR3020 course synopsis states that *"the formation of professional identity is explored relative to scope of practice, life-long learning and the care and decision making practices of the registered nurse in the health care environment"*. NUR3020 provides students with real life scenarios that initiate conversation and reflection which are focused on transition through authentic student learning journeys. It was believed that the introduction of VoiceThread would offer opportunities for students to participate in self-reflection beyond the boundaries of written reflection to add a greater level of authenticity and real life practice in the theoretical course.

As a nursing academic team, the concept of self-reflection was critical. The knowledge that student's perceived this concept to be one purely of a written reflective form does not align with self-reflection in clinical practice. The philosophy is built on the premise that reflective practice can take many forms from written, voice, art, pictures and peer support. USQ's StudyDesk has limits with students' capacity to reflect with the core platform only providing for writing in reflective forums. Feedback from one student in a 2020 cohort of NUR3020 stated that *"if you can write academically, you will do well in NUR3020. I would have loved to have shared my story in other ways"*. This led the Course Examiner to explore alternative reflective practice spaces for integration into the course. The identification of VoiceThread as a platform that can encourage engagement in reflective exercises using audio and video as well as text was seen as a viable option to explore. This technology has the capability of facilitating personal interaction with students whilst improving conversation between students and their peers, academics and guest presenters.

The concepts of self-reflection are further utilised in ANP8003 where deep reflective processes and key decision making capacity is required at a higher order level of the Manager in health care. The concepts of gaining greater insight and inclusion of students in the course content, the theoretical concepts and the self-reflective processes that must be integrally included were presented through the use of VoiceThread in ANP8003. The team sought greater inclusion of

students in learning discussions, peer networking and a space online for students to network and reflect on practice. For this reason VoiceThread was trialled in ANP8003.

The second concept introduced into NUR3020 was the inclusion of a greater range of interactive online activities for students to complete as they progressed through a number of theoretical concepts and questions. The interactive online activities were completed through the H5P platform. It was the intent of these activities to engage students early, and to capture theoretical concepts in their application in real world situations through questions and activities that provided an immediate answer to students. It was anticipated that this style of learning would engage more students in the course content.

### **Aim of the initiative**

Third year Bachelor of Nursing students enrolled in the online cohort of NUR3020 experience difficulties with course engagement. This involves difficulties in balancing the competing demands of clinical placement with study, home, work and life commitments and resulting in students feeling overwhelmed. Issues surrounding behavioural engagement exist with competing demands between theory and practice components of study. Course completion is focused on the completion of assessments rather than engaging in conversations and content. The development of social identity and important aspects of self awareness, self care and adaptability are required as students transition and further as students progress in their career as a Registered Nurse. Without engagement in the course theoretical content, the fear of students in both undergraduate and postgraduate courses not grasping important aspects of self-awareness, self-care and adaptability are lost. The social and collaborative engagement sought has a direct transference into practice settings upon graduation and into future career planning, therefore the Transition to Practice course NUR3020, is important in student preparation for clinical practice and in the graduate year as the transition period extends students' understanding and self as they develop as registered nurses. The social and collaborative engagement of students engaged in ANP8003 Management in Healthcare sought to integrate key management principles with students in a learning journey approach that requires engagement, reflection and critical thought activities with peers. This is important as managers gain the soft skills of communication, negotiation and understanding through these activities.

### **NUR3020 Technology integration strategy**

VoiceThread was integrated into the undergraduate course NUR3020 because the Course Examiner believed that VoiceThread would offer the opportunity for the teaching team to verbally engage with students more effectively by employing a flipped classroom model. While aspects of this course are self-directed, it was anticipated that the use of VoiceThread would be appealing to students because of the increased capacity for lecturing staff to introduce content verbally, for staff and students to engage in verbal reflective discussions, and ultimately, to build greater collaborative engagement with peers, teaching staff and guest speakers throughout the semester. It was believed that the introduction of VoiceThread in NUR3020's course design would offer a more professional, inclusive and collegial approach to support more personalised student learning experiences with enhanced positive collaborative engagement.

A second strategy using technology was implemented at the same time. This strategy engaged the use of H5P activities in specifically targeted StudyDesk Moodle books. This strategy sought to provide a link between VoiceThread and theory. The activities were inclusive of traditional written reflective exercises, short quizzes, work searches and fill the blank type exercises. It was anticipated that the use of H5P activities would engage students in other pure theoretical content that they may otherwise choose to skip over. This was also strategically aligned with the VoiceThread design and was focused on providing a more professional, inclusive and collegial approach to learning.

### **ANP8003 Technology integration strategy**

VoiceThread was integrated into the postgraduate management in health care practice course ANP8003. This Masters level course provides healthcare professionals with the opportunity to

reflect on the leadership and management aspects of their role and apply theoretical knowledge to the realities of leadership and management practice in health care. The ability to reflect on practice and in practice made the choice of offering Voice Thread as a tool to reflect with peers an option to provide more than writing for reflection. Voice Thread was integrated from Week 1 into the course to enable students to engage in an introduction via their own choice of VoiceThread medium. VoiceThread was then strategically placed at various intervals throughout the course to engage students in collegial and participatory reflective practice exercises. This provided an inclusive and participatory approach to adult learning.

### **Online engagement framework**

The use of VoiceThread was designed to enhance engagement for part-time online nursing students in a number of ways based on Redmond et al's (2018) Online Learning Engagement elements, including:

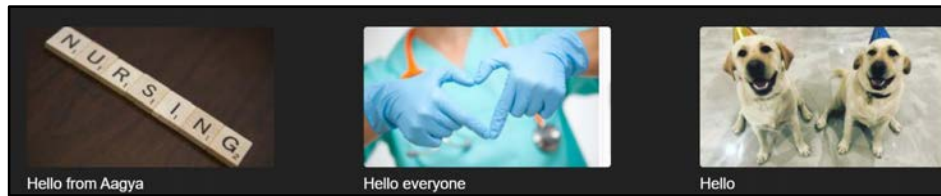
- Using VoiceThread to support **social engagement**  
To encourage students to develop relationships with their lecturers and peers to inform the formation of individual students' professional identity as a nursing practitioner. To provide a multimedia platform where students can explore real life scenarios as prompts that initiate conversation and reflection focused on transition, and ultimately, build community.
- Using H5Ps to support **social engagement**  
To encourage students to engage in weekly module content with simple and engaging online activities. The activities promoted deeper thinking with reflective exercises, or reinforced core learning through word searches and fill the blank type activities. To provide an activities-based platform where students can engage in activities and receive immediate feedback to provide a focus on content learning and formative feedback principles.
- Using VoiceThread to support collaborative engagement  
To encourage students to engage online with faculty members, learn with their peers, and begin to develop their own professional network as a nursing practitioner.
- Using VoiceThread to support behavioural engagement  
To support and encourage students' engagement with their peers and draw upon the expertise of the teaching team and guest speakers throughout the semester to assist students develop agency as they transition into the real world of nursing as practitioners.
- Using H5Ps to support behavioural engagement  
To support a behaviour of regular engagement with key course content, the H5P activities promoted student-led learning supported by teaching team tutorial support. The activities encouraged students to delve into activities and explore content with immediate feedback in their own allocated time.
- Using VoiceThread to support cognitive engagement  
To encourage students to think critically about real life scenarios and reflect on these as they encounter similar issues in practice, to support students as they articulate and justify their ideas and/or decisions as part of clinical practice, and support students' critical reflection of their own practice.
- Using H5P to support cognitive engagement  
The use of H5Ps across core curriculum content in NUR3020 encouraged students to think critically about core concepts, to engage in simple activities to assist in retaining key principles and content, and provide a space for formative feedback to occur immediately following the completion of the activity.

### **Project approach**

#### **VoiceThread Approach in NUR3020**

VoiceThread was integrated into an introduction session as a networking exercise in Week 1. The aim of this exercise was to introduce students to VoiceThread and its application prior to integration into four tutorial sessions. The four tutorial sessions related to career planning, clinical governance, teamwork and delegation. An example of the introduction of Voice Thread is provided below:

## Course introductions



## Introductions by a teaching team member



## VoiceThread to address key selection criteria

### Getting started with Key Selection Criteria

Listen to the VoiceThread and add your perspectives to each section as they unfold. The completion of key selection criteria is often complex and not well written by people applying for positions. This exercise will help you to understand the requirements and to help you in getting started with that job application.

## H5P Approach in NUR3020

H5P activities were scaffolded across the teaching content to enable engagement with all course objectives by students. This scaffolded approach introduced students to a variety of H5P activities that sought to increase student engagement with content and theoretical knowledge. It was anticipated that these activities may also increase student engagement in content. Examples of the H5P introduction are provided below:

Drag the words into the correct boxes


Registered Nurses in Australia must be registered by .

work with 15 National Boards, including nursing to help

the public by  registered health

practitioners. The role of the agency is to  and

and policies that all registered health practitioners, including nurses must adhere.



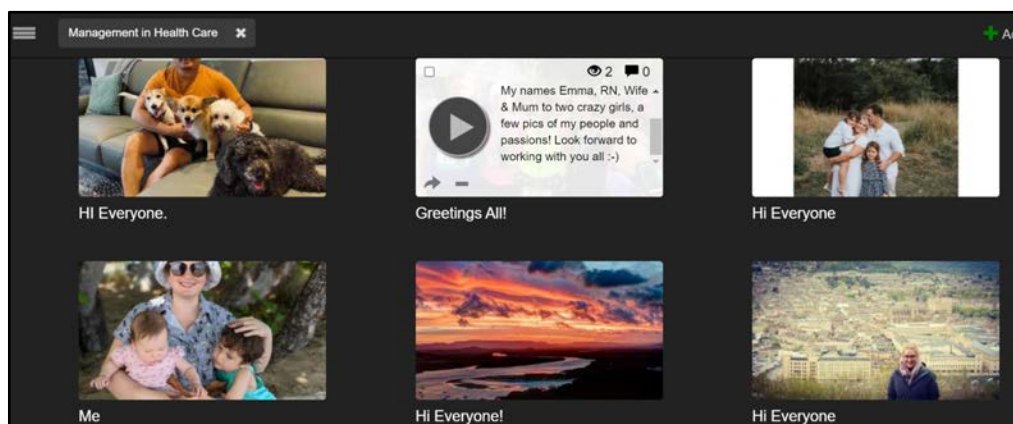
**Ponder Moment**

What does the connection between the Code and National Law mean for you as an individual practising registered nurse in Australia?

Check

### VoiceThread Approach in ANP8003

VoiceThread was integrated into ANP8003 to encourage students to participate in reflective practice and networking with peers in key concept areas in the management in health care postgraduate course. Students initially engaged in a course introduction session. This was then followed with Voice Thread activities across the semester as a form of asynchronous tutorials. Examples of VoiceThread in ANP8003 are provided below. Here, the introductions in VoiceThread opened conversations and provided a platform for students to get to know each other.



The flipped classroom technology of VoiceThread was chosen for implementation in NUR3020. Course content is initiated through online discussions currently in forum style that requires students to read through forum posts and respond. A workshop is presented and conducted online since COVID-19 restrictions were introduced in S1 2020. This format continued into 2021. Student feedback on the workshop is overwhelmingly positive and the workshop will now remain online.

The integration of VoiceThread enhances the flipped classroom model, and offers a variety of modes for students to interact with and respond to discussion forums, and in the future provides the potential for new and innovative ways of competing Assignment 1 which is a self-reflective assessment.

A staged approach to implementation is suggested:

- Stage 1: Inclusion as a content introduction and synopsis where students can engage and respond.
- Inclusion of digital artefact for reflection with peer comments and responses with a focus on reflection in practice.

The outcomes of a flipped classroom approach using VoiceThread with nursing students identified greater student and teacher interaction creating a sense of real classroom discussion in an online space (Fox, 2017). Students indicated a preference for VoiceThread to online classes that used text-based discussion boards.



### **NUR3020 design**

NUR3020 was redesigned to enable students to complete activities and course content whilst juggling clinical placement in their last semester of study. The course team scaffolded VoiceThreads and H5P activities from the beginning of the course with the getting started introductions. Activities were scaffolded to integrate theory in small sections divided by interactive H5P activities.

VoiceThread was integrated to encourage students to use more modes of reflective practice than purely a written forum. These included reflection in ethical and self awareness activities relating to career planning. The VoiceThreads were purposely designed to engage students where written tasks would not normally be used in practice. This encouraged principles of communication in practice through the use of knowing and applying theory. Weeks 1, 2, 7 and 11 were used to integrate VoiceThread.

### **ANP8003 design**

ANP8003 VoiceThread was designed to engage students from a professional networking perspective. The use of VoiceThread provided students with the capacity to network in asynchronous tutorials at a time suitable to their needs as postgraduate student learners.

### **Evaluation method**

#### **NUR3020**

The evaluation methods included course StudyDesk analytics relating to student engagement in learning activities. MyOpinion survey data collected student feedback relating to the use of VoiceThread and interactive activities. The workshop evaluation data was also used to evaluate student engagement with learning activities and satisfaction with content and activities.

VoiceThread integration was not successful in the large undergraduate course. Student feedback voiced a level of concern with the use of VoiceThread. Students commented that *'am not liking the format that this is being presented - voice thread. It is difficult to go back and review things again as you have to go through so many screens to find it.'* Approximately 46% of students did engage in one VoiceThread activity.

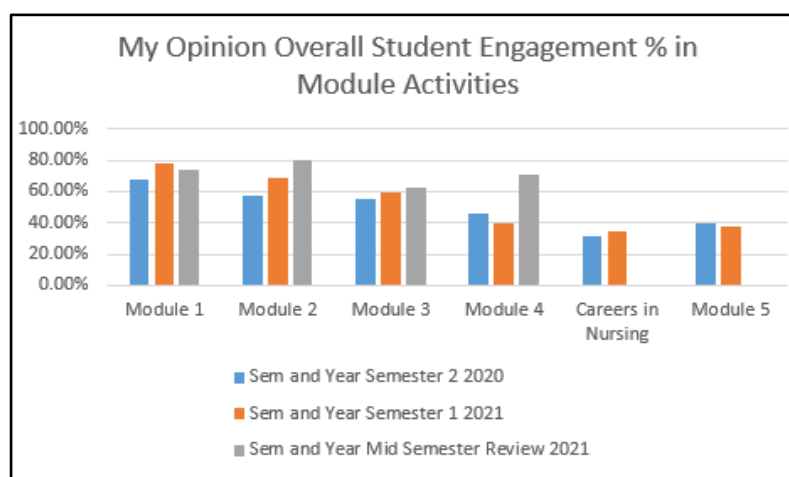
H5P integration has had a positive effect on the course analytics. Data analytics from **Semester 2 2020 to Semester 1 2021** following the inclusion of H5P activities and voicethread as an asynchronous tutorial tool indicates:

- An 11% increase in student engagement for Module 1;
- A 12% increase in Module 2 and
- A 3% increase in Modules 3 and 5.
- A decrease in engagement in Module 4 was noted as 6%.

Further development of engagement activities occurred in this module resulting in the following interim results from the Mid semester review for Semester 2 2021 -

- Maintained consistency in Module 1 engagement at 74%;
- An increase in Module 2 engagement of a further 10.6% to 80% overall;
- Maintained consistency in Module 3 engagement at 63%
- Increased engagement in Module 4 by 31.2% to an overall 71% student engagement

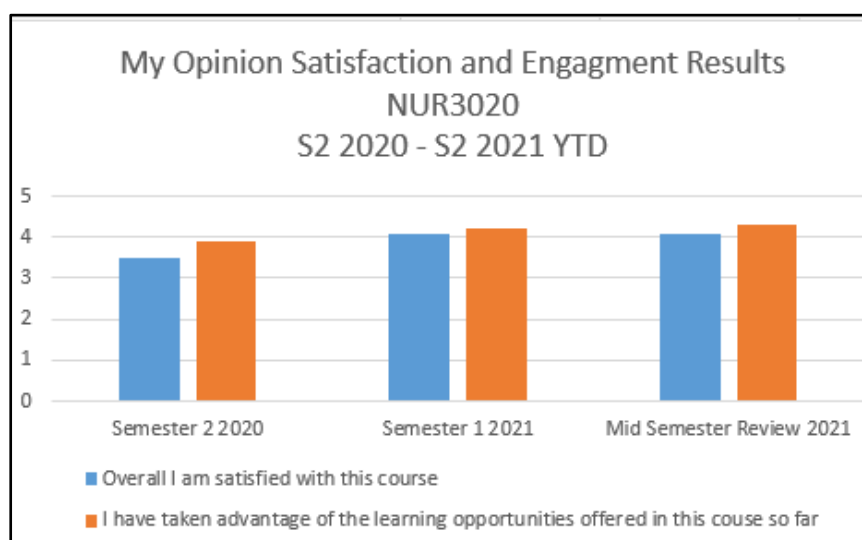
The comparative datasets from S2 2020 to mid semester My Opinion review in S2 2021 is indicated below:



My Opinion data was analysed from S2 2020 to current S2 2021. A marked increase in student overall satisfaction was achieved during this time frame.

Question	Semester 2 2020	Semester 1 2021	Mid Semester Review 2021
Overall I am satisfied with this course	3.5	4.1	4.1
I have taken advantage of the learning opportunities offered in this course so far	3.9	4.2	4.3

Engagement in course learning opportunities has increased in the MyOpinion ratings. For the question - I have taken advantage of the learning opportunities offered in this course in S2 2021 a mean of 4.3 has been achieved comparatively higher than the mean in S2 2020 of 3.9. Overall satisfaction with the Course increased from 3.5 to 4.1 during this time. It is also noted that during the timeframe COVID lockdowns and student changes to learning approaches occurred with all content and workshops now delivered in an online mode. Students had no face to face contact with staff, all contact was completed via Zoom.



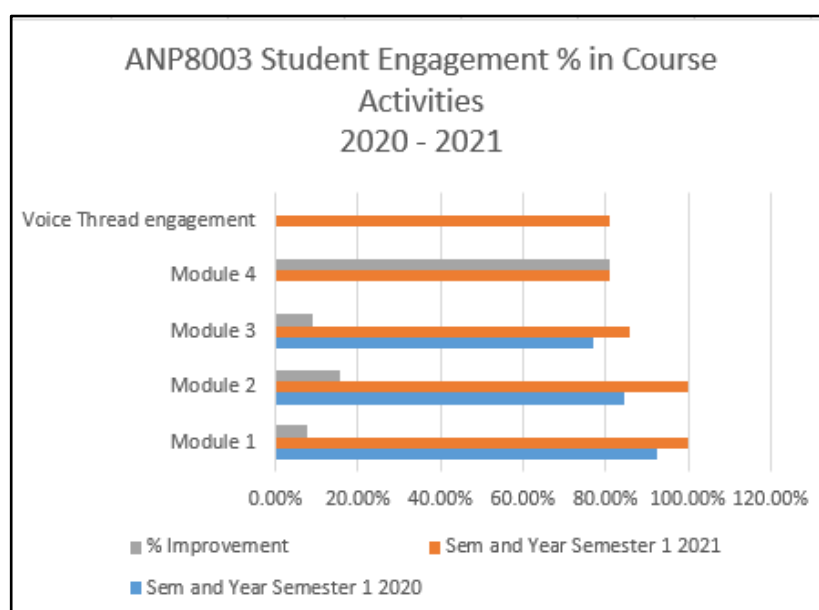
### ANP8003

The evaluation methods included course StudyDesk analytics relating to student engagement and satisfaction with course content and learning activities. MyOpinion survey data collected student feedback relating to learning experiences and satisfaction. This course has an overall high MyOpinion rating in 2020 however it was noted that student engagement in course activities

appeared low. The focus for students was specifically related to assignment completion. The aim in this course was to increase postgraduate student participation through integrating VoiceThread.

A vast improvement in student integration was seen with small, chunking of content into Voice Thread activities and discussions. The percentage improvement in each module is noted and an overall voice thread engagement of 81% was achieved.

Activity	Sem and Year	Sem and Year	% Improvement
	Semester 1 2020	Semester 1 2021	
Module 1	92.30%	100.00%	7.70%
Module 2	84.60%	100%	15.400%
Module 3	76.90%	86%	8.800%
Module 4	0.00%	81.00%	81.00%
Voice Thread engagement		81%	



The graph indicates that the integration of voice threads has impacted the curiosity of students and increased their engagement in course content. This also increased the overall MyOpinion rating to 4.9. Students commented that the voicethread provided '*a space for networking, discussion and learning from others*'; '*a great concept*'; '*it fit well around my work schedule*'; '*I loved the use of pictures, voice and writing*'.

### Project impact (500 words)

The key findings of this project indicate that the use of digital technologies can enhance student engagement in both undergraduate and postgraduate courses in health. The context and the digital concept must be considered in relation to the student learning needs, the size of the student cohort and the overall aim of the digital enhancement. Time considerations must also include the mapping, development, implementation, maintenance and engagement level of the academic staff member and the capacity to maintain this engagement level throughout the semester time frame. Overall, the implementation of H5P activities in study desk content assisted in bringing theoretical concepts into learning journeys for students. Engagement could be maximised with activities that provided students with immediate feedback relevant to content. Activities provided were described by students as '*engaging, fun, interesting and linked directly to content questions*'. Students commented on the ease to engage and the ability to retain information following completion. In fact, the simpler the activity the greater the student engagement and the increased need for students to read further about the specific concept.

The key findings regarding the use of H5P include:

- From an academic perspective activity development is not labour intensive however must be scaffolded to ensure the right activity relative to content;
- Student feedback indicates that the use of the H5P strategy enhances the student learning journey. Positive student feedback was received '*The module content has been prepared in a very thoughtful manner considering a lot of students are on placements*' and '*I can work at my own pace and work ahead in order to cope with being on prac, assignment planning and writing*'.
- Students receive immediate formative feedback at the completion of the activity irrespective of the time or day of the week the activity is undertaken.
- A variety of activities are available that can be mapped to suitability to a particular aspect of course content.

The carefully planned use of H5Ps in both undergraduate and postgraduate courses in health provided a positive learning experience for students.

The integration of VoiceThread provided a mixed result with marked differences in the undergraduate course as opposed to the postgraduate course in health. VoiceThread was identified as a labour intensive process in a large undergraduate nursing course of greater than 300 enrolments. This laborious nature related specifically to the daily maintenance of student VoiceThreads and linkages of concepts through voice, message and pictures was overwhelming in large courses.

On the contrary, the positive attributes of VoiceThread in smaller postgraduate courses in Nursing was rewarding. The use of VoiceThread in the postgraduate course worked well in the form of asynchronous tutorial options for students. This had a positive impact as it enabled students to engage in tutorial activities at a time and space that best suited their needs whilst juggling work, study and family. With smaller course enrolments less time was needed by the Course Examiner in managing threads from student interaction using VoiceThread.

The key findings regarding the use of VoiceThread in undergraduate and postgraduate courses in Nursing includes:

- VoiceThread was labour intensive for the Course Examiner and teaching staff where large student numbers existed >300 students
- VoiceThread worked well with a course enrolment of <30 students
- VoiceThread offered a viable alternative for asynchronous tutorials in postgraduate courses in Nursing and Midwifery where work/life balance could be better balanced

Other impacts include:

- The use of Voice Thread required the teaching team to develop skills in Voice Thread technology. This was inclusive of initial planning, setup, implementation and follow up with students. Cognitive development skills were required and a noted hesitation within the team and within students was apparent upon implementation. Student learning in NUR3020 was not enhanced through the VoiceThread experience. Student questions and hesitation forced the teaching team to try new options for engagement.
- The application of VoiceThread into the postgraduate course ANP8003 was successful with initial hesitation removed through a tutorial session introduction. This strategy was not successful in NUR3020. ANP8003 was a small cohort <30 enrolments whilst NUR3020 had an enrolment of > 300 students. The undergraduate students sought face-to-face tutorials, while the postgraduate students were happy with the asynchronous approach to their learning.
- While student engagement was not enhanced by VoiceThread in the undergraduate course NUR3020, student engagement was enhanced with the postgraduate cohort in ANP8003.
- H5P integration into NUR3020 did achieve project outcomes with an increase in student engagement in course module work and the associated activities. It was identified that

students sought greater engagement in the simpler H5P approaches as they felt it consolidated their learning and introduced them well to new topics.

- In terms of student outcomes, students rated both courses higher in the S1 2021 MyOpinion data than in previous offerings. NUR3020 increased its rating from a 3.5 in 2020 to a 4.1 in S1 2021. Student feedback in NUR3020 was clear that VoiceThread was not preferred, while H5P integration was. Students rated ANP8003 a 4.9 in the S1 2021 MyOpinion data sets. This is a significant upward trend.

## **Recommendations**

### **NUR3020**

Keep H5P in NUR3020 to maintain and further enhance H5P integration with activities and resources for students in the module weekly content. The inclusion of H5P activities will be further enhanced and be inclusive of greater opportunity with student learning and engagement activities.

Discard VoiceThread as an activity for students to engage asynchronously whilst on placement. Student learning was not enhanced and negative feedback increased with the implementation of VoiceThread. The use of this technology was deemed too overwhelming for staff and students due to the large enrolment numbers and the enormity of the files that present. This strategy has been removed from the Course in S2 2021.

NUR3020 could be enhanced with the introduction of a more visual and forum-like digital platform and in future offerings, we will consider the use of Padlet to engage students in critical learning areas.

### **ANP8003**

Keep VoiceThread in ANP8003 to maintain and further enhance VoiceThread utilisation in the course as a source of asynchronous tutorial presentation combined with some synchronous teaching activities. A balance between the two is required.

In addition, for ANP 8003 we need to look at a hybrid approach between synchronous and asynchronous student learning activities. The continuation of voice thread is highly recommended and in future offers more activities could be included in this manner.

In conclusion, the need to enhance support and direction with the use of new technologies in the online space must be maintained with opportunity for experimentation with new technology encouraged. Academic integration needs to include appropriate workload allocation relative to the enhancement being implemented. Outcomes determined in this TechDem Grant opportunity determined that through a well thought out and focused implementation, positive student learning was apparent. Time allocations are needed to be considered into the future to enable further enhancements. The need to have a community of practice to engage with colleagues in and across faculties was a driver to the success of the project. The team of support staff, learning and teaching staff and educational designers provided guidance and mentorship as new technologies were tried and tested. This support requires further expansion as the limited capacity of an academic team and Course Examiner to plan, map and integrate such change does require consideration of development hours minimalistically of an additional 50 hours.

## **Recommendations for using educational technologies**

The project has provided a number of areas where positive student learning outcomes have occurred. Three areas of consideration in the recommendations for the use of digital technologies can be determined. These include academic preparation, student learning, enhancing curriculum content testing.

The first of these areas is student learning. H5P's enabled positive engagement at a time and place of choice. H5P's provided an active, collaborative learning approach to course activities

where feedback was instant.

- It is recommended that the inclusion of H5P's coincide with a standardised digital curriculum development workload of 20 hours per annum. This would encourage staff to develop, implement and monitor digital enhancements in undergraduate and postgraduate courses. Academics could initiate the additional workload allocation through the provision and acceptance of a curriculum plan and mapping document annually.
- Staff education is needed to ensure that digital integration hesitancy is reduced
- The inclusion of more USQ based videos to guide academic development of digital enhancers like H5P is needed.
- Education designer support is needed to ensure that consistency in development and the availability of student engagement and user data is available.
- Program evaluation strategies using study desk needs to be considered across courses and programs to ensure a consistent evaluation process is used to evaluate new and emerging technologies

The second group of recommendations relate to the inclusion of VoiceThread in course study desk design and integration. VoiceThread provides a suitable alternative to tutorials in the online context.

The recommendations for consideration include:

- It is recommended to provide greater education to staff on the use of Voice Thread
- There is a need to orientate teaching staff prior to semester start on the key aspects of VoiceThread and its purpose for integration in smaller based courses.
- It recommended that Voice Thread not be integrated into courses of greater than 50 students.
- It is recommended that VoiceThread is a suitable option for conducting asynchronous tutorials as key information can be provided, activities completed and formative feedback provided through voice, pictures or words.

Overall the TechDem Grant opportunity has had a positive impact on two courses in the Bachelor of Nursing and Postgraduate Masters of Nursing Program with integration of two key digital technologies (VoiceThread and H5Ps) into NUR3020 and ANP8003.

The Tech Dem team led by Julie Lindsay and her team have provided support, a community of practice and guidance through the planning and implementation project. I applaud their commitment and thank them for the support and guidance.

# VIS1010 - 2D Studio Foundations

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## **TITLE: Expanding Creative Communities: Facilitating Multimodal Forms of Engagement and Learning in Tertiary Visual Arts**

**PARTICIPANTS:** VIS1010 2D Studio Foundations is a new course, taught for the first time in Semester 1, 2021, as part of the Bachelor of Visual Art (BVSA) program. It is a first year Visual Art Studio Practice course, which is fundamental to students forming a creative and supportive peer network, as well as serving as the first stage in working towards a professional arts practice and profile. The BVSA is the first time that studio courses have been offered both fully on campus and online.

There are fifty-two students enrolled in the course. The majority of these are on campus and full-time students, many of whom are school leavers. The course is supported by two academic staff: Dr Rhiannon Johnson acts as course examiner and printmaking lecturer, and Dr Tanya McLean acts as course moderator and drawing and painting lecturer.

**CONTEXT:** The teaching of Visual Arts in higher education most commonly emphasises practice and individual student learning through one-to-one, face-to-face, experiential learning. Student expectations also reflect this tendency. These expectations have become challenging as online learning and digital networking are becoming more prevalent in the design and delivery of tertiary level Visual Art. As a consequence, the development of community and its impact on first year student experience was seen as an important challenge. The concomitant opportunity was to develop a community platform that would engender artist self-awareness and identity in a 'safe' space that allowed for positive and meaningful feedback/feed-forward.

At USQ, two gaps were identified as problematic with the current instructional design. Firstly, the absence of a consistent, informal and interactive online platform for the dissemination of key arts information and digital networking was seen to impact on the development of community, professional networks, and artist identity. Secondly, there was an absence of student eportfolios, a rich repository of visual and written information which could become the precursor to artist websites, professional CVs, and blog materia, all of which enhance employability.

### **Aim of the initiative**

The aim of this project is to introduce two digital technologies into VIS1010 to align with the current University, School of Creative Arts, and Visual Art discipline priorities of strengthening the First Year Experience and embedding Graduate Employability.

- The aim of the Padlet was to address gaps in online engagement seen in previous iterations of this first year course. It was hoped the use of Padlet, as opposed to the previously used social forums, would provide an opportunity for the meaningful creation of community, both within cohorts and across modes of delivery. This community could then be utilised for student self-expression and the development of artist identity. It could also provide the opportunity for peer-to-peer and lecturer-to-student feedback and feed-forward.
- The aims of the Wordpress sites were both short-term and long-term. In the short-term (within the time frame of the course), students would have the opportunity to both learn and practise employability skills, such as how to present their work digitally. In the long-term (over the length of their program), the Wordpress sites could evolve into industry ready portfolios.

### **Online engagement framework**

As will later be discussed, many elements of the Redmond et al 'Online engagement framework



for higher education' were considered. While elements of each type of engagement were considered in the design and implementation of each educational technology, the use of the Padlet largely drew upon social and collaborative engagement. The introduction of Wordpress sites largely drew upon cognitive and behavioural engagement. Though focused on these specific elements of the framework in the design and implementation of the technologies, it is affirming to note that student use of the Padlet demonstrated all forms of engagement

## **Educational Technologies**

### **Intervention 1: Padlets for Social, Behavioural and Collaborative Engagement**

Two Padlets were created. The first, the focus of this project, was a work-in-progress Padlet designed for specific course needs. The second was a community Padlet used across all levels of the program.

#### *Course Padlet:*

Importantly, though monitored and explicitly addressed by both course examiner and course lecturer, the course Padlet was used primarily by students. It was thus powered by collaborative and social engagement. Students had the opportunity to develop course specific skills and artist attributes through the posting of works-in-progress and providing feedback to others on their works. The Padlet acted as an iterative process for students to collaboratively reflect on their own work and that of others, as well as reflexively developing confidence, capability and community (behavioural engagement).

#### *Community Padlet:*

This was used by the course examiner to build collaborative and social engagement, and create a sense of belonging for students through the curation of relevant resources to support the Visual Art program and course content. The content was designed to foster an increased sense of agency and identity for first year students as visual artists. It also sought to promote multidisciplinary skill sets and platforms, which will enhance student's knowledge of industry and their development of employable attributes.

### **Intervention 2: ePortfolio for Cognitive, Behavioural and Emotional Engagement**

Wordpress sites were selected for VIS1010 students to create an emerging artist website. These sites both form part of each student's assessable outcomes for the course and equips them up with an eportfolio space that can be enlarged in each practical studio course throughout a Visual Art degree. These sites can then continue to be used upon graduation. Students will be encouraged to use the eportfolio to: document the progress of their work; encourage critical reflection; and, develop a product to ultimately bring to industry that effectively communicates and showcases professional outcomes and employability skills.

Padlet was selected for its capacity to address all elements of the engagement framework. Not only was the key focus of the Padlet the generation of community through social and collaborative engagement, but it was also the generation of a community with agency, as students were encouraged to post and respond to posts that linked to their own artistic practice (behavioural engagement). By doing so, students acknowledged their shared experiences as students and artists. Their sense of belonging and relationships with peers were enhanced through the vulnerability of sharing creative outputs as works-in-progress. The process of iterative peer-to-peer feedback gave students the opportunity to articulate and justify the decisions they had made in relation to the development of their own work. Student learning was progressively recorded in the Padlets alongside that of their peers, and because of peer feedback, their sense of community was enhanced as were their future professional networks, which are frequently found amongst peers in the Creative Arts.

The Wordpress site was selected to give students multiple opportunities for emotional engagement, as they were encouraged to think critically about their own creative identity and how this could be communicated to others in a digital platform. The platform necessitated students develop a deep, discipline understanding, not just of their chosen art form, but of how this form is positioned and commodified within wider professional networks (cognitive engagement). The

agency that this gave students over the construction of their own artist identity promoted clear behaviour engagement.

## **Project approach**

The [\*Course Padlet\*](#) is housed within the course StudyDesk, displayed centrally on the course activity, or main, page. Both modes of delivery were provided with equivalency of experience in the enmeshing of the technology. QR codes were publicly displayed within the campus classroom. After each module and exercise on StudyDesk, there is a text based cue to prompt students to engage with their new learning through posting on the Padlet (either through posting their own artworks or reflecting on those of others). On campus and Zoom classes provided the opportunity to additionally encourage students to share their experiences on Padlet. Implicitly adopting a Vygotskian approach to scaffolding of Padlet usage, teaching staff initially modelled the use of the course Padlet through a discussion of their own works-in-progress. As students adopted this and began to likewise share, teaching staff then modelled the provision of feedback, before students felt comfortable with both the process and the technology and organically began to provide peer-to-peer feedback without the need for teacher intervention.

The [\*Discipline Padlet\*](#) was an interactive information board embedded in the course activity page under the “further information” heading. Though content on the Padlet was largely shared by staff in these initial stages, its presence on multiple StudyDesks, within all programs across the School, allowed students to experience consistency and community.

Information on the *Wordpress* sites was displayed on the course activity page, in a section devoted to building an artist website. As it was linked to an assessment task, it was likewise included in the assessment tab and students were provided with timely prompts as part of the study schedule. Support materials were included on StudyDesk. These were two-fold, linking to the artistic/design elements of the website, such as how to photograph works, as well as to the digital literacies related to building the website. In response to student feedback, guest speakers provided Zoom classes to address the technical processes involved in building the website.

### *Padlet:*

Key to the success of the Padlet was teacher engagement, which was an iterative process. Initially, teachers modelled the process of posting their own works-in-progress. Their “buy in” encouraged students to engage in a similar fashion. Teaching staff then modelled collaborative engagement by responding to students’ posts. The feedback staff provided in these posts was not only an integral part of developing students course specific knowledge and skills, but a means to developing more widespread social engagement within the cohort, as many were initially more comfortable responding than posting. Over time, teaching staff no longer needed to post or respond, as student agency developed and was demonstrated through collaborative engagement with the Padlet, seen in rich discussions and greater openness within the community of learners. Though the Padlet largely became a student-driven collaborative engagement tool, teaching staff were able to monitor it for trends in student learning needs, which they were then able to address.

### *Wordpress*

With its key focus on employability, the Wordpress site is more formative at this early stage of the program. The Wordpress site allowed the students to develop and express their emerging artist identities in a way that would engage meaningfully with their future career opportunities.

As this is a studio course, where 90% of the course/assessment is practical, traditional data analytics, though a measure of engagement with the online course, could not account for the students’ engagement with their artistic medium. Thus, a mixed methods approach to data collection was taken, including:

- Ethics permission was obtained for an online survey of students to be completed after the final assessment. Survey questions gathered both qualitative and quantitative data on student use of both Padlets and the Wordpress site.
- Data analytics from the course StudyDesk were obtained. As there is no historical data on this course, it was compared to prior course data analytics for commensurate courses.
- Padlet analytics including number of posts and responses.
- Reflection of course examiner (researcher).

## Project impact

[The Course Padlet](#) (see Fig 1) was successful in its aim to address gaps in online engagement, specifically addressing social, behaviour, and collaborative forms of engagement from the Redmond et. al. framework. This success was founded largely on instructional design, teacher modelling, and pre-existing student behaviours.

### *Social engagement:*

- There had been limited posts to social forums in past versions of the course. In 2020, VSA1002 had four posts and VSA1001 had no posts in social forums. In 2021, VIS1010's Padlet had 319 posts. This is an exponential growth in student social and collaborative engagement.
- Student survey results (see appendix 2) confirm the use of the Padlet as an engagement tool, with 80% of respondents strongly agreeing they preferred Padlet to social forums, and 80% of respondents strongly agreeing that the Padlet enhanced the quality of, and their engagement in, the course.
- 80% of survey respondents either agreed, or strongly agreed, that the Padlet gave them the ability to connect with peers and staff in a way that has fostered a sense of belonging, supporting their transition into tertiary studies.

### *Collaborative engagement:*

- In addition to the original posts, there were 403 comments and 1164 reactions to posts and comments within the Course Padlet.
- Teaching staff noted anecdotally that, as a result of collaboratively engaging with each other's works in progress on the Padlet, there was enhanced growth of students as artists, not just in the development of their work, but in their capacity to receive and use feedback in a meaningful way.
- Overall, teaching staff noted that student confidence was enhanced through the use of collaborative feedback in the Padlet. Students demonstrated an openness and transparency surrounding their creative and thinking processes.

### *Behavioural engagement:*

- Upon reflection, it was found that the success of the Padlet was partly founded on its utilisation of pre-existing behaviours. Many of the students were familiar with the use of social media, and thus both the pragmatic and affective behaviours underpinning posting and commenting. This heightened acceptance and use of the Padlet.
- The Padlet created a sense of accountability in student engagement. Students were self-motivated to be part of the active and supportive community. They were thus motivated to post at the same time as peers, often prompted to do so by the work of others. As a consequence, students remained consistent with course timelines. Whilst online learning can often mean asynchronous learning, the Padlet, in some ways, provided a collaborative prompt for synchronicity.

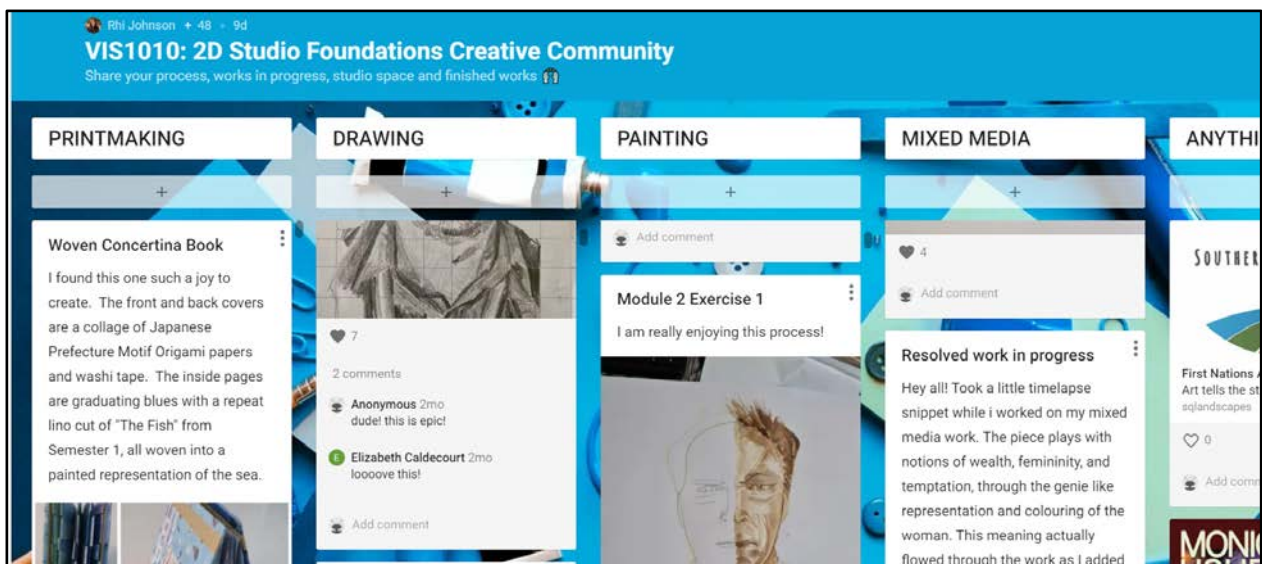


Fig. 1 Course Padlet screenshot

The aims of the Wordpress sites were both short-term (the opportunity for students to both learn and practice employability skills) and long-term (the Wordpress sites could evolve into industry ready portfolios before graduation). Though not seeing the same degree of engagement as the Padlet, the Wordpress sites were successful in their short-term goal.

- Many students have created highly engaging artist websites (see appendix 1).
- The use of Wordpress to develop artist websites has been carried over into the complementary courses, indicating that they will be sustained through the program structure.
- Data gathered from student survey indicates that 100 percent of respondents either agree or strongly agree that having an artist website would be an asset to their future career and/or professional undertaking. Only 50% of respondents, however, found the technology easy to engage with.
- As the Wordpress was implemented as part of an assessment task, it has allowed teaching staff the opportunity to follow up with students who did not achieve success on the task. In this way, first quartile students have gained an awareness of the importance of artist sites and will receive additional support moving forward in the creation of their own. First quartile students, however, have already demonstrated an eloquent use of the tool.
- Anecdotally, teacher reflection indicated that students were more strategic and critical in how they finished and presented their works. They likewise demonstrated an enhance ability to photograph and express their work. Each of these is a marketable skill for artists.

There were several positive outcomes that, though not the stated aim of the project, were important outcomes.

- Data analytics reveal greater engagement in the course overall (see tables 1 and 2). In 2020, there was an average of 265 clicks per student by semester on StudyDesk. In 2021, the average was over double at 588 clicks. (It must be noted, however, that the implementation of these technologies did not occur in isolation. They are part of a larger university wide incentive to improve the StudyDesk experience for students and align with School aims.)
- The use of Padlet and Wordpress has been embraced by both program and School staff. The lead researcher has presented at both a School forum for staff, and also School forums for students (online and oncampus) to highlight the use of the Padlet. Additional Padlets have been created to operate within additional courses, and at the program and School level. The use of Wordpress sites and the creation of individual artist sites will continue through the remaining levels of the program.

Table 1: VIS1010 2021 compared to VSA1001/2 for 2018 – 2020

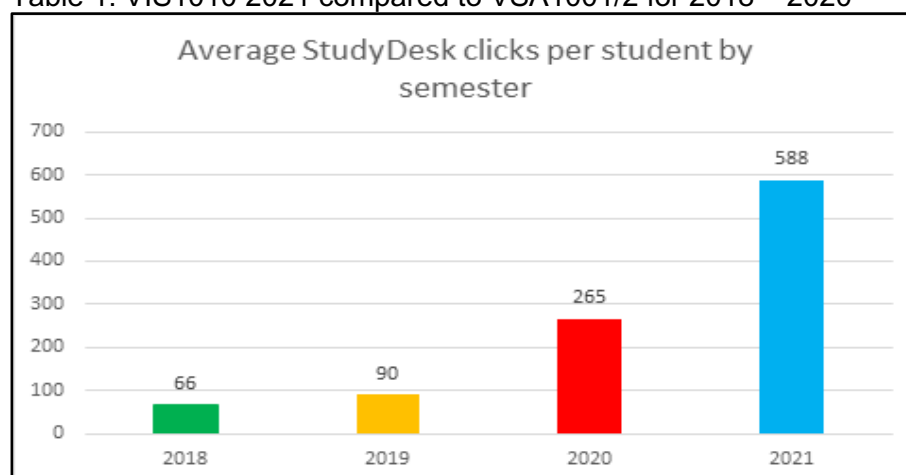
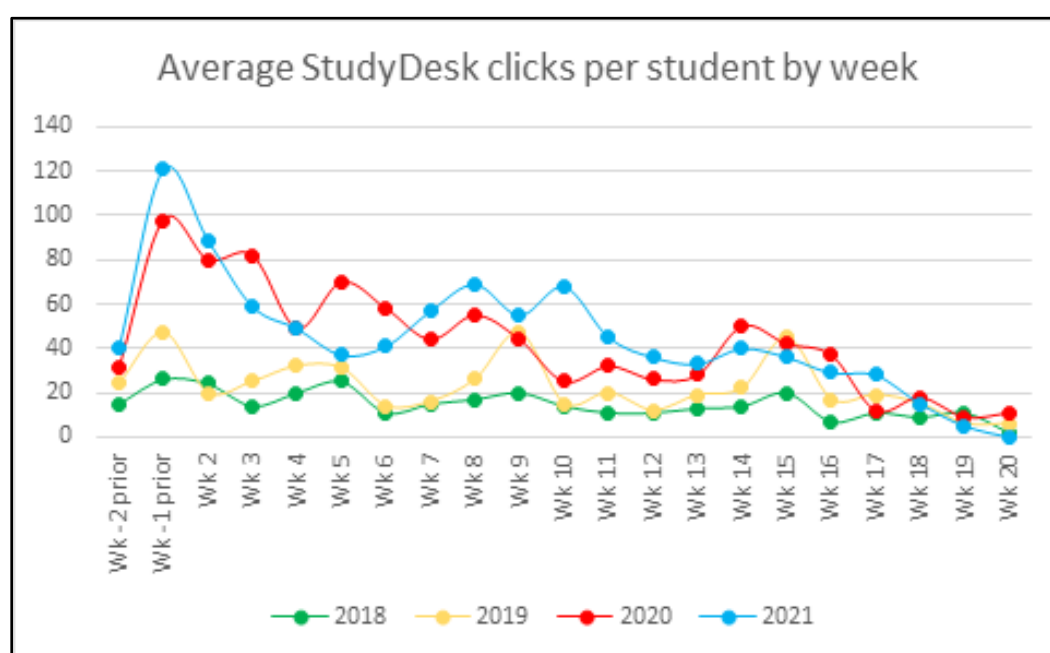


Table 2: VIS1010 2021 compared to VSA1001/2 for 2018-2020



### *Your skill development:*

Previously, due to barriers imposed by time and the complexities involved in the identification and implementation of new technologies, I have been resistant to their adoption. Now, however, through the supports offered in the Technology Demonstrators project, I feel confident and competent in the use of these technologies and with the exploration of others that may suit future student/course needs. It has been beneficial to develop a new skill set that not only benefits students, but the School as a whole, as I share my practice with colleagues. Pivotal to my skill development was that the technologies were not taught in isolation. They fulfilled a specific need, were embedded in course design, and underpinned by sound theory. Thus, I was allowed to engage with a digital first technology whilst still engaging with the integrity of practical based arts learning.

### *Application of your chosen elements from the online engagement framework:*

The online engagement framework was key to both the implementation and interpretation of the digital technologies. Upon analysis, it was found that each of the actions within the Padlet, from

posting, to providing and receiving feedback, as well as simply viewing the Padlet, acted as a layer of engagement, with each layer combining multiple elements of engagement (see fig 2). Interestingly, the Padlet, though not initially considered as utilising behavioural engagement, was found to rely on pre-existing behaviours transferred from the students' experiences with social media. Thus, behaviour engagement was a key to success, prompting initial uptake of the Padlet.

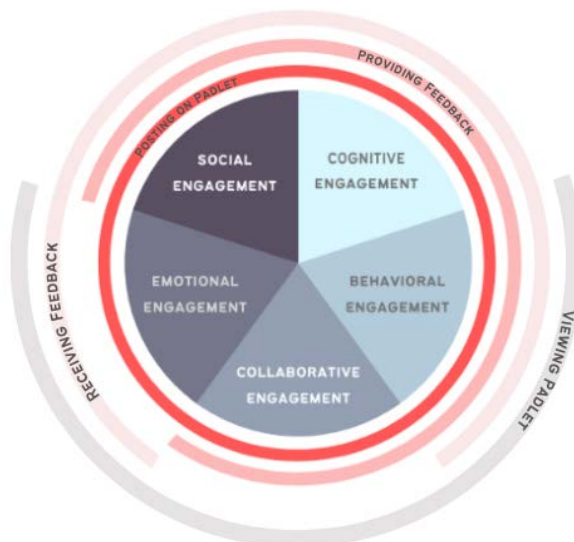


Fig 2 Layers of engagement in Padlet

*The effectiveness of the educational technologies used to achieve your project aims.*

As evidenced by the previous section, the Padlet was highly effective in its capacity to provide an opportunity for the meaningful creation of community, both within and across cohorts and programs. The Padlet's use has exceeded initial aims. In contrast to the Padlet, the use of Wordpress sites has had less student engagement. Its goals were originally both short-term and long-term, with the Wordpress sites themselves evolving into industry ready portfolios only at the end of the program. Short-term aims for Wordpress have, in the main, been achieved, with several recommendations (please see following section) to improve the overall implementation of Wordpress as artist sites.

*Student outcomes.*

As noted in the previous section, student outcomes have been diverse. There are several of note. The use of Padlet has allowed students to be able to more clearly articulate their ideas. Reflective and reflexive practice has been heightened. Students are better able to engage as a network of peers. Wordpress sites that were developed show a sense of online professional identity. Those students who are yet to fully engage with Wordpress are aware of ways to communicate with a consumer base and global audience,

Both the Padlet and the Wordpress will remain part of VIS1010. In the main, the Padlet as it was initially implemented requires no enhancement, though it is currently being extended through its implementation in other VIS courses. There are several recommendations for the enhancement of the Wordpress sites, both with regard to its initial implementation in the next iteration of VIS1010, as well as its development across the remaining courses for students in the program.

The Course Padlet has already been implemented in semester two courses. The Discipline Padlet has been embraced throughout visual arts staff and is utilised throughout the breadth of the program. Finally, the School Padlet is in use across the broader School of Creative Arts. It is recommended that the Padlet remain enmeshed in the StudyDesk in the same manner and



location. Additionally, staff modelling of Padlet behaviours will be repeated as necessary, and its use as a formative assessment tool to identify and address student needs will likewise be repeated. It has already been noted, however, that students who used the Padlet in semester one, and who continue to do so in their semester two course, did not require the initial teacher modelling that was a part of VIS1010, and have thus already demonstrated greater engagement and collaboration at these early stages.

The implementation of the Wordpress sites would benefit from additional support in the initial phases. Students found this technology the hardest to use as it did not rely on previously existing behaviours and is somewhat more complex in its initial set up phases. Thus, it is recommended that additional live classes (both face-to-face and Zoom) be timetabled at the beginning of the next iteration of the course to allow students to work through the initial set up stages with the support of both teaching staff and relevant support staff. Additionally, as the program rolls out and students continue to refine and extend their Wordpress sites, there is an opportunity for direct instruction on finer details of Wordpress, such as how to add plug ins.

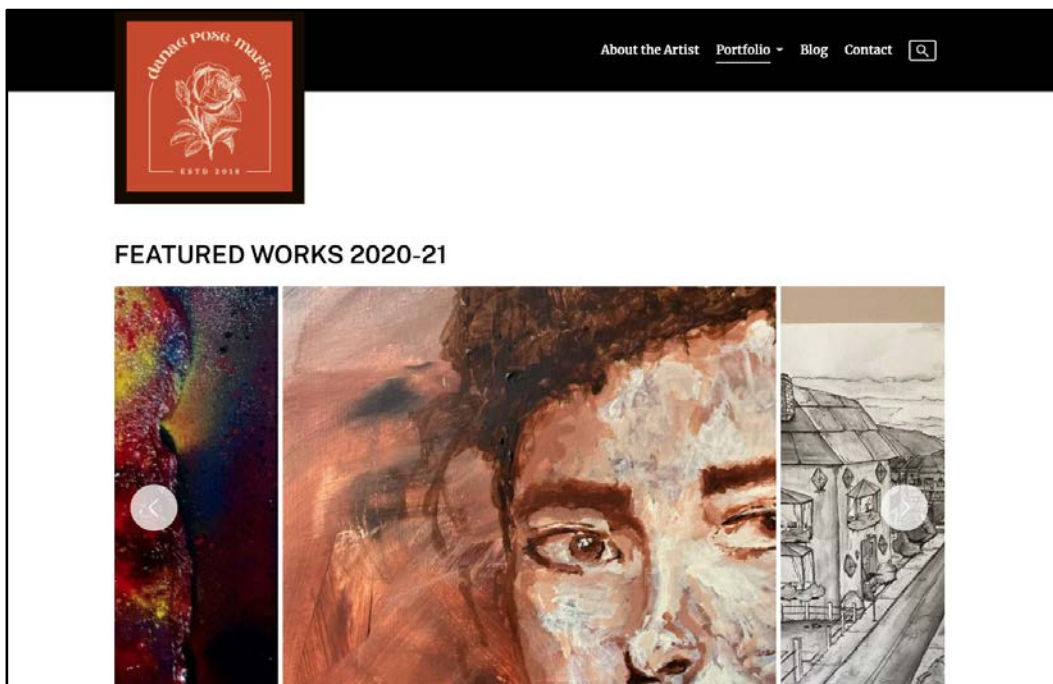
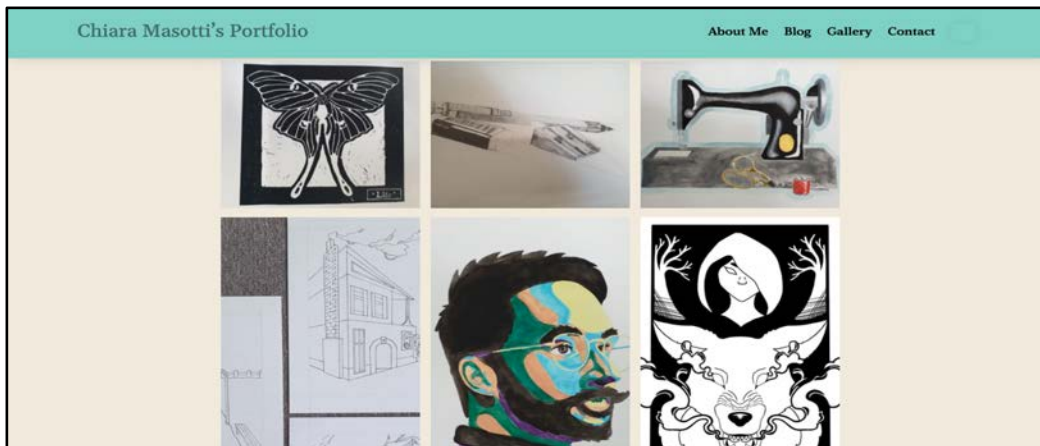
In many ways, through the inclusion of the Padlet and Wordpress technologies in other Visual Arts courses, spanning the entirety of the program, as well as the use of the Padlet as a tool to build collaborative engagement and community across the entire School of Creative Arts, I am already recommending the use of these technologies as a means of engaging students, enhancing employability, and developing community. Within these discussions, my greatest recommendation for Padlet use would be the importance of teacher modelling of behaviours. As it is a long term project, instead of a course specific undertaking, consideration of the end goal is important with the use of Wordpress, so that the appropriate supports can be implemented for learners.

Finally, and most importantly, I would recommend ongoing support for early adopters of educational technologies. Without the support of the Technology Demonstrators program, the implementation of these technologies, and the engagement and community that they developed, would not have been feasible. The imperative is for ongoing support for staff and students so that gains made through this program continue to grow.



## Appendix One - Exemplars of Student Wordpress Sites

Please note: As this is a report for internal use only, consent has not been sought from students for the use of these screenshots. Their use here is an important demonstration of the success of Wordpress, but is not for external use.



## Appendix Two - Summary tables of student survey responses

VIS1010, S1, 2021 – Padlet Survey Data						
Responses	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
The use of the ‘Your Creative Community’ Padlet has allowed me to share my works and ideas, and to communicate with my peers.	0	0	0	2 (40%)	3 (60%)	5
I have found the ‘Your Creative Community’ Padlet a supportive platform.	0	0	0	2 (40%)	3 (60%)	5
The ability to connect with my peers and staff in this way has fostered my sense of belonging and has supported my transition into tertiary study.	0	0	1 (20%)	2 (40%)	2 (40%)	5
I prefer the use of Padlet as an interactive tool than text based <del>StudyDesk</del> forums.	0	0	0	1 (20%)	4 (80%)	5
I found the Padlet technology easy to use and engage with.	0	0	0	1 (20%)	4 (80%)	5
The ‘Everything Visual Art’ Padlet was a useful tool when seeking information about industry professionals, galleries, artist interviews, blogs, suppliers, workshops and other relevant information.	0	0	1 (20%)	1 (20%)	3 (60%)	5
Overall, the use of Padlet in VIS1010 has enhanced the quality of and my engagement with the course.	0	0	0	1 (20%)	4 (80%)	5

VIS1010, S1, 2021 – WordPress Survey Data						
Responses	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	Total
I think that having an artist website will be an asset to my future career and/or any professional undertakings.	0	0	0	3 (50%)	3 (50%)	6
I found the technology easy to engage with.	1 (17%)	2 (33%)	0	1 (17%)	2 (33%)	6
There were sufficient resources and support services provided.	0	2 (33%)	1 (17%)	1 (17%)	2 (33%)	6
I have learned new skills related to presenting my work and myself as an artist.	1 (17%)	0	0	3 (50%)	2 (33%)	6
Overall, the use of WordPress in VIS1010 has enhanced the quality of the course.	1 (17%)	1 (17%)	0	3 (50%)	1 (17%)	6