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

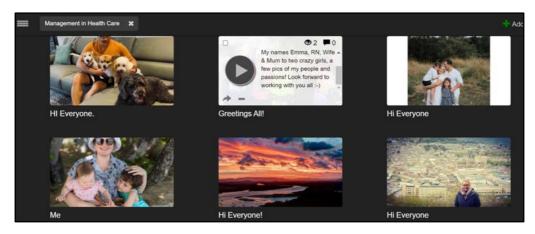
H5P activities were scaffolded across the teaching content to enable engagement with all course objectives by students. This scaffolded approach introduced students to a variety of H5P activities that sought to increase student engagement with content and theoretical knowledge. It was anticipated that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

Registered Nurses in Au	stralia must be registered by	
		ds, including nursing to help
0	the public by	registered health
practitioners. The role of the agency is to		and
	and policies that all registe	red health practitioners, including nurse
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?
The regulation of nursing practice
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.

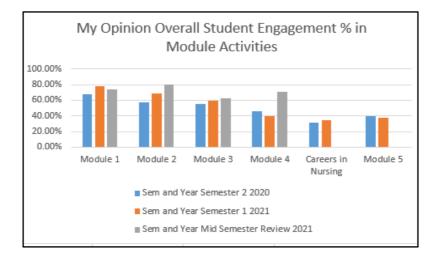
H5P integration has had a positive effect on the course analytics. Data analytics from **Semester 2 2020 to Semester 1 2021** following the inclusion of H5P activities and voicethread as an asynchronous tutorial tool indicates:

- 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

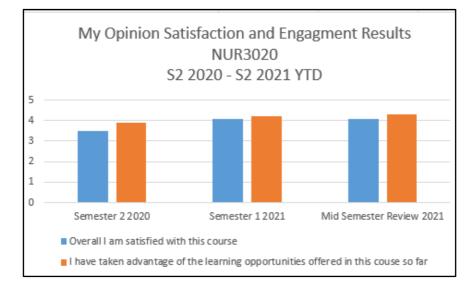
The comparative datasets from S2 2020 to mid semester My Opinion review in S2 2021 is indicated below:



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 couse 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.



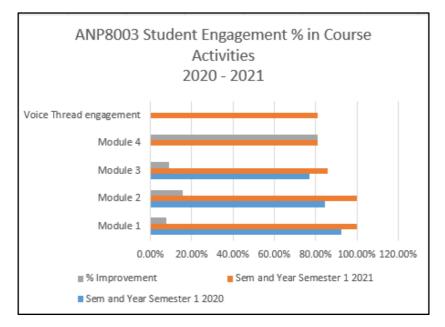
ANP8003

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%	7.709
Module 2	84.60%	100%	15.4009
Module 3	76.90%	86%	8.8009
Module 4	0.00%	81.00%	81.009
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.