APPENDIX 1: 2020 Technology Demonstrators Project Reports

ANP5001 - Introduction to Rural and Remote Nursing Practice

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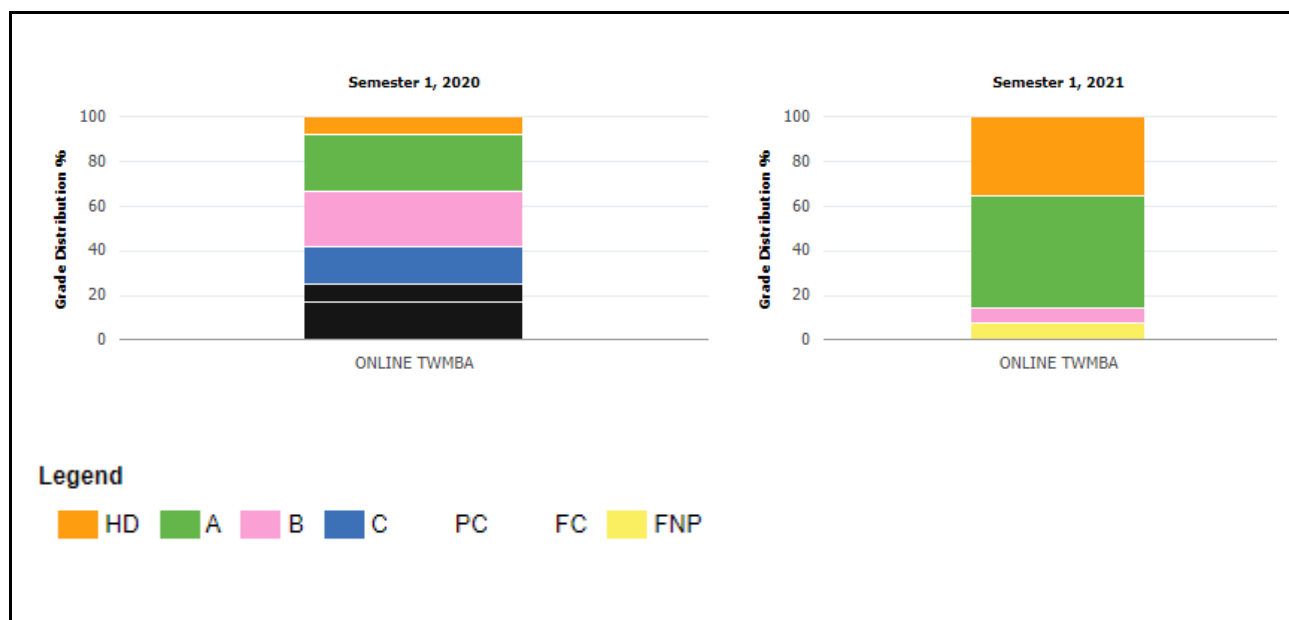
I developed skills in the use of technology. It was also useful to be in a group with academics from other schools as you could get ideas for future teaching. The whole project gave me good insight into the time demands of introducing new technology into courses.

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.