An Analysis of Podcasting to Support Learning in Nursing Education

Paul Jackson- Senior Lecturer University of Wolverhampton
Crispin Dale

Abstract

Podcasting is a means of authoring and subscribing to audio or multi media files on the Internet and has become increasingly popular within education. It offers a way for academics to record and distribute live lectures, support lectures, deliver course materials. In other words to further support learning. For the student the benefits include being able to access course materials at any time and review lectures/support material (support sessions) at any time. This assignment reports upon the work that has been done within preparation for practice within a Pre-Registration Nursing 3 year course at a School of Health. It has involved trying to create an enhanced podcast that would act as an extra support mechanism for students preparing to go out into their practice placement areas. It revolves around the Continuous Assessment Practice Documents (CAPD) they have to complete whilst out in practice. The idea of the enhanced podcast is that in addition to audio recordings it incorporates relevant images and reference material that will help support and engage the students in preparing for practice. The paper will give the justification behind the implementation of the podcast, account of the planning, delivery and evaluation of the podcast and the recommended future actions following analysis and synthesis of the collected evaluation data.

Key words: Podcasting, Nursing Education, Technology

Accepted for Publication- October 2008

Background

Within the authors role within a School of Health one of his responsibilities includes trying to enhance students learning experience within the context of practice learning using a range of teaching methods and resources in a variety of learning environments. Evidence from Pre-Registration student data (2006) at the School of Health, University of Wolverhampton stated that there are major issues around a lack of preparation for practice and support whilst in practice and there being a link between these issues and attrition rates. It seems that the University of Wolverhampton students are most likely to leave the course either on their 1st or 2nd placements in year 1 because of this. Within the School, Learning and Teaching and Retention plans in the School of Health at the University of Wolverhampton, it states that attrition needs to be addressed. Analysis of the Pre-Registration student
data (2006) in the School of Health indicates that greater attention should be brought to pre-placement preparation and that due consideration should be given to targeting support for 1st year students and in particular during and after each placement. Certainly Waters (2008) found that preparing students well for practice and providing ongoing support helps retention. With Coakley, McSherry and Marland (1999) stating good student support systems could help tackle attrition.

Part of the author’s role is to make sure a framework is in place to provide good effective preparation and support for students prior and during placement. One of the ways the author argues this issue can be improved upon is through offering different ways of learning and support such as mobile learning i.e. podcasts. As the paper will go onto discuss there are a number of benefits that can be associated with the use of podcasting and hence possibly help to reduce attrition rates. Though other studies have focused upon podcasting to support surgical procedures (Whitehead, Bray and Harries, 2007), this research is innovative in that it explores the use of podcasting to support in nursing education.

**Introduction**

There are other more generic reasons to implement podcasts within an educational setting. Podcasting is a means of authoring and subscribing to audio or multimedia files on the internet (Lim 2005) and has proven to offer an innovative way to support learning. Duke University in the United States successfully piloted the use of iPods and podcasting with all their first year students in 2004 and since then other educational institutions have followed suit in adopting this as an educational medium (Blasdell 2006). Hargis and Wilson (2005) stated that podcasting could provide a unique approach to improving foundational pedagogical approaches to information processing and conceptual learning. With Alexander (2005) stating that the use of podcasts can reach those with different learning styles and is particularly good for students who learn “on the go” as opposed to a traditional fixed classroom setting (Lim 2005). This means that ‘time-shifted’ learning can occur and hence learners can choose when and where they want to learn (Chan and Lee 2005). This was one of the main drivers for the authors use of podcasting, This is in addition to making learning more appealing to a diversity of students where podcasting has been used to generate greater inclusivity (Cebeci and Tekdal 2006).

Interestingly Miller and Piller (2005) found that students experience higher satisfaction with those courses that use audio recordings that accompany course materials. The author’s podcast would act as a means of support for what had been taught in class. Lane (2006) found that podcasts enabled students to further understand the in class taught material. With Chan and Lee (2005) finding that podcasting alleviated the anxiety levels of students to the subject matter. Although it could be said that anxiety levels could be raised by the introduction of new technologies. Another thought is that using podcasts can be conducive for those students who take a “bite-size” approach to learning (Dale and McCarthy 2006). To conclude the justification for the implementation of the authors podcast involved drivers relating to the authors job role and school he works in and backed up by strong theoretical evidence/research to state that it could be beneficial.

**Methodology**

The author chose to use the subject of CAPD’s (Continuous Assessment Practice Documents) and Preparation for Practice to pilot the use of podcasting with students. The material taught is often very varied across sites/specialisms/branches. Depending on who teaches this subject depends on whether the right information is delivered and whether it gets understood or not. The problem stems from the fact that despite Practice being 50% of the course it is not modulated. It often comes down to the same interested people to teach Prep for Practice and CAPD’s or quite often it gets minimal teaching time.

The plan was to have a number of podcasts relating to practice covering a wide range of subjects from CAPD’s, paperwork, general information, and orientation to placement areas and skills. These would supplement taught sessions and give the students the opportunity to revisit the sessions (in a condensed form) when and where they want to and hopefully this would help them feel more prepared and supported before and during going into practice.
This would hopefully lead to lower attrition rates in line with all the SOH drivers.

The production of the podcast followed the same process as Huann and Thong’s (2006) 3-stage model as illustrated in Figure 1.

The enhanced podcast was developed using an Apple Mac programme called “Garage Band” (see Figure 2). This is an audio recording programme used to record the dialogue that is being communicated by the broadcaster. Though other software programmes for producing podcasts exist (e.g. Audacity), the advantage of using Garageband is that it allows visual (e.g. powerpoint slides, diagrams, photos etc) and weblink based material to be incorporated into the podcast. Students can then see as well as listen to information that is being communicated to them during the podcast. The use of hypelinked web links enables students to be directed to sources of information that may enhance their understanding of the subject.

The Podcast is made up of a number of presentations, guidelines and general information on how to prepare for going out into practice and how to fill in the CAPD. The podcast itself was approximately 17 minutes long, although this was split up by a number of 4-6 minutes or less chapters. A chapter is a function, which enables the listener to efficiently navigate through the podcast when played through iTunes. This would mean that the level of engagement from the listener could be sustained and that the listener could move to which ever section they felt more relevant to them. The intention was for students to subscribe to the podcasts through this site (using training and instructions given to them) and as podcasts were updated on a regular basis, or new ones were created, these would automatically be updated via the iTunes programme that acts as an aggregator (see Figure 3). This is a free programme that can be downloaded and enables students to watch and listen to enhanced podcasts. Students would have also been able to download the podcast to their iPods, MP3/MP4 players. They could then either listen to the audio of the podcaster or listen and watch the visuals that accompany the audio. This would enable students to reinforce information that they had already been given via a lecture.
Data Collection

Due to the limitations of the study, the author decided to deliver the podcast to a group of key staff/peers and a focus group of students. This was done to gain evidence and support so as to push the idea of making the authors podcast go live and to hopefully add weight to the need to have podcasts within the SOH as a way of providing extra support to students. The staff group it was delivered to was the Clinical Learning Environment (CLE) group that consisted of Clinical Partners and senior members of staff who were involved heavily in Practice. It included a brief presentation about podcasts and then showing them the podcast and having a structured discussion with questions and answers. It then involved sending them a questionnaire to fill in regards the content and the concept.

Fry, Ketteridge and Marshall (1999) states the importance of observation by peers being to get discussion, collaboration and exchange of ideas. To gain mutual support between colleagues and feedback on piloting a new idea, method or solution to a problem. Fry et al. (1999) also state that it helps triangulation with other evaluative procedures i.e. student feedback/focus groups. The student group that the author delivered to was a 2nd year group who had already been out into practice a number of times. The reasons this was done was so as to gain whether they would have found it helpful and an improvement to have such podcasts in supporting them when they were going out into practice. Fry et al. (1999) stated that there is a growing range of alternative approaches to the canvassing of student opinion, these included questionnaires, structured group discussion and focus groups which offer less formal and relatively open ended ways in which groups of students can constructively exchange and pool thoughts and reactions. With this in mind the author used a simple questionnaire and focus group discussion which was used to help the group fill in the questionnaire fully.

The data collected was mainly quantitative in nature, although the last part of the questionnaire was qualitative which was facilitated via a focus group. Separate data was collected from students and staff on different occasions. Focus groups were used so as to make the questionnaire exploratory and open-ended. This was done in the hope that anything not covered in the questionnaire part of the research would show up in this part and that people’s valuable opinions, feelings and perceptions would be captured. Overall 17 staff members were presented to and shown the podcast. Their comments were taken and questionnaires were then sent out to them. Only six questionnaires were sent back completed despite reminders being sent out. However, informal feedback was gained from various staff that did not return a questionnaire. 23 students were presented to and shown the podcast. Comments were taken and questionnaires were given to them to complete whilst discussing the podcast and taking questions. Therefore, 23 questionnaires were completed.

Data Analysis

The data analysis was carried out in 2 different ways due to data collected being quantitative and qualitative in nature. The main quantitative part was tabulated and the different responses to each question were counted up and then put into percentage form. The qualitative data was read thoroughly and comments were organised into themes and these themes were looked at to attempt to identify patterns, associations and casual relationships in the themes. The author has also kept these comments in case they are needed for future reference.

Limitations

A number of limitations to the study and the use of the podcast are acknowledged. The author’s wanted to place the podcast alongside instructions and lecture material in the Universities own Virtual Learning Environment (VLE) known as WOLF. However, this did not happen because of a number of issues. These included a number of senior staff not wanting the podcast to go ‘live’ until everyone had been consulted on the actual content. There were also issues related to the curriculum and placement document changing soon and therefore it was felt that the content would need to be altered. There was a number of IT issues also. The hope was to publish the podcast using an alternative to WOLF called iWeb. This is a web publishing package, to develop a site where the podcast and future podcasts could be published and listened to. The web site could then be uploaded on to the web. However, it did not go ‘live’ in this format either. The author also acknowledges that the sample size was relatively
small and therefore caution should be raised when generalising the data more widely.

**Findings and Discussion**

When analysing the staff’s evaluation data (see Table 1) it seems that they mainly felt that the podcast was relevant and useful and that it did offer a flexible approach to learning. They also felt that students would find it useful to have other podcasts as a means of support for other practice related topics. There seemed much uncertainty as to whether the podcast was more interesting than traditional reading and note taking. They were also unsure that having podcasts as a support mechanism would improve the learning experience of the student. They were uncertain if students would access podcasts as a support mechanism if they were available. Interestingly, the evaluations showed that they did not have the appropriate equipment to be able to access and use podcasts and were mainly unsure if they responded well to technology. It was also obvious that there was a lot of variation as to whether they enjoyed TSL initiatives. The author argues that the uncertainty over podcasts being used by students or being beneficial stems from their lack of ability to access/use podcasts and their like for technology and developing TSL initiatives.

**TABLES!!!!!!!!!!!!!!**

**Recommendations**

Following the collected evaluation data there are a number of recommended future actions/issues to resolve with this TSL application. There are a number of strategies that would need to be implemented for effective podcasting to take place. These would relate to how to engage the listener such as introducing theory gradually, using chapters to guide the listener and developing deeper learner experiences. There would also be a number of technical issues that would need to be actioned. These would include making sure of audio and visual quality, ensuring copyright and technical and training support. These comments are in line with previous strategies that have been suggested on the use of podcasting to support student learning (Dale 2007, Dale and Hassanein 2008).

However, in this case the author feels that there are other more basic and specific actions relating to the School of Health (SOH) that first need to be addressed. It seems very apparent that a large proportion of the staff and management are unsure of such initiatives. Therefore, more presentations and demonstrations are required to the appropriate people to gain support for such initiatives. There is a need to present the positive data gained from the students. There is a need to showcase the benefits and provide evidence of the benefits. Maybe it requires more pilots to be authorised to provide more evidence. Therefore, the author believes the main future action is to change opinion of staff and management. Then it can be moved on to the next level of embedding such initiatives into the curriculum and then considering such learning issues and technical issues as already mentioned. It needs to be in the TSL strategy for the SOH.

Another issue that needs to be actioned would be to tackle a number of IT issues that are not just School wide but University wide. For podcasts to be made there would need to be better access and support for Mac technology. There would need to be easier access to software such as QuickTime, iTunes or similar for both staff and students. There seems to be training available for staff but not the software for them to actually develop or access podcasts.

The data shows that the students feel it would benefit them and would be a useful extra means of support and they would access it. However, there are many barriers to overcome within the School before this TSL application and future applications become embedded into the curriculum. The author believes that in light of the data collected, and the increasing evidence of the many benefits of podcasting for supporting learning, that things will move forward. Furthermore, the project indicates that this TSL application could improve student support and possibly reduce attrition rates for placement learning using this readily available mobile technology. Future research should focus upon exploring specific aspects of supporting the use of podcasting including podcast creation and staff development issues within nursing education.
With podcasting becoming increasingly popular in society and emerging as a means of supporting and enhancing learning, the authors see using podcasts as a great opportunity to meet the learning needs of the iPod generation and the increasingly demanding student body. However, it should not be seen as the ‘be all and end all’ and not as a replacement for contact between student and tutor. It should be seen as a supplementary channel enhancing the student learning experience and supporting student learning.

References


