Podcast and Unfolding Case Study to Promote Active Learning

Podcasting is increasingly used to supplement classroom instruction. More students are using technology in their everyday lives; therefore, they are eager to use technology in the classroom. Podcasting is the delivery of audio, images, text, or video to a computer or mobile device. The advantages of podcasting include lending a human voice to connect learners while using the technology they tend to favor (Stiffler, Stoten, & Cullen, 2011). Current technology makes podcasting easier for faculty to use; therefore, it was decided to pilot this technology in a senior-level nursing course.

A microphone for use with a computer and an audiorecording software program are required to create an audio podcast. A microphone was purchased for approximately $30, and Audacity (a free audio recording software program) was downloaded from the Internet (available at http://audacity.sourceforge.net). Audio was recorded related to renal disorders, which was the subject matter presented in PowerPoint® slides. The audiorecording was saved in an MP3 format, and the MP3 file was uploaded to the learning management system, Blackboard CE™. Students were instructed to review the PowerPoint slides and audio in lieu of an in-person class.

The students reported enjoying this format and several downloaded it to their iPod® to listen to “over and over.” The students also reported appreciating the ability to access the file at times convenient for them and to pause and review the text or Web site noted in the podcast. Students requested that more podcasts be added to the course.

The next podcast presented was to support class time rather than replace it. A class was chosen in which the care of patients with neurological disorders was scheduled. The lecture was recorded to accompany PowerPoint slides, as described previously. The audiorecording was uploaded to the learning management system, and students were instructed to review the podcast prior to the scheduled class period.

In addition, an unfolding case study was developed involving a patient with Guillain-Barré syndrome (one of the neurological disorders presented in the podcast). Unfolding case studies are useful because they portray a patient scenario over a given period of time, similar to a real-life experience. They are also useful to promote critical thinking skills through the application of concepts learned and are suitable for group work (Oermann & Gaberson, 2009). Case studies may be used for formative or summative assessment; however, it was ungraded for this assignment.

The case begins with the patient entering the emergency department and concludes with discharge preparation. Previously learned concepts, as well as concepts related to quality and safety, culture, emergency care, evidence-based practice, and ethics, were embedded. The case study underwent peer review prior to use, and feedback was incorporated.

Material from the podcast was reviewed during the first 30 minutes of the next scheduled class. Students were then divided into small groups and given the unfolding case study. The students were provided with instructions and were encouraged to use any electronic resources needed to complete the case. At the end of the 1-hour time period allotted for the small-group case study work, class was reconvened and each question in the case was reviewed.

A 5-point Likert-type questionnaire was distributed to the students following completion of the assignment, and all students voluntarily agreed to complete it. Higher scores indicated greater satisfaction with the item. Student response was positive, with scores ranging from 4.1 to 4.6 for each of the 11 items. Students reported a feeling of being actively involved and that they were improving clinical decision-making skills. Students overwhelmingly favored using podcasts and unfolding case studies more frequently in the course.

Podcasts are a creative method to promote student learning and have the potential to be incorporated into a number of nursing courses. Audio podcasts can be prepared with little expense and readily shared with students. Unfolding case studies are time consuming to prepare; however, the study findings suggest the time is worthwhile in promoting an active learning environment. Although using podcasts and unfolding case studies is innovative, evaluating student outcomes requires further study to determine if and how these learning strategies influence student performance and long-term retention.

References

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