Using multimedia to teach students essential skills

In this article...
- The benefits of using multimedia
- How video was used to teach essential nursing skills
- Results of an evaluation of using videos

Using multimedia
A review of multimedia approaches by the essential nursing skills team at the university found the existing materials did not meet our needs, especially in terms of the holistic integrated approach used to teach essential skills (Everett and Wright, 2011).

The approach used reflects contemporary literature on the theory-practice gap, skilling of students and the “look, listen and feel” concept (Brooks et al, 2010; Kershaw, 2010); it incorporates the core themes embedded in the curriculum: communication, infection control, patient safety, and moving and handling.

Following advice from the information and communication technology (ICT) services at UWS, we decided to use a video format that would allow students to observe a simulated scenario in which participating lecturers adopted the roles of nurse and patient.

Simulation introduced at this stage of the curriculum mainly involves patient scenarios to introduce and develop essential nursing skills. Scenarios allow students to observe, question and discuss then practise these skills in a safe environment.

Before using the clinical skills laboratory, students access the video via the virtual learning environment used at UWS. It is then replayed in the clinical skills laboratory, where students are encouraged to locate and palpate the radial pulse and observe its rate, rhythm and volume (Lewis, 2011). They are also taught the location of other pulse sites. While observing respirations, students are encouraged to acknowledge the rate, rhythm and depth of respirations. Each of these observations is monitored for one full minute (Dougherty and Lister, 2011).

Keywords: Multimedia/Vital signs/ Essential nursing skills

5 key points
1. Multimedia can engage students and enhance their learning experiences
2. Multimedia can be used to introduce and develop essential nursing skills
3. Nurse educators have an important role in developing innovative teaching approaches
4. Video can be an integral part of a blended learning approach to skills
5. Students value the use of multimedia

Students wanted to download videos

Nursing Practice
Innovation
Nursing education

An evaluation found using video can enhance the student learning experience
The video demonstrates several alternative positions that ensure that the patient’s arm is fully supported once the radial pulse has been located. It also shows several alternatives for observing respirations. Students are encouraged to use the most appropriate position based on a full patient assessment.

The NMC (2008b) code is also introduced and discussed, as well as the concepts of dignity, autonomy and respect. Furthermore, the importance of record-keeping (NMC, 2009) is established by using local NHS documentation in skills classes and in this video. While using the modified early warning score (MEWS) chart, students have the opportunity to record vital signs.

**Evaluation**

Before starting the evaluation, we sought ethical approval from the university’s ethics committee.

Evaluation involved watching the video then completing a questionnaire. We used two separate questionnaires to ascertain the perspectives of both lecturers and students. The student questionnaire was distributed to all UWS Hamilton Campus students. The peer evaluation questionnaire was given to a random sample (n=10) of all nurse lecturers with clinical skills teaching experience from all four campus sites at UWS.

The intention was to measure the effectiveness of the use of media in video format, in the first instance, to establish student preference and to provide data to inform and enhance teaching and learning for future cohorts.

Some questions used a five-point Likert scale (with the following responses: strongly disagree; disagree; don’t know; agree; and strongly agree), while others required qualitative comments.

**Findings**

The student evaluation for all three years is summarised in Fig 1.

The year 1 cohort generated an 82% response rate. Ninety-four per cent of this cohort indicated they would use the video for revision purposes, 91% would prefer access off campus and 89% would use similar videos for a wide variety of clinical skills. Interestingly, 82% indicated they would prefer to download it to a laptop computer or desktop computer, 13% would prefer multiple downloads and 15% would prefer a mobile phone (Fig 1).

The results of year 2 and 3 cohort are summarised in Fig 1.

The lecturer evaluation was extremely positive. Ninety per cent of the sample taught clinical skills in at least one module of the current curriculum. All respondents either strongly agreed (80%) or agreed (20%) that the video demonstrated best practice and that the equipment used is representative of that used in clinical practice (strongly agreed 70%; agreed 30%).

Respondents indicated (strongly agreed 80%; agreed 20%) that the length, content and level of information met their teaching needs. They all confirmed they would use the video as a teaching resource and also that it would be preferable if students could access this off campus.

All concluded that they would use similar videos to help in the teaching of all undergraduate clinical skills.

**Conclusion**

Students value the use of multimedia and have indicated preferences for access off campus and being able to download videos. Similarly, nurse lecturers have expressed their preference for off-campus access for students and their intention to use the video as a teaching resource.

This data will be used to inform and enhance learning and teaching strategies for future cohorts, which will address NMC and UWS recommendations for contemporary teaching and learning strategies.

While work on producing a portfolio of clinical skills videos is still in its infancy, we envisage that skills videos using an integrated, holistic approach will be produced and incorporated into the new curriculum.

**References**


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