Nurse educators sometimes appear reluctant to use e-learning, and question
whether it is appropriate for pre-registration nurse education for a number of reasons

E-learning adoption in pre-registration training

In this article...

❯ **Current use of technology in education**
❯ **Nurse educators' beliefs and views on technology in teaching**
❯ **How these themes should affect e-learning promotion**

5 key points

1 Use of technology is increasingly being seen as standard in education

2 Many educators are reluctant to adopt technology in their teaching methods

3 While teaching trends are for more self-directed study, this may not be appropriate for student nurses

4 Traditional approaches do not prevent engagement and can be student-centred and creative

5 Educators need to see the benefits of changing teaching methods before e-learning will be embraced

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Abstract Petit dit Dariel O et al (2013) E-learning adoption in pre-registration training. *Nursing Times;* 109: 36, 26-27.
Despite the advances in technology and the many ways in which it can be used in education, many academics are reluctant to include technology in their teaching. Past studies have been unsuccessful in finding out the reasons for this.

This article analyses a study that looked into the reasons why nurse educators in particular are reluctant to adopt technology in their teaching practice.

The use of technology in teaching is no longer considered an innovation but is increasingly seen as standard by many working in education. Much has been written on the topics of information and communication technologies for education (ICTE), technology-enhanced learning (TEL) and e-learning in nursing and non-nursing education.

However, despite the clear enthusiasm in the media and in numerous reports, the adoption of technology has been limited among educators. The technology regularly used by academics tends to be limited to PowerPoint presentations and uploading the slides to a virtual learning environment (VLE) platform, such as Web CT, Moodle or Blackboard.

Researchers have attempted to explore the reasons behind the limited adoption of technology among academics in higher education. Many of these studies have used surveys to identify barriers preventing lecturers from using technology more creatively in their teaching. Common findings have pointed to a "lack of time", "lack of training" or "limited infrastructure". However, even when all these issues have been addressed, the use of technology remains limited. Many of these studies combined all departments in their analysis, and not analysing each discipline separately may have affected the results.

Aim and method

We conducted a research study in 2009 with the aim of better understanding the underlying factors influencing nursing academics in their choice to engage with technology in their teaching.

The study took place in a nursing department within a higher education institution in the UK. It employed Q-methodology, a unique methodology that allows participants to rank statements printed on index cards to express their views on a topic. The question asked of the 38 nurse academics was: "What are the issues influencing your choice to use e-learning in your teaching practice?"

Participants were given 53 statements, validated in a pilot study, that reflected all the issues identified in previous studies as barriers to e-learning adoption. They were then asked to place each statement in order of the degree to which they agreed or disagreed with it and to explain their placement of the cards.

The advantage of this method over a regular questionnaire or survey is that

Educators argue that student nurses see self-directed e-learning as a "cop out"

participants can prioritise issues in relation to others, encouraging them to examine the issues more holistically, rather than in isolation.

Analysis

The data was factor-analysed to determine which participants had sorted the cards in similar ways, allowing groups of participants with similar views to be identified. From the factor analysis, four groups of nursing academics were identified:

» Factor A: the e-advocates. "E-learning can transform nurse education by giving learners more control to develop as autonomous professional nurses."

» Factor B: the humanists. "E-learning hinders communication and prevents the development of person-centred nursing."

» Factor C: the sceptics. "E-learning is frustrating and does not improve nurse education because it cannot develop clinically competent nurses."

» Factor D: the pragmatists. "E-learning is a convenient tool to upload documents to reinforce what is covered in class."

An analysis of how respondents had placed the statements and follow-up interviews allowed a number of themes to emerge among the four groups.

One strong theme related to the tension between nurse training and the current "revolution in higher education". This revolution has challenged traditional teaching strategies and placed more emphasis on self-directed learning (SDL) and learner autonomy. While all four groups of respondents more or less recognised the value in this, we uncovered some underlying reservations about applying these principles to nursing.

The nurse academics felt a sense of responsibility when it came to covering nursing content and did not feel comfortable simply letting students direct their own course of study. They noted the high stakes involved in preparing students to provide safe patient care and a responsibility to do this.

Respondents also felt that students themselves often misunderstood self-directed learning approaches, and argued that students saw it as a "cop-out". They believed that students saw educators who employed student-centred, self-directed learning strategies as not doing their job since they were making students more responsible for their own learning. Many felt that students did not necessarily want this control and responsibility and appeared to be more comfortable being told what to do.

Findings

This ideological dilemma between higher education's change in approach and the reality of what students and educators see as a responsibility to prepare them to provide safe patient care influenced their decisions over the use of technology. This is particularly because e-learning has been tailored and promoted as a tool to facilitate self-directed and autonomous learning. A number of nurse academics chose to continue teaching in a traditional didactic approach to appease students.

While all four groups claimed to have similar educational beliefs, this did not lead to corresponding uses of e-learning. Factors A and B held similar views, yet had different responses to e-learning in their teaching. This shows that educators choosing not to use e-learning are not doing so because it prevents them from practising their preferred didactic style. Factors B, C and D did not use e-learning because it was not perceived to add any value to their teaching practice. As noted by Hall (2009), traditional approaches to teaching (lecturing and small seminar discussion) do not exclude engagement and can be student-centred and creative, suiting those who value face-to-face contact. Nor does the use of technology automatically lead to innovative, student-centred and creative strategies (Souleles, 2005).

The attitudes of the nurse educators suggest they value student-centred, self-directed study and learner autonomy highly. However, in practice, they admitted to demonstrating a certain control of the knowledge, exhibiting some "hand-holding" for the students. They appreciated the idea behind self-directed learning, but did not think it was realistic for pre-registration nursing. This goes some way in explaining the predominant use of PowerPoint slides and of VLE purely for uploading documents, with little experimentation in uses of technology that give more control to the learner.

Conclusion

Our findings contribute to a better understanding of the issues influencing nurse academics' responses to technology in their teaching. Those who do not use technology are not necessarily "resisting change" (Sridharan et al, 2010; Straub, 2009; Newton, 2003); many nurse academics are reluctant to explore technology in their teaching without a deep understanding of how it would benefit students (Souleles, 2005).

The existing style of teaching seems to meet the needs of nurse educators and students, so it is not surprising that there is reluctance to adopt e-learning, particularly as change causes frustration and increased costs in terms of time. While technology has the potential for new possibilities, the real challenge is matching these possibilities to the type of education nurse educators and their students want.

These findings can inform policymakers, e-learning strategists and professional development staff on how to present and promote e-learning more effectively. Rather than investing in more technology and training, institutions should examine the specific needs of academics in professional disciplines such as nursing, who have a responsibility far different from those teaching non-vocational degrees. Technology in teaching is a key issue and has the potential to challenge traditional teaching models.

Nurse educators are responsible for developing, delivering and monitoring educational programmes and assessing competence and fitness for practice. Their responses to e-learning must be understood if technology is to equip them better to do this.

This is particularly relevant given the move to graduate entry into the profession. Nurse educators will need to develop a curriculum that will prepare students for their evolving role while considering how technology can assist with this preparation.

The findings from this study point to the tensions between changes in the education system and educators' sense of responsibility. It is therefore essential that these educators consider the competencies and skills they are trying to develop in the future nursing workforce. **NT**

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