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Title

Pre-registration midwifery education: Do learning styles limit or liberate students?

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Abstract

In 1995, all pre-registration health education moved into higher education, signalling a shift from the apprenticeship model to an academic one. Since 2008, the Nursing and Midwifery Council has required all pre-registration midwifery programmes to be offered at degree level only, with a required practice-to-theory ratio of no less than 50% practice and no less than 40% theory. Individual education institutions vary in how these requirements are met in terms of learning and teaching strategies. This article explores literature in relation to the 'learning styles' pedagogical approach, which advocates that all students have a particular preferred learning style and will learn best if they are allowed to learn in their preferred style. The key question is: What are the most appropriate learning and teaching strategies to support student midwives to develop the skill set required to meet the demands of contemporary practice?

Keywords

Pre-registration midwifery education, Learning styles, Competence

Introduction

Pre-registration midwifery education not only prepares students to be competent and confident on registration, it is also the start of their journey as lifelong learners in order to ensure their practice remains contemporary and evidence-based. In a potentially stressful, complex and dynamic clinical environment, midwives must demonstrate resilience and emotional intelligence to consistently provide women and their families with high-quality care (Power, 2016). Sophisticated interpersonal skills, competent and confident clinical practice and high-order critical decision-making skills are fundamental to safe practice, which is why it is important that pre-registration midwifery education employs a range of learning and teaching approaches to support student midwives to develop the skill set to meet the demands of contemporary practice.

In 1995, all pre-registration health education moved into higher education, signalling a geographical as well as pedagogical shift from the apprenticeship model to an academic one. Since 2008 the Nursing and Midwifery Council (NMC) has required all pre-registration midwifery programmes to be offered at degree level only, with a required practice-to-theory ratio of no less than 50% practice and no less than 40% theory. While indicative content of all curricula is determined by EU requirements (European Parliament and the Council of the European Union, 2005) and NMC (2009) standards, individual approved education institutions (AEIs) vary in how these professional and legal requirements are met in terms of the learning and teaching strategies adopted. As long as student midwives are competent in the four domains—effective midwifery practice; professional and ethical practice; developing the individual midwife and others; and achieving quality care through evaluation and research—individual AEIs have the autonomy to decide how to best support their students to meet the requirements to be admitted to the register.

Learning styles

Fundamental to successful facilitation of learning is to ensure the range of learning and teaching strategies adopted throughout a programme of study meets the learning needs of all students, to support them in achieving the required skills and competencies. How does apportioning individuals with one style of learning affect learning overall? Broadly speaking, the idea behind learning styles is that students have a particular preferred learning style and will learn best if they are allowed to learn in their preferred style (i.e. are presented with learning materials or activities that are consistent with their preferred style). Typically, the choice of learning styles is limited and predetermined by the designer of the learning styles system, and students will take a self-audit test in order to determine which learning style they prefer. Some of the more popular learning style theories include: VAK/VARK (Fleming, 2017), which classifies students as visual, aural/auditory, read/write, or kinaesthetic learners; and Honey and Mumford (1992), who classify learners as activists, theorists, pragmatists and reflectors.

In his book, *Teaching Today*, Petty (2004: 149) makes a reasonable claim about learning styles:

‘There is strong research evidence that “multiple representations” help learners, whatever the subject they are learning. There is much less evidence for the commonly held view that students learn better if they are taught mainly or exclusively in their preferred learning style.’

Two years later, in his book *Evidence Based Teaching*, Petty (2006: 30) went further, stating:

‘It is tempting to believe that people have different styles of learning and thinking, and many learning style and cognitive style theories have been proposed to try and capture these. Professor Frank Coffield and others conducted a very extensive and rigorous review of over 70 such theories... they found remarkably little evidence for, and a great deal of evidence against, all but a handful of the theories they tested. Popular systems that fell down... were Honey and Mumford, Dunn and Dunn, and VAK.’

Professor Coffield and his colleagues at Newcastle University produced two reports for the Learning and Skills Research Centre in 2004. The first, *Learning styles and pedagogy in post-16 learning: A systematic and critical review* (Coffield et al, 2004a), examined 13 of the most influential learning styles models in detail. The second report, *Should we be using learning styles? What research has to say to practice* (Coffield et al, 2004b), focused on the implications of learning styles for educators. This second report provided a set of tables listing the strengths and weaknesses of the 13 learning

styles systems, and a summary of the extent to which each of the learning styles systems met the minimal criteria set out in the report. Of the 13 systems, the only one to meet all four of the criteria was Allinson and Hayes' Cognitive Styles Index.

Peter Kingston (2004), writing for the *Guardian*, summarised Coffield et al's findings:

'The report... concludes that only a couple of the most popular test-your-learning-style kits on the market stand up to rigorous scrutiny. Many of them could be potentially damaging if they led to students being labelled as one sort of learner or other.'

Coffield et al (2004a; 2004b) appear to have generated a great deal of interest in the increasingly discredited area of learning styles, and the evidence against learning styles has been steadily building ever since. Examples of criticism include the following:

'The contrast between the enormous popularity of the learning-styles approach within education and the lack of credible evidence for its utility is, in our opinion, striking and disturbing. If classification of students' learning styles has practical utility, it remains to be demonstrated.'
(Pashler et al (2008: 117))

'Some studies claimed to have demonstrated the effectiveness of teaching to learning styles, although they had small sample sizes, selectively reported data or were methodologically flawed. Those that were methodologically sound found no relationship between learning styles and performance on assessments.'
(Guterl, 2013)

'The existence of "Learning Styles" is a common "neuromyth", and their use in all forms of education has been thoroughly and repeatedly discredited in the research literature... Learning Styles do not work, yet the current research literature is full of papers which advocate their use. This undermines education as a research field and likely has a negative impact on students.'
(Newton, 2015)

It is important to point out that the reports by Coffield et al (2004a; 2004b) are nuanced, complex and resistant to reductionist soundbites and simplistic conclusions. Nevertheless, Coffield provided a succinct statement on learning styles in an opinion piece for the National Council for School Leadership:

'For some years now, the research evidence has been clear, consistent and convincing: learning styles are invalid, unreliable and have a negligible impact on practice.'
(Coffield, 2013: 2)

One of Coffield's major criticisms of the learning styles movement is that its 'theorists' have taken a subject of great depth, importance and complexity (i.e. how people learn, and how people learn how to learn) and have 'developed simplistic, self-report tests, devoid of context, that force the takers of these tests to choose between predetermined categories' (Coffield, 2013: 3). This echoes an earlier criticism that 'too much is being expected of relatively simple, self-report tests' (Coffield et al, 2004b: 58). What is perhaps most disappointing about the fact that such simplistic learning styles tests still pervade educational institutions is that similar criticisms were made more than 2 decades ago. In his book *Mastering the Teaching of Adults*, Apps (1991: 40–1) explained that:

'Researchers have developed a variety of learning styles inventories to help learners and teachers understand more about individual preferences... Though these inventories can be useful, learning style preference is far too complicated for measuring with a simple test... Some people prefer a particular learning style because that is the only way in which they have experienced learning...

Sometimes, by encouraging them to try other learning strategies they discover that they really prefer quite a different approach.'

How might a 'learning styles' approach affect pre-registration midwifery education?

Some things genuinely impede a student's ability to learn:

- The student is worried or anxious about something
- The student is very hungry or very tired
- The student is in physical discomfort
- The content is too advanced
- The student cannot hear what is being said or see what is being shown
- The student is demotivated.

If some of these conditions apply, then a student is not going to be able to learn well; and if all of them apply it is unlikely that the student will be able to learn anything at all. But is it the case that a student will struggle to learn if he or she is a kinaesthetic learner—someone who best learns by carrying out physical activities, rather than listening or watching—and has been given an audio podcast to listen to? The answer could well be yes, but not necessarily for the most obvious reason. The most likely reason that a kinaesthetic learner will struggle to learn from a podcast is because they have been told in advance by an educator that this material is not in a format suitable for them—in other words, the student is only likely to struggle to learn because they have been told by a respected authority figure that they will struggle to learn. However, as highlighted earlier, there is literature to suggest that students do not, in fact, learn better when receiving information in what they believe is their preferred learning style (Coffield, 2013; Coffield et al, 2004a; 2004b). Not only is it misleading to encourage them to believe that they do, but it may impair their ability to learn if they think that they have a learning style in which they learn best—and, by implication, several other learning styles in which they believe they cannot learn.

The curriculum

Midwifery 2020: Delivering Expectations (Chief Nursing Officers of England, Northern Ireland, Scotland and Wales, 2010) outlined the key aspects of the role of the midwife (Box 1), and the NMC (2009) sets the standards for pre-registration midwifery education. Research has found that, to meet the wide-ranging demands of the profession, as well as 'traditional' methods such as keynote lectures, AEs use enquiry-based learning, simulation and e-learning for both theoretical input and clinical placements (Fraser et al, 2010). If the curriculum was developed in line with the 'learning styles' approach, it could be argued that it would be impossible to train each individual student to meet all the required skills and competencies using a single preferred teaching strategy; there must be a range of strategies that are topic-specific, rather than learning-style-specific. For a vocational programme such as midwifery, students need to have a comprehensive understanding of underpinning theory in order to apply theory to practice. Learning is multi-dimensional and requires an eclectic approach. Perhaps students should be encouraged to take an interest in the learning process and the ways in which they think and learn, rather than be constrained by a single approach.

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Conclusion

The NMC (2009) states that pre-registration midwifery education must ensure student midwives achieve all the required skills and competencies to prepare them for the complex and demanding role of midwife. The literature suggests that a learning styles approach to curriculum delivery is limiting for the individual, and has the potential to create psychological barriers to being an adaptable learner. In the unpredictable and dynamic clinical environment, adaptability is a key attribute, so it is important to review curricula to ensure pre-registration education is not unwittingly having a negative impact on students' ability to adapt in the workplace.

CPD reflective questions

- If you are a mentor: Do you actively seek to include a range of teaching approaches to support your students' learning, or are learning opportunities dictated by clinical demands?
- If you are a midwifery educator: What factors influence your decision-making in relation to how best to teach certain topics?
- If you are a pre-registration midwifery student: Have you ever taken a learning styles self-audit test? Did you think the results were accurate? Did the results influence your engagement, or satisfaction, with subsequent learning?

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