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The experience of developing an online mentorship programme for nurses and midwives supporting pre-registration students in practice

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ABSTRACT

This article describes the experience of one university team in developing, delivering and evaluating a Nursing and Midwifery Council (NMC) approved mentorship programme for nurses and midwives who support pre-registration students in practice. It provides some context and rationale for using a digital learning approach, and discusses some of the challenges and key learning identified during the process. Evaluation of the programme is presented utilising Kirkpatrick’s 4 stage evaluation model. This suggests that the programme is well accepted and meets student and employer needs.

KEY WORDS

Digital learning; NMC mentorship; Course evaluation; Kirkpatrick model;
This article describes the experience of one university team in developing, delivering and evaluating an online Nursing and Midwifery Council (NMC) approved mentorship programme for nurses and midwives who support pre-registration students in practice. Although the authors are confident in the quality of the educational provision, it is not our intention to discuss this programme as an exemplar of best practice, but rather to use the experience to share the learning gained from the experience.

**National Context**

Through Health Education England (HEE) a key aspiration of the Department of Health is to ensure that staff “………. receive consistent high quality education and training to support the delivery of excellent care” (Health Education England, 2017). This relationship between the continuing professional development (CPD) of staff, quality of care delivery, and professional fitness to practice is at the heart of the NMC revalidation process. Revalidation requires practitioners to undertake at least 35 hours of CPD, of which at least 20 hours must be activity that involves interaction with one or more other professionals (NMC, 2016). However, there are growing pressures on time for releasing health professionals to engage in CPD activities and it is increasingly difficult for health care staff to access funding for university programmes of study. Indeed, Health Education England announced that it had reduced its funding for “workforce development” for the second consecutive year - including CPD delivered by universities by almost half, from £104.3m to £83.49m in 2017-18 (Nursing Times, 2017).

This has led to universities in partnership with local health care providers, looking at more flexible, economically viable approaches to programme delivery, including greater use of technology (Higher Education Academy, 2015a).

**Benefits of technology assisted learning**

The use of technology as a learning tool is widely promoted for example, in 2011, the Department of Health (DH) published “A Framework for Technology Enhanced Learning” which emphasised that technology had a key role to play as part of teaching and learning solutions in health care. More recently HEE produced guidelines for commissioning technology assisted learning in NHS, acknowledging this
approach as a key priority in supporting the development of the healthcare workforce (HEE, 2016). Koch (2014) cited a range of evidence that demonstrates that technology enhanced learning is as effective an educational method as traditional classroom based delivery. There is also work to suggest that the increased student control over their learning on online programmes may led to quicker and better retention of new skills and knowledge that traditional methods (Cook et al, 2010). Other potential benefits of technology enhanced learning have been widely reported and are outlined in Box 1 (Kale et al, 2010).

**Terminology**

The concept of using technology to support students has been described using a range of terms. These include:

- Online learning
- Technology assisted /enhanced learning
- Digital learning
- Electronic learning or E–learning
- Distance learning – which may use technology or other non-traditional teaching and learning processes to enable instruction and academic engagement without face to face attendance at an educational institution

The term digital learning will be used for the purpose of this article. This refers to learning that is delivered, enabled or mediated using electronic technology for the explicit purpose of training, learning or development in organisations (Chartered Institute of Personnel and Development, 2016). Digital learning can be differentiated from blended learning which combines face-to-face classroom and online activities (Health Education Academy, 2015b). Digital education programmes require no attendance requirement so may be particularly suitable for students where there may be timing and travel pressures.
Local need

A particular challenge for our local health care providers – including NHS, private, voluntary and 3rd sector organisations – has been the NMC requirement for nurses and midwives who support pre-registration students in practice (Mentors) to have undertaken an approved programmes of preparation for the role (NMC, 2008). Traditionally this has been through attendance at a University programme consisting of 5 full study days of classroom based learning. However, the large numbers of mentors requiring preparation to support the practice placement circuit had the potential to put pressure on clinical services. This often led to a situation whereby several nursing or midwifery team members from one clinical area were in study block at the same time. In attempt to address this issue, a blended learning approach to mentorship preparation has been introduced. The classroom taught element has been reduced and learning is supplemented by online resources and activities on the university’s virtual learning environment. However, we recognised that there was the potential to exploit online learning more fully. To this end and in partnership with our service provider colleagues, we explored how we could develop a completely online programme with no university attendance requirements that still met the NMC requirements for mentor programmes (see Box 2) whilst still maintaining and improving the quality of the student learning.

Course development

The course development team comprised of

- Academic staff involved in mentor course delivery
- University digital technology team
- Practice learning facilitators representing local health providers
- Mentors who had recently undertaken mentorship preparation programmes

A study exploring the factors influencing digital learning adoption by nurse educators (Petit dit Dariel et al, 2013) identified a relative reluctance by nurse academics to engage in learning technology, and identified 4 different viewpoints in their sample of nurse educators:
• ‘Digital learning advocates’ who recognised e-learning’s potential
• ‘Humanists’ who avoided digital learning as they valued human interaction;
• ‘Sceptics’ who doubted that technology could improve learning outcomes;
• ‘Pragmatics,’ who only used digital learning as a tool to post lecture notes online to supplement what they covered in class

(Petit die Dariel et al, 2013 page 1293).

Within our course development team, we recognised some of these characteristics amongst the group and certainly for us, having a strong ‘digital learning advocate’ within the team, gently persuading some of us out of our “comfort zones” was a key driver for the successful outcome. The digital technology support was also vital – obviously for technological support and expertise, but equally as important, in terms of their knowledge and experience in ensuring that technology was used to improve learning, rather than simply streamline the process regardless of outcomes.

Button et al (2014) identified that a major concern for academic staff was the amount of time that digital learning resources took to develop - this certainly echoed our experiences. The time commitment for material development was certainly higher than developing materials for face-to-face instruction – however it has been recognised that once developed, digital learning courses have the potential to save time through economy of scale as potentially higher student numbers are possible with reduced academic input (Hjeltnes and Hansson ,2005).

The NMC mentor domains (NMC, 2008) were used as a framework for the online course (see Box 3.) Core material from the existing face to face and blended learning programme was used to build the units of learning that make up the course and enable achievement of the course objectives. No changes were made to the assessment processes – the portfolio of evidence remained as for blended mode. During this time, material was reviewed, evaluated and adapted as feedback was received from the course team. Approval from the NMC to deliver the programme in the different format was received. A pilot of the course was then undertaken by 15 trainee mentors.
Pilot of Course

Trainee mentor students (TMS) complete the 10 units sequentially over a 3-month period. The 10 units are focused around the introduction to the course, the 8 NMC domains and a course summary of learning. Each unit of learning comprises of:

- Clearly defined learning outcomes
- Prescribed activities including interactive quizzes, personal reflections, material to read such as research papers and case studies
- Recorded lectures
- Discussion boards - where students are required to post specific reflections or respond to questions. The boards also provide a vehicle for students to use for both peer and course leader support and for professional networking. They also provide evidence that enable academic staff to verify that student is actively engaging with the course materials in line with NMC requirements.

The trainee mentors are also expected to meet the normal NMC work based requirements of the programme, supporting a learner in practice under the supervision of an experienced mentor and evidencing their experiences through a portfolio of learning. The portfolio of evidence, which must be authenticated by the TMS’s supervising mentor, is required to be submitted online at the end of the programme for assessment by the course team. TMSs meeting the course learning outcomes are then eligible for entry on the locally held NMC mentor registers.

Evaluation of pilot programme

Evaluation is essentially about assessing the outcome of student learning. Kirkpatrick ‘s evaluation model (Kirkpatrick, 1998) is widely used and identifies 4 levels of impact following a training or educational experience (see box 4.) Initial evaluation of the pilot focused on level 1 – the student’s immediate perception as to how well the training was received. This was done via anonymous questionnaire sent out via university quality assurance mechanism processes and analysed
independently from the course delivery team. In addition, qualitative comments made by individual students were thematically analysed by the course team.

We were also able to assess at level 2 – how far the course learning objectives had been met through the online submission of the student’s individual portfolio for assessment purposes. As the portfolio is structured around the NMC learning outcomes for mentors, this allowed for relatively easy assessment of achievement of learning objectives. All TMSs on the pilot except one who failed to submit despite follow up successfully passed the course, having mapped their portfolio evidence against the NMC learning outcomes. The process of assessment was subject to the normal university processes for ensuring rigor including internal moderation and external examiner scrutiny.

We are currently exploring with local placement organisations processes for how we might assess level 3 outcomes – new mentor behaviours following the course. This will focus on how far the participants are able to apply what they learned during the mentorship training when they are back in practice. This is likely to include 360-degree feedback which is a process to obtain a multi-directional assessment of an individual’s performance (Nowack, 1993). In the context of evaluating mentor behaviours in practice, this could involve feedback from individual students mentored, line managers and peers. However, we are aware that assessing individual behaviour change can be challenging – as Voutilainen et al (2017) noted “… the effect of digital learning is, most likely, affected by many, probably confounding, factors.”

For the newly qualified mentor, this may include the motivation of the learner, the support to develop and consolidate their new skills, and the learning culture of the practice environment.

Level 4 evaluation – how far targeted outcomes occur as a result of the training and the wider learning environment in place to support the learning on the course when the attendees return to the workplace. Kirkpatrick describes this as the total support package to enable and support student mentoring in practice. Locally, this is already undertaken as part of the quality assurance processes for ensuring safe and effective practice placements for pre-registration students. This data should be able to provide more long term assurances of the quality of the learning environment, of which mentorship preparation will be an important, but not the only factor. Evaluation data currently collected and reviewed includes:
- Individual placement evaluations by student health professionals on the pan - Yorkshire health care placement website –this includes feedback on issues such as timing of formative and summative student interviews, and awareness of student learning needs. All negative feedback is followed up.

- Annual audit of each practice placement area, against pre-set qualitative and quantitative educational criteria such as number of mentors available, number of mentor up to date and meeting triennial review obligations, and nature of learning resources and learning opportunities available.

- Review of student practice assessment documents by nursing academics

- Scrutiny of external feedback mechanisms that might suggest student learning could be compromised such as Care Quality Commission reports

**Key learning from the pilot study**

9 out of 15 from the pilot cohort provided electronic feedback via the evaluation questionnaire which focused on 10 key areas:

- Pre-module information
- Initial introduction to module
- Module organisation
- Module assessments
- Feedback received
- Teaching support
- Materials/resources
- Relevance to future role
- Ability to balance study load against work and home commitments
- Technical difficulties
Thematic analysis of qualitative data was undertaken. This is a process of “… identifying, analyzing and reporting patterns within data” (Braun and Clarke, 2006). This revealed that students were very positive about the learning experience (see box 5 for examples of qualitative feedback.) All students agreed that the module had adequately prepared them for mentorship and no negative feedback was received about the actual course content or the teaching materials. Surprisingly technical difficulties around access or utilisation were not an issue for the students – in contrast to a recent systematic review of e learning in nurse education that identified technological issues as a major cause of frustration in students (Voutilainen et al, 2017). As a team we were conscious of this potential problem, and so had ensured that we had built in processes for easy access and prompt responses to technological support issues raised by students - indeed 2 students made positive comments on the quick responses from university staff.

2 key themes did however emerge for action by the course team. The first one identified was the lack of opportunities that students had to meet with fellow students. Inevitably, a characteristic of digital learning is the lack of spontaneous, personal interaction and communication that occurs between students. The discussion boards do provide a vehicle for this – and the course teaching team did engage in discussions and acted as moderators to positively influence the quality and usefulness of the discussions through use of welcoming comments, posting questions, summarising and ‘moving’ topics on. However, it maybe that for some students electronically mediated interaction is always “second best” to face to face verbal communication, particularly related to lack of immediacy and real time conversations. This lack of synchronistic discussions can be overcome by having agreed times where students and the academic moderator can join in real time discussions. However, this would mitigate against a major reported benefit by the students of flexibility in terms of working through the programme units. However, how we use discussion boards to maximise peer to peer engagement will be kept under review.

The second theme from the evaluations was around the student workload, balancing work, home life and study time. It has to be acknowledged that this is also an issue that is prevalent in evaluations from
our face to face and blended part time courses for nurses, midwives and allied health professionals. It is difficult to say whether this was a more profound issue with the new digital mode of delivery or whether this is an inevitable challenge for part time students. Certainly recent evidence suggests that the competing demands of study, family and work impacts on the lives and the academic performance of health professionals undertaking part time continuing professional education programmes (Burrow et al, 2016). It may also be that whereas students on the face to face course are given study leave to attend the study days held in university, there is a perception by managers that less time is required for the on line course. It is also possible that if study leave is granted for an online programme, it is more likely to be cancelled due to the lack of attendance requirements.

The course team discussed these issues and actions taken to address them include:

- More pre course information regarding the nature of the course and the lack of face to face contact
- Improved, more directive guidance on using the discussion boards as a vehicle for discussion and “networking” between students
- More explicit guidance on estimated time for undertaking the online activities and work for potential students on the programme and their managers
- Exploring use of student photographs appearing when they post on discussion boards to reduce “faceless” nature of the conversations

**Future of course**

These changes have been implemented and the online course is now offered as part of our continuing professional development provision for health professionals. It continues to be well evaluated. However, we are aware that the TMSs are to some extent, self-selecting and it may be that the students who apply for the online module are more “technology-savvy”. Recent work exploring differing generational attitudes towards technology suggest significant difference between different generations of nurses (Health Education England, 2015) ranging from older nurses who may strive to understand
and feel comfortable with digital technology as opposed to younger generation who are “digital natives” having grown up as “technological multi taskers” (HEE, page 38). For this reason, we have continued to offer face to face delivery of the module twice per year – but we anticipate demand for this mode falling significantly in future.

We anticipate that that the teaching and learning materials within the module are flexible enough to be adapted to meet any additional professional body or service requirements for mentors. This is particularly important following the recent NMC education consultation which emphasises the importance of education institutions, practice placement and work based learning providers working together to develop innovative approaches to supporting learning and assessment in practice (NMC, 2017).

**Conclusions**

Higher education providers need to demonstrate a sound understanding of local workforce needs and the ability to respond to changing requirements. This article has provided an example of this through the development and delivery of a digital learning programme for preparing nurse and midwifery mentors. Collaborative and partnership working has been a key feature of the development process, and early evaluation suggests the course has been very well accepted by students and their employers. Our educational provision will continue to be reviewed and monitored in order to ensure that we are providing timely, flexible and student-centred education.
- Providing consistency of material and educational activities
- Reducing instructor time during delivery
- Enhanced cognitive recall and mastery of learning
- Increased students’ motivation and satisfaction
- Can provide convenient, economical and active teaching
- Learning methods that are more learner-centred than some of the more traditional teaching methods

**Box 1: Potential benefits of technology enhanced learning (adapted from Kala et al, 2010)**

Mentor preparation programmes must be:

- At a minimum academic level of HE Intermediate level (previously known as level 2)
- A minimum of 10 days, of which at least five days are protected learning time.
- Include learning in both academic and practice settings.
- Include relevant work-based learning, e.g. experience in mentoring a student under the supervision of a qualified mentor, and have the opportunity to critically reflect on such an experience.
- Normally, be completed within three months.

(NMC, 2008 page 38)

**Box 2: NMC requirements for Mentorship preparation programmes**
1. Establishing effective working relationships
2. Facilitation of learning
3. Assessment and accountability
4. Evaluation of learning
5. Creating an environment for learning
6. Context of practice
7. Evidence-based practice
8. Leadership

(NMC, 2008 page 25 – 26)

Box 3: NMC mentor domains

Level 1: Reaction

The degree to which participants find the training favourable, engaging and relevant to their jobs

Level 2: Learning

The degree to which participants acquire the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training

Level 3: Behaviour

The degree to which participants apply what they learned during training when they are back on the job

Level 4: Results
The degree to which targeted outcomes occur as a result of the training and the support and accountability package

**Box 4 The Kirkpatrick Model of Evaluation**

<table>
<thead>
<tr>
<th>Positive aspects:</th>
<th>Negative aspects:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“. working through material week by week allowed me to have lots of time to catch up with anything I missed”</td>
<td>“Some of the discussion time to complete suggestions were unrealistic “</td>
</tr>
<tr>
<td>“The structure divided into 8 domains was very easy to follow “</td>
<td>“. difficult to balance working full time and doing online course”</td>
</tr>
<tr>
<td>“Student discussion boards created for students to ask questions were very helpful and queries were answered promptly.”</td>
<td>“Lack of study time due to being an online course – struggled without study leave”</td>
</tr>
<tr>
<td>“. regular feedback via discussion boards stopped me feeling isolated.”</td>
<td>“I missed face to face meetings with fellow students to discuss and share problems and challenges about mentoring – discussion boards are not the same as face to face networking.”</td>
</tr>
</tbody>
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**Box 5 examples of students feedback post pilot**
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