



Students' experiences of blended learning across a range of postgraduate programmes

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SUMMARY

The article describes the students' experiences of taking a blended learning postgraduate programme in a school of nursing and midwifery. The indications to date are that blended learning as a pedagogical tool has the potential to contribute and improve nursing and midwifery practice and enhance student learning. Little is reported about the students' experiences to date. Focus groups were conducted with students in the first year of introducing blended learning. The two main themes that were identified from the data were (1) the benefits of blended learning and (2) the challenges to blended learning. The blended learning experience was received positively by the students. A significant finding that was not reported in previous research was that the online component meant little time away from study for the students suggesting that it was more invasive on their everyday life. It is envisaged that the outcomes of the study will assist educators who are considering delivering programmes through blended learning. It should provide guidance for further developments and improvements in using Virtual Learning Environment (VLE) and blended learning in nurse education.

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Introduction

Currently the challenge in nurse education is to make programmes convenient, accessible and attractive to a wider cohort of students (Dorrian and Wache, 2009). E-learning and blended learning have the potential to meet this challenge. Little is reported about students' experiences to date. The aim of this paper is to describe postgraduate nursing students' experiences of participating on blended learning programmes in an Irish University.

Background

Although blended learning is widely used in nursing and social sciences (Jonas and Burns, 2010; Marsh et al., 2008; Green et al., 2006), there is no agreed definition. In the context of this study blended learning is defined as a combination of face-to-face and on-line learning. On-line learning involves providing students with access to learning resources, facilitating communication, and collaborative working among and between students and academic staff (Garrison and Kanuka, 2004; Volery and Lord, 2000). Effective interactivity facilitates the promotion of active learning environments, the

provision of greater feedback for educators, and enhances student motivation (Markett et al., 2006; Muirhead and Juwah, 2003).

On-line offers a rich virtual workspace in which interactions occur among students either in real time (synchronously) or through discussion boards (asynchronously) (Volery and Lord, 2000). Advantages include increased student satisfaction (So, 2009; Green et al., 2006), increased knowledge (Campbell et al., 2008; Sung et al., 2008) and reduced staff workload (Dorrian and Wache, 2009). Students appreciate the flexibility and convenience of being able to work in their own time and location without the need to travel (Ireland, et al., 2009; Welker and Berardino, 2005; Song et al., 2004; King, 2002).

On-line delivery is not without its problems. These include: the lack of non-verbal cues and cultural markers in on-line student discussions (Twomey, 2004; Hara and Kling, 1999), increased demands on time (McVeigh, 2009; Welker and Berardino, 2005) and technical difficulties. Technical difficulties are one of the most commonly reported frustrations with on-line education (Welker and Berardino, 2005; Song et al., 2004; Hara and Kling, 2000; 1999). Information Technology (IT) ability and access may affect students' ability to engage in the on-line discussion (King, 2002). The ease of access and navigation of any Virtual Learning Environment (VLE) is crucial in the effectiveness of online education (Volery and Lord, 2000). Also, traditional teaching roles become less clear; and some educators may focus on the technology and disregard the learning goals (Twomey, 2004).

Students require clear guidelines and preparation prior to starting any on-line programme (Song et al., 2004). Pre-course assessment in IT skills and continuous student support is helpful (McVeigh, 2009).

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Students may become frustrated and anxious by poor communication and delayed feedback from educators (Welker and Berardino, 2005; Aspden and Helm, 2004). The educator has to be approachable and willing to provide prompt feedback to students (Ireland et al., 2009).

Educational context

All postgraduate programmes in the academic year 2009/2010 were delivered through blended learning for the first time in the School of Nursing and Midwifery. Sixty modules for the programmes were blended over a two-year period. The programmes cover a wide range of specialisms including: emergency, palliative care, oncology and mental health nursing. The blended learning approaches that were adopted combined on-line teaching and assessment and face-to-face workshops on the campus. The blend includes:

- A 2-day induction on the campus which introduces programme requirements. Other activities included informal meetings with the module teams, familiarisation with University policies, navigation of the VLE and participation in electronic literature searching tasks.
- Each module is set up individually on the VLE and comprises of:
 - An on-line learning guide that includes resources in meeting programme learning outcomes.
 - An asynchronous BLOG, facilitated by a module team. The BLOG aims to support student learning by seeking their comments, answering questions and reviewing responses to learning activities. The number of students on a BLOG varies depending on if the modules are core or specialist. In the larger core modules, students are subdivided into smaller groups of approximately 20–25 students. This enables contact across a smaller number of students and allows the facilitator to track individual student progress and needs.
 - Specific subject content is delivered in two-day face-to-face workshops for each module.
 - Assessment of the modules varies. These include coursework, practical assessments, and online submission of e-tivities.¹ Feedback on e-tivities is given within a minimum of two weeks following submission.
 - An on-line end of module evaluation.

Redesigning the modules included writing up learning guides, devising meaningful learning activities and selecting key readings. A fundamental challenge was learning how to support student learning in a VLE, and using the technology effectively. Staff were eager to maintain a quality learning experience for students; hence the rationale for the study.

Method

A qualitative interpretive descriptive design was used to gather and analyze data from participants based on Thorne et al. (2004) work. This approach was in keeping with the aim of the study. Focus groups were used to collect the data. The focus groups captured the interaction between participants (Kitzinger, 1994). A semi-structured interview guide developed by the research team was used to guide the discussion (Appendix 1). The guide addressed; experience of programme delivery, programme content, programme delivery and student support. All students (n = 146) registered on the nine postgraduate nursing programmes were contacted via email and invited to participate in the study. An information sheet was attached to the email informing them of the purpose, process, potential benefits and harms, data collection procedures, time commitment, voluntary nature of participation, the right to withdraw, confidentiality, and contact details for additional

information. A total of 51 students returned signed consent forms (RR 35%) and agreed to participate in the focus groups during the lunch hour of one of the face-to-face-workshops, six months from the end of their programme. Refreshments were provided. To reduce any potential ethical conflict, seven focus groups were facilitated by four educators, who had minimal involvement with the blended learning programmes under review; and who had extensive experience facilitating focus groups. Prior to conducting the interviews, all participants were reminded that they could withdraw at any time; permission to tape record the interviews and transcribe verbatim was obtained by each participant. The length of the focus group interviews ranged from 36–72 minutes. The study was approved by the University Research Ethics Committee.

A short demographic questionnaire was used to collect supplementary data to describe the sample. The majority of participants were female (n = 48) with between 2–30 years clinical nursing experience. Most participants were in the 23–50 year age category and only nine had previous experience of blended learning.

Data analysis

All data was transcribed verbatim by a qualified transcriber. The resulting transcripts were scrutinized and read thoroughly to check for accuracy of transcription by the four members of the research team who conducted the analysis. Thematic data analysis, described by Burnard (1991) was used to analyse the data. This involved a few stages; 1) individual researchers thematically coded the data. This involved reading and re reading the transcripts and assigning open codes, axial codes and finally generating tentative categories. These tentative categories included 'accessibility', 'flexibility', 'managing the blend', 'autonomy', 'responsibility', 'expectations' 'technology' and 'learning and application'. 2) The four researchers compared their individual codes and categories and a coding framework was established. 3) The transcripts were reread, in light of the agreed coding framework, and coded accordingly.

Rigour was maintained using the principles of credibility and trustworthiness (Lincoln and Guba, 1985). Credibility and trustworthiness were enhanced by having the researchers initially independently code the data and develop and agree a coding framework. To further enhance credibility, a copy of the findings was presented to participants (n = 4) to provide them with an opportunity to comment on the accounts and the researchers interpretations of same. All agreed and confirmed that the findings accurately captured and reported their experiences. Dependability and confirmability were also ensured by keeping a detailed record of the research strategy, analysis and the resultant findings.

Findings

This section presents two predominant themes, each containing sub-themes concerning the participants participation on the blending learning programmes (Table 1). Selected quotations from the interviews

Table 1
Themes and sub-themes.

	Themes	Sub-themes
1	Benefits of blended learning	Accessibility and flexibility Autonomy and responsibility Application to practice Enhanced learning
2	Challenges of blended learning	Feeling isolated Maintaining a sense of community Invasiveness of blended learning Feeling overwhelmed Technological problems Blogging and e-tivities. Feedback

¹ The term "E-tivity" refers to a conceptual framework for discussing interactive learning activities (Salmon, 2002).

are presented to illustrate these themes. Overall the participant experiences of partaking on an e-learning programme were positive.

Benefits of blended learning

Many participants reported that blended learning provided them with a unique flexible learning experience, because they could access and engage with their educational programme from anywhere and at any time. The participants did not need to be on the campus to actively engage in their studies.

"I think the one thing that worked for me about blended learning is I'm living in, and I'm working in, so I can just access it and I don't have to be planning my time as much, so I found it good like that" (FG J)

This flexibility allowed participants to "manage the blend" by fitting the on-line study around their work and family commitments.

"...., if you'd to come in every week, it would be impossible to get off work, not wasting your days off, I find I work a lot of nights, so at least I can go online when I come home in the morning and it's more flexible" (FG H)

Participants believed that the approach provided autonomy in their learning as they were responsible for the amount of time they dedicated to the programme.

"It is more grown up it seems ... you have to be focused, motivated and really self-disciplined, not held by the hand. That is what I appreciate ... you feel that you are doing it for yourself ..." (FG D)

Many participants suggested that the approach enabled problem solving. This helped in being more active in applying what they learnt to their practice.

"...in particular I'm trying to apply it to practice because I am making sense in my own head. I'm actually doing it at work ... you have to make your own sense of it which (means) you learn it, you really learn because you had to totally understand it" (FG A)

Participants who were able to contrast what they learnt on a blended learning programme with a traditional classroom approach reported they learned more through blended learning. This appears to be with the on-line content and in the face-to-face workshops.

"I definitely learned more. I did my degree five years ago ... and maybe it's self-directed, maybe it is because I am older and more responsible and more interested. I don't know but I am definitely learning more and more interested. I love the layout of it. If I was to do a course I would do this rather than sitting in a room." (FGB)

Participants emphasised the value of the face-to-face workshops; these helped to clarify concerns and consolidated learning. More importantly the workshops provided an opportunity to meet their peers.

"...that knowledge would have been reinforced whenever we had our [workshop]... clarification then would have been given ... you could have discussed it then with the lecturers ..." (FG G)

However, participants also experienced many challenges with the blended learning approach.

Challenges to blended learning

Some participants commented that the approach could be isolating as the opportunity to socially interact was limited. The majority of the participants would have had the experience of this with the traditional classroom approach.

"...but when you're doing it through blended learning...because you don't know anyone, you're not really given the opportunity to know people" (FG J)

Maintaining a sense of community on the BLOG was important for the participants. They found this was challenging if their specialist area in nursing was under represented in the blogging-groups. This applied to the core modules only.

"(You could argue that) it is better to get a multi-disciplinary view (on the BLOG) but ...if you are the only person (with a mental health background) and the others are from (other specialisms) they don't take on board what you are saying it means nothing to them. The idea of multi-disciplinary sharing (is good in theory) but in reality on the BLOG it is not great." (FG A)

Participants were of the view that having smaller groups on the BLOG, and possibly speciality specific groups, might help to maintain and develop a sense of community and aid the getting to know each other better.

"You can nearly interact more with the smaller group. You don't have as many names to trawl through [in the BLOG]. It's that bit easier. Like in the module we were more grouped into smaller groups, so it made it easier than looking down through the whole list of lines" (FG K)

Despite appreciating the flexibility of the programme, some participants highlighted how the on-line component was invasive on their everyday life, as there was no differentiation between college and home time. Studying nursing related materials at home, following a day at work, was considered invasive.

"It is so invasive ... at least when you are in college, you are in college and that is it. Its college and it is done. Whereas when you come home from work, you come home to put on the computer, you study cancer, you read articles. "You may not spend more time but it is in your home time" (FG D)

This invasiveness on personal time meant that some participants felt that blended learning was an overwhelming and tiring experience.

"It has been heavy going.... You really need to be (on-line a lot), I have been on I say the at least two nights a week for three hours each night but that is organizing getting kids to be bed. (starting at) 8 o'clock until 11 o'clock at night and then back up in the morning at 6 o'clock to get ready for work ..., I find it quite time-consuming and tiring" (FGC)

Some participants commented that the internet connectivity was an issue. This was particularly the case in geographical areas where there was a slow dial up network connection.

"With me at home and with the wireless connection I have to wait sometimes ..., it could be half an hour before you can get connected... So, that in itself was frustrating" (FG G)

Participants' views differed on whether it was helpful to allocate marks for BLOG participation. Some participants thought it appropriate

to allocate marks, given the amount of time they spent on the BLOGs. Others questioned the usefulness of BLOGGING. They felt some discussions were 'obligatory' in the sense they felt compelled to BLOG to get the marks rather than focusing on what was important. Participants indicated they were sometimes confused as to what was expected of them on the BLOG or in e-tivities.

Some participants reported an absence of prompt feedback on the e-tivities while others believed that learning was enhanced by the provision of timely and high quality feedback on e-tivities and assignments.

"You need the feedback to see are you on the right path or are you off it altogether. If you're off it then you need to be contacting your lecturers" (FG 1)

Limitations

In total only 51 students participated in the focus group giving a response rate of 35%. It is possible that these students were a more motivated cohort, in particular as the focus groups were held during lunch hour. Furthermore the focus groups were conducted six months from the end of their programme; hence the full experiences may not have been captured. However, overall the responses were constructive and encouraging.

Discussion

The findings contribute to an understanding of the student experiences of undertaking an e-learning programme. Their perceptions of the experiences highlight the benefits and challenges of pursuing this method of study.

The study reveals that students experienced a number of benefits from blended learning. One particular benefit was its accessibility and flexibility (Ireland, et al., 2009; So, 2009; Welker and Berardino, 2005; Song et al., 2004). Blended learning enabled students to engage with the programme when it suited them. Participants believed that the flexibility fostered a sense of autonomy and they valued this adult learning approach. The flexibility and sense of autonomy helped them plan their own learning. All participants were qualified registered nurses working full-time, many with family commitments and many lived long distances from the campus. The challenge was having to 'fit in' time and energy to study around these competing factors. These results embrace important considerations for the design of e-learning programmes.

Participants reported that unlike traditional classroom approaches; blended learning enabled them to take increased responsibility for their learning. They were cognisant that in order to actively use their learning in practice, the responsibility for learning and understanding content rested with them. In nursing and midwifery programmes, it is especially important that students apply and use in practice what they have learned. This would support the notion of constructivism guided by Piaget and Vygotsky (Woo and Reeves, 2007). In constructivist learning, students build up their own body of knowledge centred on individual experiences and then apply this knowledge directly to the setting. Furthermore, nurse educators continually aim to develop independent autonomous lifelong learners (Birenbaum, 1996). It would signify that the blended learning approach may be one way to achieving this aim. Participants commented favourably that they learned more through the blended learning format. This finding concurs with studies that suggested that blended learning helped to increase student knowledge (Campbell, et al., 2008; Sung, et al., 2008). Equally important, educators must develop a deep understanding of individual learning styles of students as they can affect many attributes of learning and teaching.

A number of challenges were reported by the participants. Some participants missed the social interaction compared to the traditional method. On-line learning was lonely and isolating. Evidence supports that the asynchronous nature of on-line communication such as BLOGs can result in reduced social interaction and a poor sense of community (Welker and Berardino, 2005; Song et al., 2004). This highlights that the facilitator is key in creating, and nurturing an on-line community of students, indicating that blended learning fits within a constructivist pedagogy (Twomey, 2004). In an on-line environment, within a constructivist paradigm, educators function as facilitators guiding transformative experiences enabling students to feel confident and supported in working independently and with each other. This could be achieved by ensuring that face-to-face opportunities occur early in programmes, allowing ample time for students to socially interact with their peers.

The participant's suggestion of having smaller, discipline specific, groups on each BLOG might also enhance engagement. These strategies may assist in developing a more engaging on-line community, thus reducing student experiences of isolation and enhancing their learning. Whilst many participants welcomed the flexibility, some felt that the on-line component was invasive on their everyday life. They felt that they had difficulty studying nursing related materials at home, following a day at work. This is a noteworthy finding as it was not found in previous research. The traditional classroom approach made it easier for students to separate college time from home time. These participants felt overwhelmed at times indicating that it was more time consuming (McVeigh, 2009; Welker and Berardino, 2005).

On-line programmes can allocate marks for e-tivities and BLOG participation as they can require a lot of work (Woods, 2010), hence the rationale for mark allocation to encourage student participation. The marks are allocated for the quality of the discussion rather than the quantity. Some participants were confused as to how the marks were allocated to the BLOG. The view was that there was pressure to BLOG, in order to qualify for the marks allocated. Consequently, they felt that BLOGGING was superficial. Some participants were confused regarding e-tivity requirements. It is essential that students receive clear guidelines on e-tivity requirements and BLOG participation. It should be explicit that merely writing something for the sake of having contributed will not guarantee marks.

Technological problems such as poor internet connectivity were reported. This prohibited the students' abilities to engage in on-line discussion (King, 2002) and created frustration (Welker and Berardino, 2005; Hara and Kling, 2000; 1999). McVeigh (2009) suggests that more support and resources need to be provided to students commencing on a blended learning programme. This may take the form of additional basic computer skills as well as instruction in the on-line navigation of the VLE being used. Furthermore, it should be emphasised to students when applying for programmes that good broadband and internet access is imperative.

Participants reported that their learning was enhanced if prompt feedback on e-tivities and assignments was received. Similar to other studies, participants were anxious and frustrated when feedback was delayed (Welker and Berardino, 2005; Aspden and Helm, 2004). According to Rogers (1992), timely informative feedback can help the older student to evaluate how they are performing. Interestingly, the majority of the students were in the 23–50 year age category.

Conclusion

This study aimed to explore postgraduate nursing student experiences of participating on blended learning programmes. It confirmed that participants reported positive aspects to the experience. Blended learning has good potential to challenge students to engage in constructing their learning and application to practice. A notable finding that was not reported in previous research by students was the invasiveness of the on-line study on everyday life. However, hearing the student voice is a

starting point to progress further with blending learning in the School of Nursing and Midwifery, with the hope that it provides encouragement and for other educators who wish to develop blended learning approaches. While hand-on learning will continually have a place in nurse education, the e-learning milieu has had an encouraging impact; indeed this will continue and have a long and meaningful presence in nursing education today and well into the future.

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Appendix 1

Semi-structured interview guide.

Focus	Question/prompt
<i>Experience of programme delivery</i>	What was your experience of participating in a blended learning programme?
	What was good about taking your programme this way?
	What was negative about taking your programme this way?
	How did learning this way compare with your previous learning experience? (Prompts: independence in learning, relevance, application)
<i>Programme content</i>	Did programme materials meet your expectations? (workbooks, blackboard)
	Was content relevant to practice? (Elicit views on web-based content and workshops)
	Was content appropriate to programme level? (Elicit views on web-based content and workshops)
	How regularly did you engage with course materials?
<i>Programme delivery</i>	What facilitated your engagement?
	What hindered your engagement?
	Did you know what was expected of you?
	Were the learning outcomes or objectives clear?
<i>Student support</i>	Were the learning activities clearly described? Helpful?
	Were the e-tivities clearly described? Helpful?
	Was it easy to access and use BlackBoard?
	Had you any particular difficulties with the on-line element of the programme?
<i>General</i>	Had you any particular difficulties with the face-to-face elements of the programme?
	What was important for supporting your on-line learning? (Prompts: interaction with other students, availability of facilitators, interaction with facilitators, timely feedback, access to technical support)
	Did you feel well supported when learning on-line?
	Did you feel well supported when learning in the classroom or laboratory?
<i>General</i>	Did learning in this way support application of your learning to practice?
	Have you an example of excellence?
	Would you recommend any improvements?
	Any other comments or suggestions?

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