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Improving the digital literacy competence of nursing and midwifery students: A qualitative study of the experiences of NICE student champions

Julia Terry*, Alyson Davies, Catherine Williams, Sarah Tait, Louise Condon

College of Human & Health Sciences, Swansea University, Singleton Park, Swansea, SA2 8PP, United Kingdom

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ABSTRACT

Developing competence in digital literacy is an important component of health professional education in order to increase confidence in accessing best evidence for clinical practice. Regulators of pre-registration nursing programmes in the UK have stipulated an increasing number of digital competencies that will be required by future nurses. The teaching of digital literacy skills may be achieved through a range of methods, including didactic, experiential and peer-taught approaches. The UK National Institute for Health and Care Excellence (NICE) have developed the NICE student champion scheme (NICE SCS) to train health care students to deliver digital literacy sessions on using the NICE Evidence Search engine to peers. This scheme has previously been evaluated from the perspective of medical and pharmacy students, but there has been no published evaluation of the experiences of nursing and midwifery students. In this study focus groups were used to explore the experiences of those who acted as NICE student champions. Findings were that student champions experienced benefits, which ranged from greater facility in using the search engine and a better understanding of accessing resources and information about evidence-based care. Student champions described improvements in their presentation skills and knowledge, despite some challenges in facilitating sessions.

1. Introduction

Health professional education programmes include elements of digital competence, evidence based practice and peer teaching; so the research literature from all three areas are pertinent to the positioning of the research study described in this paper. Nurse educators are increasingly aware that information literacy and digital competence are needed to ensure nurses are open to technological possibilities and have the competence and skills to manage the flood of available information (Health Education England, 2017; Newbern, 1985; Royal College of Nursing, 2017). Digital literacy relates to the capabilities needed for living, learning and working in a digital society, and healthcare has been slower than many other sectors to embrace new technologies, with some staff feeling nervous and sceptical about the digital revolution (Pearce, 2017).

Working in health and social care requires sound digital capabilities. In the UK the Nursing and Midwifery Council (NMC) mapped digital literacy within the 2018 Standards for Pre-Registration Nursing Programmes and Standards of Proficiency for Registered Nurses. The development of digital literacy not only facilitates engagement with effective decision-making, problem solving and research, but also enables nurses to take responsibility for continued learning in areas of

personal or professional interest as well as facilitating evidence based practice (EBP). According to Pravikoff (2006) digital literacy is as important as evidence-based practice and developing and maintaining digital literacy is a lifelong professional obligation. For this reason it is important that digital literacy is embedded in nursing and midwifery education programmes to ensure that as novice practitioners students develop EBP skills effectively (Stombaugh et al., 2013). Digital competence is currently under-reported in peer-reviewed literature. Papers to date report on the identification of specific digital competencies and toolkits designed to encourage reflection and self-evaluation against a set of digital capability criteria (Evangelinos and Holley, 2014; Tanabe and Kobayashi, 2013). Identification of these digital competencies, like those reported by Janssen's and Stoyanov (2012) depicted in Fig. 1, provide useful starting points when re-designing curricula in order that competency gaps are addressed. Further studies concerning digital competence have reported on specific aspects of learning. For example, Røsvik and Haukedal's (2017) study in Norway looked at how nursing students evaluated digital competence in relation to the development of a wiki learning resource, highlighting that research can also be assessment-focused.

As part of the UK National Institute for Health and Care Excellence (NICE) drive to provide access to best evidence and to promote health

* Corresponding author.

E-mail address: J.terry@swansea.ac.uk (J. Terry).

1. General knowledge and functional skills
2. Use in everyday life
3. Specialized and advanced skills for work and creative expression
4. Technology mediated communication and collaboration
5. Information processing and management
6. Privacy and security
7. Legal and ethical aspects
8. Balanced attitude towards technology
9. Understanding and awareness of the role of ICT in society
10. Learning about and with digital technologies
11. Informed decisions on appropriate digital technologies
12. Seamless use demonstrating self-efficacy

Fig. 1. Twelve digital competences as identified by Janssen and Stoyanov (2012).

improvement, a search engine called NICE Evidence Search (NICE ES) has been developed in its current format since 2009, which enables links to regularly updated sources of evidence on major health conditions. This search engine, which is accessible via a hand-held device or a computer with an internet connection, provides high quality specialist health and social care information which is safe to use in practice. NICE Evidence search - <https://www.evidence.nhs.uk/> includes a range of filters enabling the user to select the type of evidence (for example, which includes guidance, policy, and patient decision aids). NICE ES also includes shortcuts to the British National Formulary (BNF) for adults and for children, as well as links to Clinical Knowledge Summaries (CKS) and NICE pathways. Topic searches, health issues and evidence are accessed through a range of routes including alphabetical lists and search boxes.

It is useful to compare Janssen and Stoyanov's digital competencies (listed in Fig. 1), with the context and potential use of NICE ES. Whilst all twelve competencies have relevance to this search engine in some way, each would require further explanation and discussion with students to ensure identification, recognition and appropriate practice. For example, two of the key competencies listed are *use in everyday life* and *learning about and with digital technologies*, and these are particularly relevant as students need to learn the purpose of search engines like NICE ES, as well as the context of regular use, and how to use search engines in a systematic way.

To promote the use of the NICE ES search engine, a digital literacy training scheme was developed between the NICE education team and universities in the UK to enable students to become NICE student champions, who then teach their peers to become digitally competent in using the NICE ES search engine. The NICE student champion scheme (SCS) began as a pilot in 2010, with initial target disciplines of Medicine and Pharmacy, and has since been adopted by 38 universities in the UK to date. Currently 4 Schools of Nursing in the UK have engaged in the scheme. According to Sbaffi et al. (2018), participating healthcare undergraduate students' confidence improved when approaching information tasks on NICE ES. Sbaffi et al. (2018) report on an evaluation of the NICE SCS scheme in England from 2011 to 2016, with over 5500 students attending peer-led sessions. Our paper reports on the experiences of nursing and midwifery students who acted in the role of NICE student champions in one university in the UK, and adds to what is known about this peer-led digital literacy scheme as reported by Sbaffi et al. (2015, 2018).

2. Background

Digital literacy is about 'having the knowledge and ability to effectively and critically navigate, evaluate and create information using a range of digital technologies. A digitally literate person can use technology strategically to find and evaluate information, connect and collaborate with others, produce and share original content, and use the

Internet and technology tools to achieve many academic, professional and personal goals' (Grech, 2014, p.79). Digital literacies therefore are the abilities which facilitate an individual for living, learning, working, participating and thriving in a digital society, and essential skills for today's healthcare professionals. Development in technologies provides opportunities for students to engage in problem solving and knowledge advancement in supportive environments (Peddle, 2011; Johnston et al., 2013; Skiba, 2008). The growth of this type of technology has resulted in a significant and continuing culture change within health education and higher education. It is argued that the delivery of safe, effective nursing care requires the use of an evidence-based approach to practice and that undergraduate nursing students need to develop a sound repertoire of digital literacy skills for clinical practice and life-long learning (Shorten et al., 2001).

Currently studies regarding digital competence and digital literacy are under reported in the nursing and midwifery literature. The UK's Royal College of Nursing and Health Education England produced guidance to promote digital literacy among the profession. Their *Improving digital literacy* strategy aims to inform policies directed at improving the digital capabilities of all healthcare staff (RCN and HEE, 2017). Further drivers in the form of newly published standards for proficiency for registered nurses in the UK include the mention of digital technologies on 4 occasions, and a statement that at the point of registration, the nurse must be able to 'demonstrate the numeracy, literacy, digital and technological skills required to meet the needs of people in their care to ensure safe and effective nursing practice' (Nursing and Midwifery Council, 2018, p.9). The standards also state nurses should 'effectively and responsibly use a range of digital technologies' (NMC, 2018) as well as be able to manage digital, verbal and written information in practice settings.

According to Theron et al. (2017), even though it is assumed that students are digitally literate and skilled in accessing and using the internet and technology generally, it appears they are challenged by understanding the trustworthiness and rigour of the information they access online. The need for nursing and midwifery students to develop abilities to assess and appraise information in a robust manner is vital. Increased skill in digital literacy has an impact on care and in providing high quality evidence based health information to the public. With increased public access to health information on the internet, health professionals can empower individuals to make judgements about the quality of information accessed and what constitutes 'good' information (Theron et al., 2017). Gonen et al. (2016) state it is important that nurse educators consider digital competencies as an overarching theme that are integrated within nurse education curricula. Helping students to gain digital competence will in turn impact upon their knowledge about evidence based practice.

Evidence based practice is a dominant concept in healthcare, which was characterized in the early 1990s (Guyatt et al., 1992), and is now a fundamental aspect of nursing programmes across the world, as well as the Nursing and Midwifery Council's code (NMC, 2015). Before the internet was in common use healthcare professionals would look for research evidence via books and journals, but now search engines have made accessing research more manageable for clinicians, supporting the developing culture of inquiry (Pravikoff, 2006). Wang et al. (2012) noted a wealth of search engines are available to help people access health and medical information, but there can be pitfalls for healthcare staff who are first and foremost seeking accuracy of information. In a survey of healthcare staff, which included doctors, dentists, allied health professionals, nurses and midwives, Hider et al. (2009) found that all professional groups employed Google more than any other internet-based tool, suggesting it was quick and accessible, despite concerns about the quality of information retrieved. This shows that while practitioners may have the ability to access online tools to search for evidence for best practice, they may not access the most reliable sources. If students are doing what their peers do, the notion of implementing good digital habits that students teach and learn from each

other may be a real option in improving their knowledge and digital competence.

Student centred pedagogies such as peer led learning activities are developing recognition as a fundamental aspect of many teaching programmes (Briggs and Doubleday, 2016; Reid and Duke, 2015). Many benefits to the student are demonstrated, including increased confidence in practising skills, better self-esteem, improved communication skills, developed critical thinking skills and an overall higher performance during studies (Ambrose et al., 2017; Bates, 2016). Significantly, during student led pedagogies, when the power is considered equal between students acting as teachers and concurrently as learners, it is reported as an effective strategy for developing deep learning (Ambrose et al., 2017).

The NICE student champion scheme is based upon a peer-led model of teaching, which encourages interaction (Khan and Coomarasamy, 2006) and is student focused (Secomb, 2008). Many higher education institutions provide sessions on evidence searching, frequently delivered by subject-specialist librarians who are expert in this field. The NICE student champion scheme differs in using healthcare students to deliver sessions. Bodemer (2014) refers to many sources in relation to peer reference and peer-to-peer interaction and supports the idea that peer-led styles of teaching benefit learning. Suggesting that professionals with the most knowledge often overcomplicate basic instructions, Bodemer (2014) states that students often do a better job explaining concepts or instructions in ways that their peers understand. Not only are the students who are being taught likely to benefit, but also peers who are teaching find value too, in terms of increased competence and confidence. Having students as peer teachers supports the students as partners agenda, as they are fully engaged in aspects of programme delivery (Healey et al., 2014). Holliday and Nordgren (2005) evaluated a program set up to promote peer teaching and found that students benefitted from the position, especially in relation to learning from teaching others. It is suggested that peer-led sessions promote student success, as peer teachers can be available and accessible to other students to teach and discuss digital literacy (Jarson, 2017).

The NICE champion scheme was introduced at x university in 2011 solely for medical students. In 2015 medical, nursing and midwifery students participated, but during 2016/17 it was provided solely for student nurses and midwives, as only students from those disciplines volunteered for the champion roles. Existing research into the NICE Student Champion Scheme has focussed on the benefits and challenges of delivering the scheme for medical, pharmacy and dentistry students (Rowley et al., 2015) and learning that champions derived from participation in the scheme (Sbaffi et al., 2015). Sbaffi et al. (2018) reported on the first five years of the scheme's implementation in England and conducted pre and post session surveys with health professional students who attended pc lab sessions peer taught by NICE student champions. Findings suggest that participating students' confidence improved when approaching information tasks, and further promotion of the scheme is recommended in online formats (Sbaffi et al., 2018), to increase accessibility and awareness about NICE ES.

The study reported in this paper explores the experiences of nursing and midwifery students in their role as NICE student champions at one university regarding their personal and professional development, knowledge transfer in practice, and conflicts and challenges that arose for them in their champion roles.

2.1. Implementing the NICE student champion scheme and delivery of peer-led NICE ES sessions to nursing and midwifery students

The first author organised the scheme in collaboration with subject librarians, and the Education team at NICE. Fig. 2 shows the stages of implementing the NICE student champion scheme in UK Higher Education Institutions.

Each academic year students apply to be NICE champions in

response to promotional posters, emails and introductory sessions with the aim of delivering face to face information sessions to their peers at a future point. For first year student champions sessions would be delivered with the support of librarians. The selection process (a 300 word expression of interest to the scheme facilitator) was completed by each student applicant, followed by consultation with each potential champion's personal tutor to assess suitability for the role. Those appointed as NICE student champions attended a one day training event led by staff from the NICE Education team, university librarians and the scheme facilitator. A combination of didactic and interactive teaching methods were employed during the one day training to optimise the student learning experience (Khan and Coomarasamy, 2006; Westin et al., 2015). At this event student champions engaged in experiential learning on the NICE ES engine, learnt about delivering teaching effectively, and finally engaged in role play in facilitating peer-led teaching sessions with feedback from staff and students present.

Student champions received a zip file of suggested resources from NICE to support them (which included suggested presentation slides and quizzes), and then prepared their sessions either alone or with their student champion partner (if they requested a buddy). The scheme facilitator remained in touch with student champions by email and checked they were prepared to deliver the peer-led sessions as timetabled. Eight of the sixteen student champions chose to deliver the sessions in pairs, which resulted in more experienced champions partnering with first year champions. Student champions delivered to their own student peer groups from the same professional field where possible, had familiarity with forthcoming assignments, and said they used relevant examples to link topics and essays with NICE ES, so their peers could recognise the value of NICE Evidence as a search engine. Following the delivery of sessions student champions completed a report about their teaching session, and sent this to NICE (a further part of NICE's evaluation). Students who send completed reports are eligible to attend a national NICE workshop where they learn more about the workings of NICE and meet champions from other universities. Engaging in activities such as emailing reports was further evidence of demonstrating digital competency.

3. Methods

3.1. Research aim

To evaluate the NICE student champion scheme from the perspectives of nursing and midwifery students who participate in and deliver the scheme.

3.2. Objectives

- To explore the experiences of nursing and midwifery students who are NICE student champions and deliver the NICE Evidence search sessions as peer teachers
- To consider NICE student champions' perceptions about peer-teaching digital competencies to fellow students

3.3. Research design

The experiences of the NICE student champions who delivered sessions to their peers were explored during focus groups in order to gather student champion participants' experiences of the scheme. The College's research and ethics committee provided ethical approval at the outset. Student champions were aware that their participation in the study was voluntary, that collected data would only be used for the study and would not affect either their participation as a NICE student champion or their on-going experience on their nursing or midwifery programme. Participants were asked to provide consent, informed that they could withdraw at any time and that all transcripts would be anonymised and any identifiable features removed.

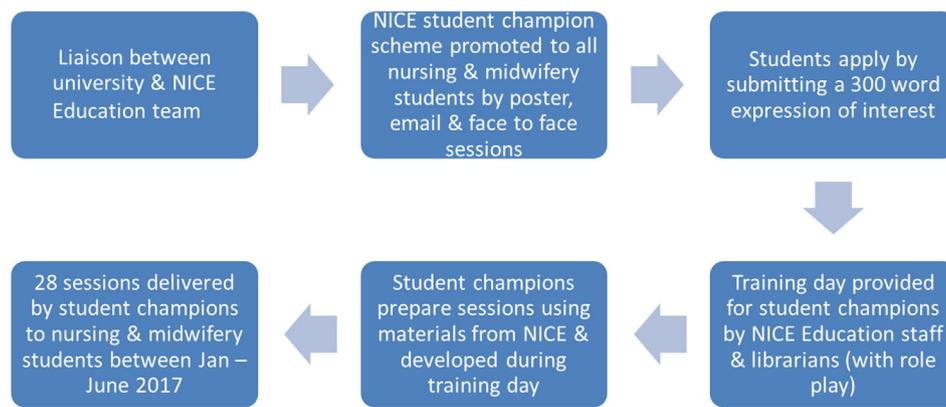


Fig. 2. Process of implementing NICE student champion scheme.

3.4. Data collection

All sixteen NICE student champions recruited during one academic year were invited to participate in the focus groups, and were informed about this opportunity 6 months prior at initial champion training, followed by further email invitations with participant information sheets. Students were provided with dates of focus groups and those wishing to attend had permission for a study day from practice. Two focus groups were held, one on each university site, with 4 participants in the first, and 2 participants in the second group. Each participant was asked to sign a consent form. Focus group facilitators were experienced academic staff from the Department of Nursing, and did not include the scheme facilitator. Ground rules were clarified at the start, and students assured of confidentiality. The focus groups were held in July 2017 and lasted for 55 min and 34 min respectively. Focus groups were recorded with participants' consent using two digital audio recorders, with audio data transcribed by an independent transcription service. In addition to the focus group data, the research team also read 8 anonymised student champion reports submitted to NICE (which students had given permission to share), and reviewed promotional material delivered to students about the scheme for further context.

3.5. Data analysis

The qualitative analysis technique used was inductive thematic analysis (Braun and Clarke 2006), which began with transcripts being checked for accuracy with digital audio files then distributed to the research team for repeated reading to ensure familiarity with the data and for initial independent coding. These four researchers then reconvened to discuss similarities, possible themes, and on-going manual coding of the transcripts. Key observations and corresponding quotes were then discussed. Particular attention was paid to student champions' comments about developing digital competence and peer-teaching these skills to others.

3.6. Findings

Peer-led digital literacy sessions were delivered by 16 NICE student champions to 1st, 2nd and 3rd year nursing and midwifery students between January and June 2017. Four dominant themes were identified from the student champion focus group data analysis, which were common to participants and related to the overall topic of NICE ES knowledge. The themes were professional and personal development, knowledge transfer, credibility and conflict.

We report these themes in four sections relating to the chronological process of becoming (and being) a NICE student champion; participating in training to be a NICE student champion; delivering the NICE ES sessions to peers; and taking NICE ES knowledge into practice. The

four dominant themes are interwoven into the four chronological stages.

3.6.1. *Becoming (and being) a NICE student champion*

Students volunteering to be NICE student champions said they were initially motivated by a desire to develop themselves personally and professionally. An initial strong motivation was seeking individual self-development, such as gaining confidence in public speaking, overcoming shyness and developing presentation skills. However, the desire to gain greater clinical knowledge was the most dominant motivating factor overall. Knowledge of searching for evidence using NICE resources was described as being useful at a personal level, for essay writing as a student and for future professional practice. One participant described her motivation to be a NICE student champion as initially 'selfish', but she also wanted to help other students by sharing her knowledge and experience:

S4, FG1: I was a bit selfish. I thought if I need to learn more about it, it'd help my essays. But then also the way [the organiser] presented it, tell others about it, I thought well it helped me so if I can help all the ones in my class do the same then that would be good then.

Another student looked ahead to using NICE evidence searching to provide a better service for patients:

S1, FG2: Myself I wanted to know more about it and to be able to find information for practice and to empower women that I'm meeting and looking after.

Knowledge transfer was thus described as being between student and service user, in addition to student and peer.

Students who applied to be student champions described themselves as highly motivated to develop themselves personally and professionally, keen to seize opportunities, and take on challenges. Some assumed that applying to be a champion would be a very competitive process, and were surprised that more students did not consider applying. Many felt inspired by the training session provided by NICE, and were then motivated to explore the NICE search engine themselves 'to have a really good look around and find everything' (S1, FG2). Once trained, some students experienced some conflict between their university work and the demands of the NICE champion role. The feedback report required by NICE after the delivery of peer sessions was perceived as long and 'quite intimidating', particularly as students often had other pressing university deadlines, which student champions implied could be stressful.

3.6.2. *Participating in training to be a NICE student champion*

Students referred to the one day study day they attended in order to become NICE student champions, which prepared them to deliver the peer-led sessions.

S1, FG2: It was brilliant. There was library staff and lecturer and it was just really good, really in depth. Just basic but you just could go off and find everything and knew where everything was as well. It was really good, really enjoyed it

F: What was the focus? What did they do? What did you do?

S1, FG2: It was explaining all the different guidance searches, what's available, the BNF, the evidence services, the clinical knowledge summaries, and then they went in to explain how to find it. All the different ways of finding different information as well and then they'd set a task and then we'd all try.

Student champions spoke about their increased awareness of becoming champions at the preparatory training day and the responsibility involved of teaching NICE ES to others.

S1, FG1: It was a lot of information. I think you definitely had to go away and play with it yourself

One student commented that having increased information at the start about other university searching sessions at the preparatory training day would have been useful and may have increased credibility for champions who were delivering the peer-led sessions:

S2, FG2: Because of the importance of NICE Evidence Search perhaps it could be lightly mentioned than-I don't know how much' how far the library staff have gone into regarding Evidence Search. So perhaps if we know what sort of information was delivered by the library staff as student champions then we can, you know, accordingly adjust the way our session's delivered, to build on what's already been delivered.

Students also commented on some conflicts that arose for them in terms of the workload of being student champions along with the demands of their own education programme. The workload could perhaps have been highlighted more to student champions at the preparatory training day.

3.6.3. Delivering the NICE evidence search sessions to peers

A dominant theme in discussions about delivering NICE ES sessions to peers was knowledge transfer, and how to do this effectively. Peer-led sessions were usually based on the initial training champions had received from NICE themselves, and a brief PowerPoint presentation provided by NICE was used, followed by a computer search session where students could use the search engine in a pc lab. Some champions elected to deliver sessions in pairs, but this did not always work out in practice. In some cases both partners contributed to the planning the session, while with others the student who felt they had stronger technological expertise designed the presentation, while the other, who was more confident in addressing a group, delivered the session. Audiences of peers varied in their receptiveness to the training, with some groups working well and others seen as being hard to engage or disinterested during sessions. In this there were inter-champion differences (see below) and even differences experienced by the same champion on different occasions. One champion described the group being disinterested; seen as seeking to gain credit for attending the session and being disrespectful of the champion in their behaviour:

S2, FG2: There was one group in particular where ... it just felt like a session that they just came in and signed the register and stayed for a while and started leaving.

Conversely another described an on-going interest in NICE resources after the training session, with students continuing to use the champion as an expert source of knowledge:

S3, FG1: Now that we've done that session they do ask me now and again, oh, can I use NICE for this and with the evidence search that's good as well for your essays because I know people are using it since

that session.

A major factor in the attentiveness of the group was whether the students participating in the session had prior knowledge of NICE evidence searching. Champions suggested the most successful sessions were those where students had received no previous teaching. However, where some information about NICE ES had already been delivered as part of the usual undergraduate teaching it was difficult to capture the attention of the group. Champions suggested that this could be better managed to ensure that information was not repeated to students.

Student champions often attributed the success of their session to their personal credibility in the role of teacher. Several considered that students would not listen to those more junior to them as students. Therefore first year students felt ill at ease delivering to third years, and preferred to deliver in partnership with a more experienced, senior student.

However the confidence student champions had in the scheme and its potential value to their peers gave resilience even in difficult situations. One champion said that as she was 'quiet' it was difficult to get the attention of groups of students, but believed that she was able to make a difference in adding to their knowledge:

S1, FG2: My cohort weren't receptive at all, and the third years ... I had a member of the library staff in with me, she was really supportive but they were all chatting, because if you're quiet as well it's really hard to get everybody to listen to you. But I hope they appreciated it because they found out stuff they didn't realise ... they didn't know they could find that information so I think it did make a difference, if you know what I mean.

Student champions highlighted the flexibility needed when delivering sessions, and the hands-on nature of the sessions prompted students to be inquisitive.

S4, FG1: It's nice to see them finding something and they're going, oh look at this, and you're going, oh I haven't found that yet either.

Champions did stress challenges, particularly relating to them inviting peers to complete the pre-session survey, as accessing the web link proved difficult at times.

S4, FG1: If the link is going to be there then there's got to be an easier way because I did ask, I can't remember who I asked back then, how do I access it and they didn't know either. Then by the time NICE got back to me with it I had already delivered my session' (Student 4, focus group 1)

This may indicate why response rates for the pre-session survey were considerably lower than numbers who attended.

3.6.4. Taking NICE evidence search knowledge into practice

Students certainly saw the value in the search engine for both use in assisting with their own academic assignments as well as when they were out in practice. Participants advocated the need for NICE ES being used in practice suites during teaching, to assist with the development of students' confidence in adopting the tool in practice. One participant recognised the credibility that the search engine had:

S1, FG1: ... [it] helps when you're assessing patients as well because some things might confuse what you do next and then I just have a look at NICE and it says exactly. So this is what you do and then I just do that then.

Those who were familiar and confident with the search engine used it frequently in practice and not only for personal use. They felt confident that the tool was credible and worthy of sharing with service users and other staff:

S2, FG2: We happened to see a young lady who had hypermobility, and so I used the – and she was complaining about how there's so

much information on the internet regarding certain conditions. And she was quite confused as to like which sources can be trusted and which are essentially just stuff that people have put on the internet. So I sort of offered and like directed her to like the NICE evidence search and to look up hypermobility I don't think there was a guidance on it but then we did find something from an accredited source after the evidence search and it was from – I think it was from patient info and from then we looked up information that was quite relevant to her condition.

F:Excellent.

S1, FG2: It is good because of a lot people do say, oh, I've been Googling this and I've had a look at this and you know that even if NICE doesn't have any guidance on it that it will, like for the midwifery, take you to that (ICOG Green Top) guidelines or any research papers as well. So it's really –

F: So did you teach your mentor as well in practice how to go about doing the NICE evidence searches?

S1, FG2: I didn't have time.

There was much said about the credibility and reliability of NICE ES, compared to other search engines. Student champion participants expressed views that they found the search engine to be reliable, up to date and user friendly, with the additional resource of information for patients:

Students also recognised a need to evaluate the student champion scheme, to ensure the longevity and sustainability of it, with one particular participant referring to the evaluative process and questions they would like to see addressed in relation to the scheme:

S4, FG1: Well, obviously what we could change and what they've learnt and will they use it in the future? Will they become sort of their own type of champions of action using the website and telling other people about it as well?

So while students recognised some challenges of becoming a NICE student champion, overall they had a lot of positive experiences of both NICE ES, and of using it and teaching others about it both in the classroom and in practice.

4. Discussion

The aim of this study was to understand the experiences of nursing and midwifery NICE student champions' engagement in a peer-led digital literacy scheme. Whilst the programme has been delivered in the UK for over five years, there is a lack of peer-reviewed literature concerning the experiences of nursing and midwifery students to date.

In terms of student champions' experiences regarding personal and professional development, students spoke at length in focus groups about how the champion role had developed their confidence, competence, and facilitation skills. Similar to other peer-led teaching initiatives (Ramm et al., 2015; Valler-Jones, 2014) perceived benefits for peer teachers included specifically increased understanding about social learning experiences, development of teaching skills, and self-awareness; which student champions spoke about positively. Champions said they found delivering the sessions to peers positive in terms of building their confidence and presentation skills. Those who delivered the session in pairs reported the most positive experiences, which may be worth further exploration.

Champions also felt a sense of credibility about their role in the scheme which added to their personal and professional development. Having received further training they considered themselves therefore more digitally competent than their peers in using NICE ES. This credibility in turn was linked to students' increased confidence, as student champions voiced feeling they felt they had some authority on the subject.

Nurse education literature about peer-teaching often focuses on clinical settings (Carey et al., 2018) or peer-learning in simulation suites (Ramm et al., 2015), with little mention of student preparedness for the peer-teacher role. Participants in our study highlighted some difficulties in engaging their less enthusiastic peers, and students who felt they had familiarity with the NICE search engine already. Further teaching techniques and tips for encouraging engagement may benefit students who peer-lead sessions whether in pc labs or clinical settings.

Student champions highlighted two key areas regarding knowledge transfer. First, they reported benefits using NICE ES in clinical practice with staff and patients. This was spoken about in focus groups with several examples describing how students had shown staff and patients how to use the search engine for particular topics, and felt confident about information they were able to access about patient care. Second, students voiced benefits to themselves and others about using NICE ES to support their academic assessments, particularly essay writing. Student champions talked about this in relation to their own learning, as well as learning of the peers they had taught, and how other students continued to refer to them as a champion regarding accessing NICE materials.

However, conflict was apparent for some as they sought to undertake the student champion role. Some champions found the role taxing with existing academic work to complete, and the required report for NICE said to be onerous. Students voiced frustrations about not having sufficient time in practice to show others the search engine. It is recognised that 'one-shot' teaching sessions do not fulfil students' particular needs (Walker and Pearce, 2014), and champions did not expect a one-off taught session to provide anything more than an introduction to NICE ES. Students saw their champion role as on-going and talked about being available to their peer groups as a point of reference regarding NICE resources. Overall, student champions reported the most successful peer-led sessions to be with student groups who had not used the NICE ES engine before.

Peer-to-peer teaching strategies are an effective approach for ensuring active engagement of all learners (Curtis et al., 2016). Student champions gave several ideas for the scheme moving forwards in the university, in terms of improvements they would like to see which included increased peer support, embedding elements of NICE ES into each module and further support of the scheme with eLearning resources.

This study was undertaken with full approval from the relevant College's ethics committee regarding student participation. Students highlighted concerns that the scheme could be onerous in terms of their other programme commitments. Strengths of this study are that experiences of nursing and midwifery NICE student champions have not previously been reported. In terms of limitations we recognise that this is a small study and results may not be transferable. However, our findings are similar to those from Sbaffi et al. (2015) who studied the NICE SCS with student from disciplines other than nursing and midwifery, in that students reported using NICE ES as a first port-of-call for information for assignments, and that they frequently recommended the search engine to peers and practice colleagues.

5. Conclusion

The findings suggest that students who undertake the role of NICE student champions find many benefits, and that the scheme helps to improve their digital competence. The peer-led approach as a pedagogic method has value for both students attending (Sbaffi et al., 2018), as well as for students as peer teachers, who are able to develop competencies around teaching and facilitation skills. Student champions reported many benefits to being involved in the scheme, although recognised that it was not without its challenges. The support structures provided by the university and NICE are essential in terms of the implementation and sustainability of this digital literacy scheme. Finding new ways to develop student confidence and competence in digital

literacy is a challenge for nursing and midwifery educators. We may not be able to predict exactly how digital proficiencies will shape our future nurses and midwives, but it is important they are equipped to engage in digital technologies, like NICE Evidence Search, and possess the skills to work alongside their peers and patients to share their developing knowledge.

Conflict of interests information

- (1) Conflict of Interest – there are no conflicts of interest.
- (2) Funding Sources – the study was supported by Swansea University, with permission from NICE
- (3) ethical approval details – Ethical approval was granted by the College of Human & Health Sciences, Swansea University in Nov 2016

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