<u>Title</u> Balance and a new reality: Exploration of the learning experiences of students studying for a nursing degree during Covid-19 pandemic.

Keywords Covid-19, nurse education, qualitative research

<u>Headline</u> An exploration of the learning experiences of students studying for a nursing degree during the Covid-19 pandemic.

In this article...

- Understanding the lived experiences of student nurses studying for a nursing degree during the Covid-19 pandemic
- Understanding the benefits and disadvantages of online learning
- The importance of developing hybrid learning for student nurses

Key points

- The need for societal lockdowns to prevent the spread of Covid-19 changed many students, and indeed their tutors, experiences of education.
- In a relatively short time, sometimes overnight, students moved from studying face to face with their peers, to learning online.
- This presented considerable challenges to tutors and learners alike. These changes were especially profound in courses like nursing which had a practical focus, and/or had a practical component.
- This article presents a small-scale qualitative study which explored the experiences of a small group of students whose studies were moved online.
- Drawing from interview data the ways in which students adapted to their new reality of studying online, and the tensions and challenges in doing so, are presented.

Author/s

Dr Liz Charalambous, assistant professor, university of Nottingham

Andy Townsend, professor of education, university of Nottingham

Abstract Introduction: Covid-19 pandemic restricted access to traditional pedagogy with students removed from placement. The course changed in a short time frame.

Aim: to understand the experiences of student nurses during the pandemic Methodology: Qualitative research using 1:1 semi structured interviews of undergraduate BSc student nurses. A thematic analysis was undertaken of the data. Findings: Tensions and balance-students experienced tensions around relationships, learning, safety versus risks, emotions. Understanding a new reality-students navigated ways of learning, facing challenges, new routines, adapting to change, and eventual understanding and acceptance.

Conclusion: Students experienced positive and negative aspects of online and face to face learning. The principles of effective learning design remain consistent for both types of pedagogy. There is a possibility that hybrid approach to learning could benefit nurse education.

Quick facts

Students studying for a nursing degree during Covid-19 found advantages and disadvantages in learning online

Pull quote

Students studying for a nursing degree during Covid-19 found advantages and disadvantages in learning online

Article

Introduction

The Nursing and Midwifery Council (NMC, 2021b) specifies that to enter the professional register on successful completion of a BSc nursing degree, student nurses must complete 2300 hours of theory-based learning and 2300 hours of clinical practice hours. This includes mandatory training examples include health and safety, infection prevention, and moving and handling; clinical skills sessions, and theory-based learning in topics such as evidence-based practice, biosciences, leadership, among others. Placements specialisms vary and can include setting such as acute surgical/medicine, rehabilitation, community, older person care, and theatres among many others.

During the Covid-19 pandemic the UK went into national lockdown on 23rd March 2020 and student nurse education was disrupted as the NMC introduced emergency education standards which supported more flexibility in programme delivery (NMC, 2021a). Students were removed from clinical placement until risk assessments could be completed and this was temporarily replaced with theory-based learning. Subsequently, student nurses commencing a nursing degree in the academic year 2020-2021 did not attend clinical placement until May 2021. Learning changed from mainly face to face to a digital platform (Microsoft teams) except for clinical skills sessions. This research studied the lived experience of student nurses during this transition from face to face to online education.

Background

The BSc nursing degree in the UK requires students to complete 2300 hours of practice and 2300 hours of theory to register with the Nursing and Midwifery Council (NMC, 2021). Traditionally face-to-face learning this had already started to change before the pandemic with the increase of digital learning (Beetham and Sharpe, 2013; Leigh et al, 2020).

There is the possibility that digital learning can be a more attractive option for students as it offers new opportunities for pedagogy (Keller and Suzuki, 2004). Studies of online learning have already suggested many possible benefits, including both the potential for immediate feedback and the support for self-directed learning as student can asynchronous engage with course content. Because of this online learning can support students with diverse needs (Gikandi, Morrow and Davis, 2011).

Because of the benefits there is even evidence that digital learning during the pandemic had a positive effect on student motivation (Faridah et al, 2020). The transition from traditional face to face nurse education to online platforms has been viewed by some as a necessary and inevitable development catalysed by the enforced restrictions brought on by the pandemic and provide important and beneficial opportunities for the future of nurse education (Haslam, 2020). However, the disadvantages of online learning are the barriers to social interaction, a potential sense of isolation, and limited scope of interactive activities for learners (Dumford and Miller, 2018).

Regardless of the educational context, the importance of creating a safe and supportive environment and encouraging students to reflect on their own learning process (Brown, 2004) is well recognised. Nevertheless, despite being unable to modify the physical space of a classroom when teaching online, (Jacques and Salmon, 2006), it is still important to give prompt feedback, communicate high expectations, and use active learning techniques (Chickering and Gamson, 1987) wherever possible.

This research adds to existing literature by seeking to understand the lived experiences of student nurses undergoing this change and the impact on their learning.

Methodology

The aim of this research is to provide a rich and in depth understanding of the experiences of a small group of student nurses studying during the Covid-19 pandemic restrictions.

The objectives are:

- To identify barriers and facilitators to education during this time period
- To explore the students' coping strategies
- To explore students' perspectives of the change in teaching

The research question was designed using the SPIDER tool (Cooke and Booth, 2012) (see Table 1). Because this is a small-scale qualitative study, the research question is: 'What are the experiences of students studying for a nursing degree during the Covid-19 pandemic?'

Sample	BSc Nursing students	
Phenomenon of Interest	Learning experiences during pandemic	
Design	Interviews	
Evaluation	Lived experiences	
Research Type	Qualitative	

Table 1: Research question using SPIDER tool

Methods

A qualitative approach was taken to the methodology as this supports exploration of the social world (Mason, 2002) and values individual perspectives and experiences (Merriam, 2009). Participants were chosen using purposive sampling (Robson, 2011) as they were undergraduate student nurses of all years studying for a degree in nursing during Covid-19 pandemic restrictions. Student nurses studying for a graduate entry program were excluded as they have had previous experience of university education. The project aimed for ten participants but only four responded to the invitation to take part. The demographic split was female (n=3), male (n=1). One method was used, that of one-to-one semi-structured interviews (via a digital platform to ensure safety during covid restrictions). This form of interviewing is seen as purposeful conversations aiming to collect information about a particular topic, but with freedom for the participant to shape the discussion (Leonard, 2003). They are seen as a powerful tool to investigate views in depth (Kvale, 1996). An inductive and iterative process to data analysis used thematic analysis to identify, analyse, and report patterns within the data (Braun & Clarke, 2006). Interviews were recorded and transcribed with the permission of the participant and data coded manually. The small sample size is justified because of the exploratory nature of the research. Ethical considerations

This research was undertaken as a part of studies for the Post Graduate Certificate of Higher Education (PGCHE) and so ethical approval was granted from formal application to the organisation as well as key stakeholders which included the head of school and course lead. Ethical guidelines were adhered to in line with the Code of Research Conduct and Research Ethics (2020) of the University of Nottingham, The British Educational Research Association's Ethical Guidelines for Educational Research (BERA, 2018), and GDPR legislation. Data were managed in compliance with the Data Protection Act (1998) and General Data Protection Regulation (GDPR) (NHS Health Research Authority, 2018). Participants were invited to choose where they would prefer to be interviewed but because of social distancing restrictions all interviews were conducted on Microsoft teams.

Participants were approached via a third party, or gatekeeper, and were provided with a participant information sheet. They were assured of confidentiality unless they reveal something of concern to safety of others which would be reported and were given the opportunity to decline at any point during the study. They were then given the opportunity to consider the invitation and invited to contact researcher when ready. Participants were asked to sign a consent form having been informed about the study. Data were managed and stored in accordance with GDPR legislation: their identity would be protected and remain confidential; they would be given a pseudonym; and any data which might potentially reveal the identity of the participant would be removed.

Data analysis

In keeping with the exploratory nature of qualitative approaches, a thematic analysis was undertaken of the data to identify patterns across the data. This included: familiarisation with the data; generate initial codes; search for themes; review themes; define and name themes; then produce the report (Braun and Clarke, 2006). Familiarisation with data included listening, transcribing, reading, and becoming 'immersed' in the data (Braun and Clarke, 2006). Data were coded manually and assigned codes to label segments of data (Charmaz, 2014). This included both descriptive and interpretative coding (King and Horrocks, 2012). The codes were

then organised into groups, or categories, which were then sorted into themes. See table 2 for an example of data analysis.

Data	Code	Category	Theme
'Friends I never met' (Tom)	Social	Relationships	Tensions and balance
'Felt proud' (Amy)	Feelings	Safety versus risks	
'Felt scary' (Ellie)	Isolation	Emotions	
'Gratitude' (Jane)		learning	
'Unable to access student			
services' (Ellie)			

Table 2: Example of Data Analysis.

From the data a concept model was developed to support further analysis (see fig.1).

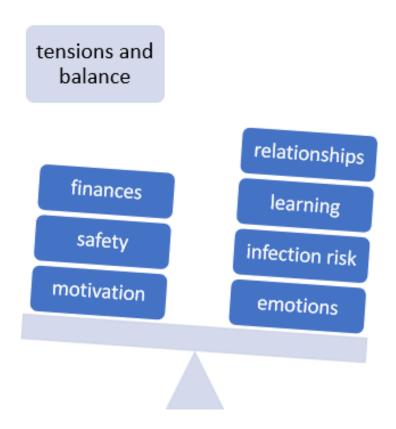


Figure 1: Concept Model

Findings

Participants discussed relationships, navigating the complexities of safety versus risk, emotions, and learning. As this project was developed to understand the pedagogical implications of Covid-19 restrictions the focus will be on learning.

The types of learning offered to students were:

- Online (Theory) sessions on Microsoft teams (live or asynchronous)
- Face to face (practical) clinical skills and clinical placement

Two themes were identified from the data, namely 'Tensions and balance' and 'Understanding a new reality' which addressed the objectives of the study namely:

- To identify barriers and facilitators to education during this time period
- To explore the students' coping strategies
- To explore students' perspectives of the change in teaching

Theme 1: tensions and balance

Participants discussed the impact of social isolation on relationships, detailing how this had changed from face to face to online forums and social media platforms. They developed meaningful relationships with colleagues, peers, and flatmates but experienced a sense of loss being unable to visit family and of the friends they never met. One participant elaborated on this sentiment saying

'I think there's probably about 6 people who I don't know who I will be really good friends with, and I've never met them!' (Tom).

There was a tension between navigating safety versus risks in clinical settings as they felt unsafe working in the context of a pandemic but appreciated the support from peers and colleagues. Emotions varied from the experience feeling 'scary at first' (Ellie) to feeling 'proud' (Amy), with one participant saying:

'other people were saying oh I'm a bit nervous about this or, ooh that worries me a bit, and I thought ok so everyone's having the same kind of worries and it makes you feel better doesn't it really' (Jane).

Despite the fear and loneliness experienced by students, they also expressed feeling a sense of community on a virtual platform,

'I was really impressed, we had small seminar groups [...] I was actually very ...sort of like soothed, and kind of impressed that we still managed to have that sense of community and talking to each other over and stuff like over teams which was quite like a foreign platform...' (Amy).

This tension, or discomfort, appeared to be created by unfamiliarity and resolved through community development. There was also a sense of gratitude and appreciation. A close friend of one participant became ill from Covid which prompted participants to express a sense of appreciation about keeping well under these circumstances.

Participants also discussed their experience of learning through the pandemic which ranged from the challenges of isolation to difficulties around motivation (see table 3).

Learning	Positives	Negatives
Online	No travel Use time productively Convenience Pause/replay/repeat content Easier to take notes Comfort (wear pyjamas, toilet) Easier to learn Appreciated space to chat Some teachers focused on social aspect	 Lonely Looking at screens Missed socialising Social aspects more challenging than studying Barriers to communicating with staff (email more formal and inhibiting) Difficult to form relationships No one knew what to do Unable to help each other
Face to face	 Easier to ask for help Peer/colleague support Felt good to be with others Felt safe Change of environment More encouraging 'Feels more real' (Jane) 	 Missed things as teachers talked fast Felt intense Felt scared Felt daunting having to remember everything on placement Barrier with masks/PPE

Table 3: Positives and negatives of online and face to face learning.

The challenges were magnified by what one participant experienced as navigating the new restrictions of social distancing, mask wearing, and handwashing, to learning how to manage relationships with others 'I think for me I found the social aspect more challenging than the studying, but I think the main thing about face to face is that you can just nip and ask someone a question [...] but when you're online you have to formulate it into an email and it feels more ...and then you're like do I need to write and email about this? I dunno it feels like more of a thing than just popping and asking someone a question...' (Ellie)

Theme 2: understanding a new reality

The second theme 'understanding a new reality' illustrated how students faced challenges, with one participant describing their experience of new ways of working once on placement,

'...once I got onto the ward they were good at wearing masks and doing things how it should be done really, it kind of made me feel reassured... after a week or so I just kind of got used to it' (Ellie)

Participants described learning new ways to protect their mental health by making new routines and making a different type of timetable. They described how they adapted to change, finding new ways to socialise, usually online and accessing support in different ways, for example from staff they trusted and already knew rather than their personal tutor.

They appreciated this shared experiences and sense of community within the profession and team, feeling 'part of something bigger than me' (Amy). However, they continued to exercise caution.

There was a sense that things changed quickly, but it became easier over time. Participants described the change disorientating and confusing but despite this felt optimism for the future. They described a sense of disconnect between clinical and public contexts, with one student saying

'it was 'weird comparing supermarkets with wards' (Jane).

However, they appeared to adapt quickly to this new way of working with one participant saying, 'it's all I've known now' (Jane).

This sense of resignation, understanding, and acceptance was understood as a new reality and students found it useful to be able to understand why they need to wear masks and PPE.

Discussion

This research highlights the problems of new educational settings, in particular online, which are especially associated with unfamiliarity. It highlights how development of learning communities can help students becoming familiar and comfortable with these forms of learning and the environments associated with them. This can be achieved through synchronous group interactive tasks held online and that this is something which can work well on an online platform on teams. Finally the findings also show the importance of how interaction and community helped students cope with the stresses of their experiences during the pandemic, especially in contrasting their experiences of being on a ward, with what was going on outside of hospitals. In view of the findings, it is possible that both digital and face to face platforms both have the potential to support effective learning, that is use of scaffolding to facilitate guided discovery (Bruner, 1961), and can help students to build on previous knowledge as the course progresses to achieve competencies (Benner, 2001). The experiences of participants resonate with the wider literature which highlights that online learning has the potential to facilitate self-directed learning and support students to self-check their knowledge and understanding in a safe and supportive environment and encourage the student to reflect on their own learning process (Brown, 2004). For example, learners can interact with the information through reusable learning objects (RLOs) to encourage deep learning to form their own ideas and conceptualise information to transfer and assimilate knowledge to other situations (Marton and Säljö, 1976). However, it is likely there are significant challenges to overcome in making the transition from one mode to another. Learning orientated assessment is 'defined as assessment where a primary focus is on the potential to develop productive learning experiences' (Carless, 2015). This resonates with the concept of assessment for learning, rather than assessment of learning (Bloxham and Boyd, 2007) which describes assessment as a way for students to develop their knowledge rather than merely a way to pass the course. An inquiry-based approach to learning is recommended in nurse education as it supports critical thinking by encouraging openness and taking a facilitative, flexible, interdisciplinary, problem-solving approach where students take responsibility for their own learning (Cleverly, 2003). Furthermore, face to face sessions can provide a focus on active learning techniques (Chickering and Gamson, 1987) to foster student creativity (Kiely, 1982; Bargar and Duncan, 1982) in a supportive peer group.

However, as illustrated by the findings there are challenges around ensuring students enjoy and engage with the content on wither platform which need to be addressed. Educators must continue to ensure learning is coherent and streamlined (Fry et al, 2015), possibly drawing from the theoretical principles of constructive

alignment (Biggs and Tang, 2011) as this highlights the need for teachers to understand how students' prior learning experience enables them to construct knowledge. Nevertheless, there appear to be opportunities in both contexts for educators to accommodate diversity to maximise the outcomes for students (Ashwin, 2015). This will aim for all students to feel included with no one left out along the learning journey. In view of the findings which highlight the tensions and balances experienced by participants, getting the balance right to address these tensions. This could be bespoke learning based on students' needs through collaborative dialogue (Vygotsky, 1978) and prompt feedback (Chickering and Gamson, 1987). It could also include regular evaluation by collecting and analysing information to improve practice (Butcher, Davies, and Highton, 2019), and involving students to collaborate and respond to the curriculum and be engaged as partners in the co-construction of curricula, rather than expect them to be passive recipients of information (Ashwin et al, 2020). This might be more effective than purely focussing on the geographical context in which learning takes place.

In relation to professional literature, these finding support the concept of monitoring the mental health of college students during epidemics (Cao et al, 2020). There appears to be a need for professional strategies to support students with Covid-19 related problems including signposting to occupational health services; keeping a register of events to record all untoward events affecting students; developing a rigorous evidence base around the allocation of students to clinical placements during the pandemic; and providing support for those students who decide to take an interruption in their studies (Hayter and Jackson, 2020). It is recommended that universities providing nurse education should identify students experiencing difficulties and provide support to prevent attrition (Gaffney, Chargualaf, and Ghosh, 2021).

It would appear there are benefits to students being contacted regularly and having access to consistent and regularly updated information; ensuring flexibility with extensions and consideration of extenuating circumstances; easy referral to support services; continuous assessment of risks versus benefits of clinical placements and managing rostering to minimise impacts of students; and encouraging work/life balance, self-care and relaxation (Usher et al, 2020).

Strengths and limitations

This study aims to provide a rich, contextualised account from student nurses about their perspectives and experiences of studying during the Covid-19 pandemic. Guba (1981) details four criteria which show how trustworthiness can be demonstrated in qualitative research; namely, credibility, transferability, dependability, and confirmability. Credibility is demonstrated by ensuring the data is representative of the participant accounts; Transferability relates to how applicable the findings might be to other contexts (Guba, 1981). By providing sufficiently rich, thick, and contextualised detail, the reader is then able to determine the relevance of this study and the findings to those of other settings. Dependability relates to the consistency of findings and the extent to which the study could be repeated by another researcher without necessarily achieving the same results (Guba, 1981). This is demonstrated by providing a clear description of the research process in sufficient detail, keeping analytical memos and meticulous documentation. Confirmability refers to the role of

the researcher in influencing the research by considering the degree of impartiality and neutrality in the findings to ensure the research is of good quality (Guba, 1981). An audit trail was established which describes each step of the data analysis stage and provides a rationale for each decision made throughout this process. The researcher exercised reflexivity to develop a sense of self awareness of the research process and how this might impact of data collection and analysis. Reflexivity involves the researcher seeking transparency by striving to exercise critical self-awareness, self-analysis and conscious reflection; and recognises how their interactions with participants and subsequent analysis of data may affect the interpretation of information (Green and Thorogood, 2014; Polit and Beck, 2014).

This real-world research draws on the perspective of key stakeholders with lived experience. It is Well timed to capture these lived experiences in a snapshot of time, namely the Covid-19 restrictions. It generates findings to support the development of pedagogical and pastoral support to future students to improve the quality of teaching and student experience. However, there are limitations to the study.

Firstly, despite the efforts to recruit the planned number of participants, only four students came forward to be interviewed. To address this, several avenues were explored including liaising with the school administration team without success. Nevertheless, the justification of the total number of participants interviewed are that there are no rules regarding number (Patton, 2002) as the researcher seeks adequacy of the sample rather than generalisability or representativeness (Charmaz, 2014).

Secondly, the data were collected at one site only and as such the views of stakeholders might differ from those at other sites. It is possible that the views of those who chose to take part in the study were different from the views of those who chose not to. Nevertheless, the views of all those who participated were relevant. One more method would have been preferrable to provide another layer of interpretation of meaning (Fine et al, 2000) but was not possible due to the scope of the project.

Thirdly, it is important to note that I am a lecturer at the university which may have influenced the decision of students as to whether they took part or introduced some unconscious bias in the interpretation of data. One researcher analysed the data but was nevertheless under the supervision of a professor in the school of education and as such able to discuss the data.

These findings illustrate the importance of focussing on effective and supportive underpinning pedagogy for both online and face to face education as the principles of effective learning design remain the same for both online and face-to-face teaching. Relating to the pedagogical literature, it appears that despite some critique of learning objectives potentially limiting learning (Butcher et al, 2019), students prefer them if they are clear, understandable, and unrestrictive to guide learning (Brookes et al, 2014). Sessions should include clear aims, outcomes, and opportunities for deeper student engagement with content, an inclusive approach, and contextualisation to wider curriculum (Brenton, 2015) whether online of face to face.

Implications and Recommendations for practice and further research

The implications of the findings are that the student voice is essential to understand ways to maximise learning. Students experience advantages and disadvantages in online and face to face learning. It appears that a clear, supportive pedagogical infrastructure whether online or face to face could facilitate nurse education.

The quality of nurse education experienced by this research is not only about course content but the quality of social interaction with peers and colleagues and is important to support effective learning for nursing students. It is unclear what the future holds for nurse education but it is possible that online learning can benefit nurse education, particularly the use of reusable learning object (RLOs) which encourage an inquiry-based approach to learning, recommended in nurse education. This can support critical thinking by encouraging openness and taking a facilitative, flexible, interdisciplinary, problem-solving approach where students take responsibility for their own learning (Cleverly, 2003).

These findings can contribute to the understanding of developing new support strategies for hybrid learning as new systems and processes evolve. Further research could be done with participants who are nurse educators to understand the issue from a different perspective.

Conclusions

This research used qualitative research methodology to explore and understand the lived experiences of student nurses studying during the Covid-19 pandemic restrictions. Hearing the student voice is important to understand their lived experience and perspectives of a unique and extraordinary phenomenon. The themes of 'tensions and balance' and 'understanding a new reality' were illustrated by the experience of students who described positive and negative aspects of both online and face to face learning. It can be argued that the principles of effective learning design remain consistent for both online and face to face learning. Through necessity, nurse educators have inadvertently discovered that online learning can be beneficial to learning and as such, the benefits of online and face to face learning should be considered as complementary when planning courses. It is possible that a hybrid approach to learning could harness the positive aspects of both types of learning platforms to maximise nurse education.

References

Ashwin, P. (2015) Reflective Teaching in Higher Education, Chapter 15 pp.303-327. London: Bloomsbury Ashwin et al (2020) Reflective Teaching in Higher Education (2nd edn). Part Three, Chapter 9, Curriculum: What is to be Taught and Learned? London: Bloomsbury Academic.

Bargar, R. and Duncan, J. (1982) 'Cultivating Creative Endeavour', Doctoral Journal of Higher Education, 53(1), 1-31.

Beetham, J. and Sharpe, R. (2013) Rethinking pedagogy for a digital age: designing for 21st century learning. New York: Routledge

Benner, P.E. (2001) From Novice to Expert: Excellence and Power in Clinical Nursing Practice. Commemorative ed. Upper Saddle River, N.J.: Prentice Hall.

Biggs, J. & Tang, C. (2011) Teaching for Quality Learning at University, McGraw-Hill Education, Maidenhead. Available from: ProQuest Ebook Central. [11 September 2020].

Bloxham, S. and Boyd, P. (2007) Developing Effective Assessment in Higher Education: A Practical Guide. Maidenhead: McGraw-Hill Education.

Brenton, S. (2015) Effective online teaching and learning chapter 10, in H. Fry, S. Ketteridge, S. Marshall A handbook for teaching and learning in higher education: enhancing academic practice (4th edn). London: Routledge.

Braun, V. and Clarke, V. (2006) Using Thematic Analysis in Psychology, Qualitative Research in Psychology, 3:2, 77-101.

Brooks, S., Dobbins, K., Scott, J.J.A., Rawlinson, M, and Norman, R.I. (2014) Learning about learning outcomes: the student perspective, Teaching in Higher Education, 19:6, 721-733, DOI:10.1080/13562517.2014.901964

Brown, G. (2004) How Students Learn, A supplement to the Routledge Falmer Key Guides for Effective Teaching in Higher Education series, available at

https://www.researchgate.net/profile/George_Brown5/publication/238735404_How_Students_Learn/links /55cdbaa608aeeaab209b591d/How-Students-Learn.pdf [accessed 19th May 2021].

Bruner, J.S. (1961). The Act of Discovery. Harvard Educational Review, 31, 21–32.

Butcher, C., Davies, C., & Highton, M. (2019), Designing Learning: From Module Outline to Effective Teaching, Taylor & Francis Group, Milton. Available from: ProQuest Ebook Central. [4th February 2022].

Butcher, C. Davies, C. and Highton, M. (2019) Chapter 11 Does the course work? Evaluating and evidencing your practice in Designing Learning: From Module Outline to Effective Teaching (2nd edn) London: Routledge.

Cao, W., Fang, Z., Hou, G. et al. (2020). The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Research, 287, 112934.

Carless, D. (2015) Exploring learning-oriented assessment processes. High Educ (2015) 69:963-976 DOI 10.1007/s10734-014-9816-z

Charmaz, K. (2014) Constructing Grounded Theory. London: Sage.

Chickering, A.W. and Gamson, Z.F. (1987) Seven Principles for Good Practice in Higher Education. American Association for Higher Education Bulletin p3-7 March 1987.

Cleverly, D. (2003) Implementing Inquiry-Based Learning in Nursing. London: Routledge Taylor and Francis Group.

Cooke A, Smith D, Booth A. (2012) Beyond PICO: the SPIDER tool for qualitative evidence synthesis. Qual Health Res. 2012 Oct;22(10):1435-43. doi: 10.1177/1049732312452938. Epub 2012 Jul 24. PMID: 22829486.

Dumford, A.D. and Miller, A.L. (2018) Online learning in higher education: exploring advantages and disadvantages for engagement. J Comput High Educ (2018) 30:452–465 https://doi.org/10.1007/s12528-018-9179-z

Faridah, I., Sari, F.R., Wahyuningsih, T., Oganda, F.P., Rahardja, U. (2020) Effect Digital learning on Student Motivation During Covid-19. The 8th International Conference on Cyber and IT Service Management (CITSM 2020) On Virtual October23-24 2020.

Fine, M., Weis, L., Weseen, S. and Wong, L. (2000) For Whom? Qualitative Research, Representations, and Social Responsibilities, in N.K. Denzin and Y.S. Lincoln, Handbook of Qualitative Research (2nd edn) Thousand Oaks: Sage.

Fry, H., Ketteridge, S. and Marshall, S. (eds.) (2015) A handbook for teaching and learning in higher education: Enhancing academic practice. London: Routledge.

Gaffney, M.K., Chargualaf, K,A., Ghosh, S. (2021) COVID-19 Disruption of Nursing Education and the Effects on Students' Academic and Professional Confidence, Nurse Educator vol 46: pp. 76-81 doi: 10.1097/NNE.000000000000

Gikandi, J.W., Morrow, D. and Davis, N.E. (2011) Online formative assessment in higher education: A review of the literature. Computers & Education 57 (2011) 2333–2351

Guba, E.G. (1981). Criteria for Assessing the Trustworthiness of Naturalistic Inquiries. ECTJ 29(2): 75.

Green, J. and Thorogood, N. (2014) Qualitative Methods for Health research (3rd edn) London: Sage.

Haslam, M.B. (2020) What might COVID-19 have taught us about the delivery of Nurse Education, in a post-COVID-19 world? Nurse Education Today, Volume 97, 2021, 104707, ISSN 0260-6917, https://doi.org/10.1016/j.nedt.2020.104707.

Hayter, M. and Jackson, D. (2020). Pre-registration undergraduate nurses and the COVID-19 pandemic: Students or workers? Journal of Clinical Nursing, 9, 3115–3116.

Jacques, D. and Salmon, G. (2006) learning in groups: a handbook for face-to-face and online environments (4th edition). London: Routledge.

Keller, J. and Suzuki, K. (2004) Learner motivation and E-learning design: A multinationally validated process, J. Educ. Media, vol. 29, no. 3, pp.229–239, Oct. 2004, DOI: 10.1080/1358165042000283084

Kiely, M. (1982) 'Creative Sensitivity in Doctoral Research: The Supervisor's Contribution', paper presented at the annual meeting of the American psychological association, Washington, DC, p5.

King, N. and Horrocks, C. (2012) Interviews in Qualitative Research. London: Sage.

Kvale, S. (1996) InterViews. London: Sage.

Leigh, J., Vasilica., C., Dron, R., Gawthorpe, D., Burns, E., Kennedy, S., Kennedy, R., Warburton, T., and Croughan,, C. (2020) Redefining undergraduate nurse teaching during the coronavirus pandemic: use of digital technologies. British Journal of Nursing 29 (10), 566-569.

Leonard, M. (2003) Interviews, in R Miller and J Brewer, A-Z of Social Research, London: Sage.

Marton, F. and Säljö, R. (1976), On Qualitative Differences in Learning: I—Outcome and Process. British Journal of Educational Psychology, 46: 4-11. doi:10.1111/j.2044-8279.1976.tb02980.x

Mason, J. (2002) Qualitative Researching (2nd ed). London: Sage

Merriam, S.B. (2009) Qualitative Research: A guide to design and implementation. San Francisco: Jossey-Bass

NMC (2021) Requirements to enter the register. Available at

https://www.nmc.org.uk/globalassets/sitedocuments/checklists/requirements-to-enter-the-register.doc [accessed 4th February 2022].

NMC (2021a) Recovery and emergency programme standards. Available at

https://www.nmc.org.uk/standards-for-education-and-training/emergency-education-standards/ [accessed 18th June 2021].

NMC (2021b) Requirements to enter the register. Available at

https://www.nmc.org.uk/globalassets/sitedocuments/checklists/requirements-to-enter-the-register.doc [accessed 18th June 2021].

Patton, M.Q. (2002) Qualitative Research and Evaluation Methods (3rd ed.) Thousand Oaks, CA: Sage.

Polit, D.F. and Beck, C.T. (2014) Essentials of Nursing Research: Appraising evidence for nursing practice. Philadelphia: Lippincott Williams & Wilkins.

Robson, C. (2011) Real World Research (3rd edn) John Wiley and sons Ltd: West Sussex.

Usher, K., Wynaden, D., Bhullar, N., Durkin, J. and Jackson, D. (2020), The mental health impact of COVID-19 on pre-registration nursing students in Australia. Int. J. Mental Health Nurs.. doi:10.1111/inm.12791

Vygotsky, L.S. (1978) Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.				