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cases

Introducing Anecdote Circles as an Alternative Method to Focus Groups in the Pedagogic Impact Evaluation of a New Digital Nurse Navigator System

Abstract

The construction and labeling of a relatively disparate set of university information technology systems as the "Nurse Navigator System" were routed in the principles of broader design research where methodologies of teaching, learning, and assessment were used to drive educational innovation within and between clinical and academic teaching. In terms of pragmatic design and appearance, this was straightforward; however, the theoretical basis of the design was more complex and rooted in core pedagogic design principles. Responding to the outcome of the initial evaluation of the system was therefore critical in the iterative developmental design of the Nurse Navigator System. Evaluation necessitated the collation of data which could tangibly and qualitatively examine whether expectations of such a conglomerate set of information technology criteria were realistic in practice. This pilot period of adjustment was recognized as a time to allow for configuring, fine-tuning, and assessment of purposefulness to the student cohort using it and in keeping with the need to co-construct learning and resource needs of students in practice. Evaluating the effectiveness of the preliminary pedagogic design of the Nurse Navigator System necessitated reliable indicators of engagement and learning. This research methods case study provides an overview of the qualitative evaluation of the impact of the new Nurse Navigator System using anecdote circles as an alternative to Focus Groups.

Learning Outcomes

By the end of this case, students should be able to

- Understand the process of a mixed-methods study using anecdote circles as alternative to focus groups
- Apply and transfer the fundamental principles of qualitative impact evaluation with anecdote circles to their own specific disciplines
- Understand the complexities of integrating digital learning platforms in the context of a learning resource that encourages social interactivity in a pre-registration nursing program
- Understand the pedagogical and philosophical underpinnings of digital interactivity design and how this might potentially be applied to their own area of professional or clinical practice

Project Overview and Context

Responses to educational reform have meant that in terms of the future potential employability of students, there has been a corresponding rise in needs-led curriculum design and new and innovative pedagogic approaches in digital interactivity in U.K. Higher Education (HE) (Tsiotakis

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& Jimoyiannis, 2016). The new BSc (Hons) in Adult Nursing Practice at the University of Sunderland was designed in partnership with stakeholders from regional trusts, patient care and public involvement representatives, and academic staff with a resultant mission statement of "*Education Transforming Care*." The aim of developing a digital navigator system was a threefold means of

- Using technology and strategic pedagogic design to simultaneously drive human relationships at the heart of both the patient and student experience;
- Driving an integrated curriculum;
- Maximizing the potential of student nurses to simultaneously be functionally competent and authentic in their provision of care and workforce ready on completion of their studies at the university.

Alongside critiques of HE curricula in relation to their relative complexity, the identification of the critical level, timing, collaboration, and interaction among academic and clinical staff and their students has become increasingly important (Duncan-Howell, 2010). The BSc (Hons) Adult Nursing Practice program was an opportunity to drive authenticity and flexibility in education through the use of the extant operational virtual learning environment (VLE) platforms and learning technology of the institution. It also, most importantly, was an opportunity to personalize opportunities for educators across the program to interact and communicate with one another while in different contextual settings and bases (Chieu & Herbst, 2016). The program was also designed to integrate the co-construction of knowledge from initial evaluation of the program and fostering and advocating social interaction between students, their peers, their clinical educators, and academics (Yen et al., 2012).

Relationships and patterns between points of interactivity online provide an insight into behavioral activity and level of engagement, highlighting the characteristics and the potential for limitation of student online learning activity (Lee & Bonk, 2016).

Strategically, the design of the navigator system focused on three key areas:

1. *Learner/people interactivity*: the potential for academic staff, students, and clinical mentors and link tutors using the system to communicate and interact with one another regardless of the context of nurse educational provision (clinical or academic);
2. *Learner interface*: the devices and computer programs that enable processes of interactivity;
3. *Learner content*: the interaction that takes place between the student and the VLE content of relevance to clinical or academic learning.

Embedding the opportunity for ongoing evaluation and the co-construction of new knowledge

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with students/academics and clinicians was a priority in the pilot implementation of this project.

Philosophical Backdrop

Social constructivism provides a philosophical backdrop for curricula that shapes and values individuals. In relation to the vision and strategy underpinning U.K. HE provision, the University of Sunderland has a civic responsibility anchored by the human experience rather than one which provides a student education in abstraction from it. As mentioned earlier in the case study, we were keen to implement a mechanism of evaluation that was authentic and reflected the overall ethos of the program in engaging with people, whose work would be at the forefront of patient care. Accompanying this is Weber's assertion that we are "cultural beings" and in this sense the graduates we produce for societal engagement and impact in health care provision lend the world their significance (Bruun, 2016). Perhaps the greatest lesson others might learn from our research is the need to consider the concept of authenticity and to ensure that by claiming to be authentic this is not just a tokenistic form of lip service, which is evident upon dissemination and sharing of their findings. It is also an extremely pragmatic approach when researchers know their participants because it adds a degree of transparency to the methods being adopted.

Curriculum Design Principles

In keeping with the social constructivist philosophy of an integrated curriculum, the BSc (Hons) Adult Nursing Practice program engenders processes of enculturation into a very specific community of practice, that is, nursing. The ethos of this approach stemmed from the co-construction of a curriculum that necessitated it to be content-specific in relation to professional regulation by the Nursing and Midwifery Council (NMC) yet is driven by learning objectives rooted in end what ought to characterize professional practice. This stemmed from its central vision of "*Education Transforming Care*." This co-construction was the product of a wide-scale scoping exercise with patient carer and public involvement representatives, program stakeholders from regional NHS Trusts, and academic staff. This process involved embedding affective domain learning across all of the constituent modules of the academic program.

Vygotskian's (1978) philosophy and metaphorical "scaffolding" of learning from this permitted a control in the deliverable phasing of developmental progression through the program in which the opportunity to develop and shape culture was also an acknowledged reality. Cultural dependence also had to be shaped between clinical and academic practice, yet situate the student and person-centered experience within it.

At this stage of developing the Nurse Navigator System, it was acknowledged that a social

constructivist curriculum

- Contextualizes and frames individual beliefs and values in the context of social situations.
- Focuses on the situated context of knowledge construction. The relative authenticity of the learning context affects students' capacity to engage and transfer acquired knowledge to new settings.
- Ensures focused activities that provide an opportunity for individuals to construct their understanding of reality and roots this in the social process of education.
- Integrates and triangulates authentic assessment processes in relation to the relative progression of cognitive, psychomotor, and affective development.
- Is characterized by critical reflective practice and ongoing processes of reflexivity.
- Is dependent on the effective facilitation of academic and clinical teaching staff, and in this respect, it acknowledges the pedagogic expertise of the facilitator in relation to the content-specific expertise necessary to support students' capacity to learn. The provision of available resources linked to prior knowledge is pivotal to academic development.
- Necessitates access to an IT and traditionally equipped learning environment with access to information retrieval resources and, where appropriate, situated or experiential learning that can support active learning.
- Necessitates the inclusive, co-construction, and collaborative construction of knowledge which can be internalized at an individual level. It embeds an ethos of value and respect, which is embodied in activity, characterized by co-operation, and demands a proactive approach and an ongoing commitment to deep learning.
- Permits the representation of knowledge from an unlimited range of resources and in which the cultural situation or context of that knowledge is significant to the articulation of it.

The construction and labeling of a relatively disparate set of university IT systems (the VLE, E-Portfolios, and Padlet) collectively as the "Nurse Navigator System" were routed in the principles of broader design research where methodologies of teaching, learning, and assessment were used to drive educational innovation within and between clinical and academic teaching. In terms of pragmatic design and appearance, this was relatively straightforward.

Research Design

The focus of the overarching methodology was to shape the pedagogic research in this evaluation to provide actionable outputs. We were fortunate that our research team for this particular project had a collective value for patient and public involvement in the co-construction of academic curricula. With multiple researchers, though, a key challenge can be discerning

which approach to adopt when. We therefore reached a collective consensus and adopted the stance that whatever we ought to be was evidence based by the latest literature. In instances where there was lengthy academic debate, we triangulated our search for evidence and brought different sources of the extant literature together for assessment of quality and applicability to practice. We felt this gave our own research greater content validity too and that academic debate added much to the whole process of research design and execution. In terms of the data collection phase, though, this needed to be relatively straightforward, so all decisions were made and finalized and we agreed no changes could occur beyond that point. A common approach would have been action research, but because design research differed significantly in its capacity to provide forward-looking solutions rather than a retrospective means of highlighting IT problems, it was selected as a means of increasing curriculum development approaches to solution finding and progressive development (Tranfield & Starkey, 1998). Curriculum design of the BSc (Hons) Adult Nursing Practice program was complex and multifaceted. It involved the construction of domain-specific and domain-collective teaching and learning activities. This system of delivery was ensured to be driven by an assessment process which was in turn triangulated by a Practice Assessment Document across all program domains of learning across psychomotor, cognitive, and affective domains. This design involved changeable variables such as people (patient carer public involvement representatives, NHS Stakeholders, and academic staff), infrastructures, processes, policies, professional regulation, and environmental constraints. In adopting Design Research as an overarching methodological approach for this study, there was an increased likelihood of being able to apply the phenomena of complex curriculum justification, design, and development to an observable context. In its rawest form, this was a pragmatic and relatively atheoretical approach, nevertheless underpinned by robust mixed-methods framework. The project was acknowledged and developed as a very small-scale study of the initial BSc (Hons) cohort. As such, no claim of generalizability is made from the study to a wider context. The methodological approach adopted was selected for two main reasons:

1. The approach offered the highest degrees of procedural trustworthiness and authenticity in relation to the data collected in both phases of the research.
2. In comparison with observational and longitudinal studies, it offered a very practical and straightforward means of data collection and analysis in the context of an initial pilot study.

The research had two distinct phases, in keeping with the mixed-methods approach adopted; each is outlined below. (It is not the purpose of this case study to illuminate this phase of the research process, but the authors thought it would be useful to provide it as a contextual backdrop to the whole research process.)

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Decision-Making Processes During the Design Phase

Although the Nurse Navigator System was a functional addition to the academic and clinical curriculum for nursing students, the rationale for using anecdote circles as an alternative to focus groups was a deliberate acknowledgment of the underpinning and guiding philosophy of compassion and care that led to its original development. The pre-registration nursing curriculum, in which the system was piloted, was co-constructed not only with stakeholders from the nursing profession but also patient carer and public involvement representatives. These were people who had experienced care first hand in the context of the National Health Service (NHS) and whose experience of care (and sometimes care that could have been much better in relation to communication skills) informed what and how in the degree program that students would learn. As authors, we have all worked in the context of patient care and patient engagement, albeit in different sectors of health care provision. We wanted our evaluation of the introduction of the Nurse Navigator System to reflect a degree of authenticity, which could then be used to inform the progressive and iterative development of the system. We had all also been involved historically in focus group research and we reflected on and could appreciate how the formality of an evaluation using that method might limit the degree of authentic engagement we could achieve with students. As we also knew all the students as the cohort was small, we did not want to create an air of artificiality around how we would collect rich data sets. Alongside this, we needed to ensure our research was methodologically robust and had a clear analytical framework for the data analysis phase of the study, so anecdote circles were our method of choice. Although little used in practice, anecdote circles provide an additional tool in the armory of the qualitative researcher and we are pleased to be able to share our experience of their use in practice with others who might be finding it difficult to discern whether traditional focus groups or these are an option for their research or evaluative studies.

Method

The word anecdote (certainly within the context of qualitative research) can often be associated with research that has no scientific underpinning or capacity for analysis, beyond hearsay. However, we adopted methods, which emphasized the authenticity of the data we were collecting but at the same time ensured its analytical integrity and worth as a robust piece of qualitative research. A theoretical framework was something we were convinced would provide us with this degree of integrity. Below we outline how this worked in practice:

Research Phase 1

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Students of the BSc (Hons) Adult Nursing Practice program in the Faculty of Health Sciences and Wellbeing were recruited purposively to the investigation. This sampling technique was adopted on the basis that students undertaking this specific program were experienced to answer questions about the initial piloting of the Nurse Navigator System. The process of participation was entirely voluntary and students were invited to participate via invitation. The sample was made up of 21 students entering Semester 2 of their studies in the academic year 2016-2017. The study was cross-sectional and descriptive in design, with data collected via a specifically adapted version of the Clinical Learning Environment Inventory (CLEI), which was adapted to capture student perceptions of the usefulness of the Nurse navigator System to their potential employability in the context of nursing practice (Moos, 1980). The adaptations captured student perceptions about the extent to which the Nurse Navigator System prepared students in terms of graduate employability. The questionnaire consisted of 29 questions which asked students to respond with an opinion as to whether they agreed with the level to which they agreed or disagreed with core statements of their use of the system. These values were correlated with the dimensions seminally outlined by Moos (1980) and mapped against 15 core skills in relation to

- Individualization—the degree of autonomous practice that the Nurse Navigator affords students in their everyday student experience;
- Innovation—the degree to which new approaches to learning technologies can be implemented;
- Involvement—how much students actually use the Nurse Navigator to contribute to their studies across the BSc (Hons) Adult Nursing Practice program;
- Personalization—how much of an opportunity each student is afforded in individualizing their Nurse Navigator experience;
- Task Orientation—how clear and well organized learning and teaching resources are across the Nurse Navigator System;
- Satisfaction—the degree to which personal and professional development has taken place as a result of using the Nurse Navigator System.

The 15 core skills, which were developed from and overarched Moos's dimensions, became the focus of the study. Student perceptions of each were gathered to illuminate the extent to which students felt that the Nurse Navigator System had affected the development of their

- Active listening skills;
- Classroom management;
- Communication skills;
- Confidence;

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- Creativity;
- IT skills;
- Independence/capacity to learn autonomously;
- Initiative;
- Leadership;
- Professionalism;
- Reflection;
- Research skills;
- Self-esteem;
- Teamwork.

A total of 14 usable responses (response rate 66%) were obtained from 21 BSc (Hons) Adult Nursing Practice students.

Phase 2: Research Design and Execution

"Anecdote Circles" in Action

Anecdote circles were adopted as a deliberate alternative to focus groups for this research evaluation project (Ali, 2014; Lugmayr et al., 2016). Little documented in the context of pedagogic research, they appeared to offer a means of authentic informality where students could voice their opinions inclusively and honestly in a manner which reflected the ethos of the Nurse Navigator System (i.e., social interactivity). The issue of the researchers also being teachers of the students meant that this approach could be conducted with a degree of authenticity and credibility on behalf of the researchers too.

Pre-Stage Planning

This involved establishing a series of straightforward guidelines for the participants in the study. They were stated at the beginning of each anecdote circle and also at any stage where it was felt that they were being breached or needed to be reminded of the process. In the case of the anecdote circle case study here, these guidelines were as follows:

- Focus on giving us some examples of your experience here and how it might link to stories from [nursing] student experience.
- Please try not to interrupt others as they are in the middle of their stories as this will stop the "flow" of what they are thinking and articulating to us.
- Don't be afraid if we have a gap in the flow of our stories; there is no pressure on you to speak continually.
- If you feel the need to contradict someone, then try to put your perspective across instead.

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At this stage, I also decided to do content validity checks as an ongoing process so that at the end of each story with the students, I could ensure I had interpreted their intended meaning. This was deemed important in relation to the immediacy of the interpretation and the potential to lose valuable information.

In addition, I decided on a series of intuitive probes I could use which would further encourage the conceptual depth of student narratives and stories to deepen further. These were as follows:

- "Can you tell us a bit more about that …?"
- "Where did that experience come from, can you tell us a bit more?"
- "Have you got any examples of that from [nursing] student experience that you can bring to that?"

Stage 1

This phase was an opportunity to establish what the exact themes of the evaluation would become—it can also be termed an "anecdote-elicitation" session. Being strategic here in terms of controlling how many themes for discussion are both wanted and necessary in the study is important. For the purposes of this evaluation, there was a deliberate focus on two story questions, namely, critical reflection and reflexivity.

Stage 2

This involved trying to use the same language as the international students who were the participants and who would ultimately become the storytellers in the anecdote circle.

In this instance, it was "Tell me about to what extent using the Nurse Navigator System has made an impact on you preparing to become an employable nurse."

This necessitated, first, facilitating the group in establishing their operational definitions of both terms. In some instances, there was discussion and disagreement about what it meant to each of them, including the following terms:

- Employability;
- Prospective work roles;
- Contribution to daily student experience;
- Social networking;
- Barriers and facilitators of practical usage;
- Professionalism;

■ Nurse identity.

As these words had such a resonance with the participants, they were deliberately integrated into the questions.

Stage 3

In terms of the question, it was necessary to elicit emotion in the participant's responses, so emotional words of extreme were that which would help them to relate the context of what they were doing to their real experience in practice. Part of this process is to deliberately incorporate a scale of emotion with both extremes of it into the questions. This was primarily to provide extreme binary terms so that ultimately the storytelling process would not become overly skewed by the tone of the question and allowing them to position themselves on a continuum of choice and contemplation in terms of how they reacted and engaged with the elicitation question.

Stage 4

This stage necessitated building the actual elicitation question. In accordance with the published evidence base on anecdote circles, I combined a process of image building and then added emotion to it. This was to ensure the participants had a specific "anchor" for their stories in being able to build their stories and regale their anecdotes comfortably.

I started with "Think about when you first used the Nurse Navigator System in practice—what did it remind you of …"

Then, "Think about using the Nurse Navigator System when you're out there on clinical placement …"

Then, "Consider … how this differed to being on campus during your academic blocks for a minute …"

Emotive words were then integrated into these questions:

> When were you apprehensive, certain, confident or unsure about using the Nurse Navigator System in practice.

As recommended in the literature, a spectrum of emotions was incorporated so that this increased the chance of a memory being triggered by the question.

Stage 5

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Once the group had settled, they were asked the first prompting questions.

Data Analysis

Braun and Clarke's (2006) six-phase approach to thematic analysis was adopted as a systematic, yet recursive, approach to inductive qualitative analysis. In accordance with recommendations of the process, data were not viewed in a linear fashion and ideas were extracted as they emerged during the process of interpretation (often after visiting and re-visiting particular transcripts), and the researchers proceeded to the next phase where appropriate.

Phase 1

This entailed familiarization with the data set where the researchers immersed themselves in the data collected via extensive reading and re-reading of the transcribed information from the data collection. This was a process undertaken by two researchers where a consensus could be reached between those themes independently found to be most commonly occurring.

Phase 2

Data were coded: this involved creating and identifying themes that came from analysis of the data sets. This subsequently guided analysis and provided a systematic approach at a semantic and conceptual level, which could be mapped against extant published literature. This was achieved by manually coding every data item and completed by the two researchers involved, collating every element together so that it could be independently checked for inclusion in the overall findings by both.

Phase 3

This entailed exploring the data for the specific themes identified in Phase 2 of the data analysis, defined in accordance with Braun and Clark (2006) as "coherent and meaningful patterns in the data" of direct relevance to the research aim. If a theme emerged from more than 10% of respondents, it was deemed to be meaningful to the study. Its coherence was judged on the basis of non-ambiguous articulation of student perceptions. As there was a degree of diversity in the questions asked, this meant that 100% of respondents contributed to at least four themes.

Phase 4

This stage involved reviewing the emergent themes. It provides a means of checking that these were relevant to the data extracts when they are taken in abstraction from the complete data

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set.

Phase 5

Providing a definitive theme for each one that has emerged from the study entails defining the overall findings so that each can be individually examined.

Phase 6

This stage involved analyzing the themes relative to one another in terms of their rate of occurrence and writing up the findings in relation to this. It also involved merging analytical narratives and examining this in relation to the existing published evidence base.

Practical Lessons Learned From Using Anecdote Circles

Conclusion

Focus groups are posited as a means of best understanding the collective beliefs people have of specific topics or interventions (Silverman, 2006). Usually, selection of participants for inclusion in studies is based upon their commonality of shared experience related to these topics or interventions. For this reason, focus groups would have been a pragmatic means of gathering data about the impact of the Nurse Navigator System. However, as students all knew each other to the point of having established friendships within the group, we needed a means of being able to value the dynamics of extant relationships and also capturing data in a credible and transparent fashion. It is also worth noting that the researcher who undertook the anecdote circle (C.H.) was also a Reader teaching on the Professional Practice module of the program and as such had developed a working rapport with the students. This would have meant conducting research using focus groups with a moderator who could not possibly be independent of group dynamics.

The anecdote circles afforded the research a means of providing a nurturing environment that actively encouraged conflicting standpoints and perspectives to be explored. Although preparation for the anecdote circle was considerably longer than focus group preparation would have been, it allowed for the focused and seamless design of the collection of data that would be conceptually deeper and acknowledged the extant relationships of the group.

Anecdote circles were chosen as a deliberate and strategic alternative to focus groups. Whereas a focus group has very specific criteria for the exploration of given themes (in this reflection and reflexivity and how well the Nurse Navigator System had facilitated the exploration of each), an anecdote circle does not. The capturing of the group dynamic or "spark" between group members is actually much less important than establishing lived

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experiences and the stories and narrative accounts that can be used to articulate them. It can be argued that in this sense it advocates a greater sense of authenticity in response, in comparison with a focus group, because stories are elicited in the context of creating an environment for the session that makes participants feel less formal and able to give a response in the form of a personal story rather than an interactive dialogue. As anecdotal response lies at the heart of good storytelling, the creation of sound questions that encourage personalized stories is pivotal. The following five sections provide an insight into the various stages reported in the evaluative phase of this case study.

Exercises and Discussion Questions

1. In this project, we attempted to use existing resources and infrastructure to design a navigator system that would provide an enhanced level of digital interactivity in practice for our students.

2. Examine your own workplace context and explore whether there are similar platforms that you could adapt and transfer into your own learning environments and use these methods to evaluate.

3. Compare and contrast the use of anecdote circles and focus groups in the context of evaluative research strategies. What are the distinctive features of each that might make them appropriate methods of evaluation in your own research?

4. How significant or contentious is the concept of anecdotal response? Debate whether narrative storytelling can ever really be regarded as a trustworthy and authentic research method in practice?

5. Examine the process of Braun and Clarke's (2006) six-phase approach to data analysis and compare this with alternative framework analysis approaches. Why do you think we adopted this one in the context of this study?

Further Reading

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