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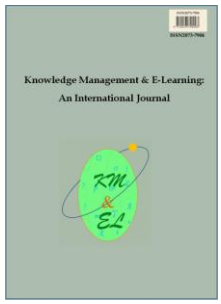

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Becoming a mental health nurse; A three year longitudinal study

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Becoming a mental health nurse; A three year longitudinal study

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Abstract: This longitudinal case series study explores how students' conceptions of 'mental health nursing' changed whilst on a three-year pre-registration Mental Health Nursing programme. The study was carried out in two university nursing schools in the South East of England and this paper reports a detailed analysis of 6 individual case studies. The researchers utilised Novak's approach to concept mapping to elicit students' personal knowledge structures, which were explored further using semi-structured individual qualitative interviews. The maps were analysed by looking at their gross morphology to interpret changes over time into types of learning achieved and the associated interview data were analysed using thematic content analysis. Results from analysis of the map structures suggest that whilst four of the selected students learned deeply, one participant learned superficially and one appeared not to learn at all. The associated interview data provides an interesting insight into the students' reflective narratives on the process of learning. The findings also demonstrate further evidence of the practicability of using Novakian concept maps to self-prompt qualitative research interviews. Implications for the professional education of Mental Health Nurses are discussed.

Keywords: Longitudinal study; Mental health nurse education; Concept mapping; Qualitative interviews

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Dr. Daniel Bressington is an Assistant Professor at The Hong Kong Polytechnic University and Visiting Reader in Mental Health at Canterbury Christ Church University. He is interested in the research and educational utility of concept mapping in health care education in addition to researching the effectiveness of clinical interventions in mental health.

1. Introduction

The nursing profession in the UK has undergone a shift by becoming an exclusively graduate level occupation. Understanding how this change impacts on the students seems vital to evaluate this professional transformation. However, the process by which people become professionals has been largely neglected in the educational and professional literature; instead the focus of research has been on measuring knowledge and skill acquisition. The process of becoming a professional is more than just learning the skills and behaviour of that profession. Particularly for a caring profession such as nursing, the process of becoming a nurse must also include the internalisation of values and norms that are fundamental to being a nurse.

Two key pieces of research have considered the factors involved in how people become professionals. Ibarra (1999) identified that the process by which people become professionals is achieved through three basic tasks: 1) observing role models, 2) experimenting with new self-identities, 3) evaluating progress through self-examination and external feedback. Ibarra went on to say that the transition from layperson to professional is achieved through the process of creating and establishing a new narrative identity (Ibarra & Barbulescu, 2010).

In nursing, Fitzpatrick, While, and Roberts (1996) found that there were three main contributing factors in the professional development of nursing students: the influence of the clinical environment; having examples of high quality practice; and having strong role models in both educational and clinical environments. The movement towards increasing the minimum requirements of academic achievement within nursing education was cemented in the early 1990s with the introduction of "Project 2000"; in which the minimum academic level of training was established at higher education diploma level. During the early 2000s student nurse education was refocused towards quality practice learning as student nurses were given supernumerary status throughout their entire programme, which meant that they had more time to dedicate to learning when in clinical settings (rather than being purely task orientated) because they were no longer formally included in the workforce numbers. The focus then shifted back to higher academic achievement during 2010-2011 when the nursing profession was made a graduate only profession (Longley, Shaw, & Dolan, 2007; Borneuf & Haigh, 2010). Given the shifting focus of nurse training and the fact that nursing education has changed considerably over the past 18 years, how does the current nursing programme shape the development of a mental health nurse?

The aim of this study was to explore the process of becoming a Mental Health Nurse by exploring the changing narrative identities of student nurses whilst they pursued their programmes. Students created concept maps to capture their developing

understanding of what it means to be a Mental Health Nurse and a selection of the participants was interviewed to explore the values and beliefs that underpinned their knowledge structures and professional identity development. The project aims to explore the following themes:

- How does the narrative identity of a mental health nursing student change and develop over time?
- How do the course requirements, practice elements and personal experience contribute and shape the experience of becoming a mental health nurse?

2. Methods

2.1. Recruitment and selection of participants

The first stage of this study used a convenience sample of students (n=60) recruited from two undergraduate level pre-registration programmes in Mental Health Nursing. One university is located in London, UK and the other in the South East of the UK. All students on the first year of the programme were eligible to participate. The data was collected as part of their education programme to encourage critical reflection of what it means to be educated as a mental health nurse. 60 students were recruited from the two programmes. Due to attrition related to withdrawal/transfer from the programme (18) and participants declining permission to continue in the study (n= 2) a total of 40 students completed the study.

This paper reports selected initial findings from this study. For pragmatic reasons we outline the results from our analysis of a selected convenience-based sample of 6 participant case studies in order to illustrate the development of understanding over time and explore the case studies in greater depth. The selection of participants for analysis in this paper was based purely on their availability for semi-structured interviews on the first and last days of the study. Due to the large amount of concept map and interview data collected during the whole three year study we present only the findings from the thematic analysis of the final interviews and a comparison of the first and final concept maps.

2.2. Ethical considerations

Ethical approval was granted by the Health, Social Care and Education Faculty Research Ethics committee at Kingston University and St George's, University of London. Permission to use the data for research purposes was formally requested from potential participants. Participants provided written informed consent and were also aware that taking part was entirely voluntary and that declining to be involved would have no negative influence on their professional training or academic success. In the presentation of the results, the student identities are protected by the use of pseudonyms.

2.3. Procedure

The individual concept maps were created using Novak's approach to elicit participants' understanding of 'Mental Health Nursing' (Novak, 1990). Guidance and materials for concept mapping were provided to students during class time in order make concept

maps. Maps were created at the beginning, middle and end of each year of the programme, totalling nine data points across the three years of the nursing programme.

The participants who were available for the interview on the final day of the study (n=6) were asked to explore their series of maps within the individual qualitative interviews in greater detail in line with the procedures used in Hay, Wells, and Kinchin (2008) and Bressington, Wells, and Graham (2011). This process involved presenting a copy of their series of concept maps to participants and asking them to reflect upon and describe how the maps represented their snap-shots of understanding at the times when they were created. The abandonment or adoption of specific concepts was then discussed in detail and the participant was asked to explain the reasons for the presence of new or removed links between concepts. Finally, the first and last maps were used as visual prompts to facilitate a discussion with the students (Kinchin, Streatfield, & Hay, 2010; Bressington, Mui, & Wells, 2013) about their changes in understanding of Mental Health Nursing over the entire programme and how their education and practice had impacted on their understanding by the end of their programme.

2.4. Data analysis

The interviews were recorded and transcribed. These were analysed using manual thematic content analysis using the stepped approach described by Braun and Clarke (2006) to explore and understand how participants' understanding of Mental Health Nursing changed during their education.

Each map was classified according to the gross morphology of each participant's knowledge structures into spoke, chain or network structures as outlined by Kinchin, Hay, and Adams (2000). The maps were then used to measure the quality of change in the course of learning into surface-, deep- and non-learning outcomes, as outlined by Hay (2007) and Hay and Kinchin (2006). Participants' learning trajectories were then explored by the researchers in greater depth through a comparison of the students' first and final concept maps and their associated commentaries that explained their impressions of how their understanding of the role of metal health nursing had changed during the educational programme.

3. Results

3.1. Demographics

The average age of the six participants included in this analysis was 29.3 years and there was a range of highest level of previous academic achievement, although none had studied at diploma or degree level previously (see Table 1). All of the participants were enrolled on one of the two undergraduate Mental Health Nursing programmes with representation from each of the two study sites. Of the six participants four had previously worked in a nursing assistant type role in mental health care settings.

Table 1
Demographic details of study participants

Participant	Age at start of study	Highest level of study prior	Programme	Previous healthcare experience
Anna	22	A levels	Undergraduate	No
Ben	31	NVQ3	Undergraduate	Yes
Clare	46	Access	Undergraduate	Yes
Debbie	31	BTEC	Undergraduate	Yes
Ellen	18	A levels	Undergraduate	No
Frank	28	NVQ3	Undergraduate	Yes

3.2. Learning outcomes

Our analysis of the learning trajectories reveals that four of the six students included in this case series demonstrated deep learning at the end of the three year programme (see Table 2). Although two of the students created concept maps with network structures at the beginning of the programme (suggesting that they already had a good level of understanding of the role), both of them added additional meaningful concepts and links to their final maps demonstrating a significant progression in learning over time. Four of the participants created maps with spokes when they entered the programme, suggesting that they were ready to learn, and all but one of these students managed to make greater connections between concepts to develop a deeper understanding of the mental health nursing role.

Table 2
Summary of the 6 participants' first and last maps

	First Map			Final Map			
Participant	**Structure**	**Concepts**	**Links**	**Structure**	**Concepts**	**Links**	**Learning outcome**
Anna	Spoke	8	7	Network	15	25	Deep learning
Ben	Spoke	24	23	Spoke	24	23	Non-learning
Clare	Network	11	12	Network	14	16	Surface learning
Debbie	Spoke	28	27	Network	19	22	Deep learning
Ellen	Spoke	10	11	Network	17	23	Deep learning
Frank	Network	13	13	Network	31	40	Deep Learning

Anna

Anna's first map (Fig. 1) was quite simple. It has a spoke structure comprising of 8 concepts with 7 links. This map suggests that Anna has a basic idea of what mental health nursing means at the beginning of the programme and was ready to learn (Kinchin, Hay, & Adams, 2000).

Anna's final map (Fig. 2) was structured as a network with 15 concepts and 25 links. This is clearly a more complex structure with greater integration of concepts. Her choice of concepts is more meaningful and shows greater understanding of salient ideas. This suggests she has learned deeply and meaningfully from the programme.

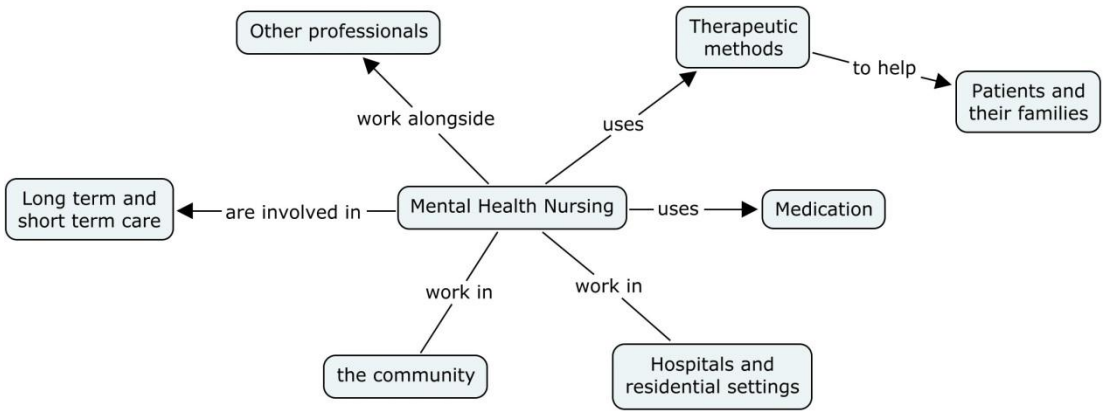

Fig. 1. Anna's first map

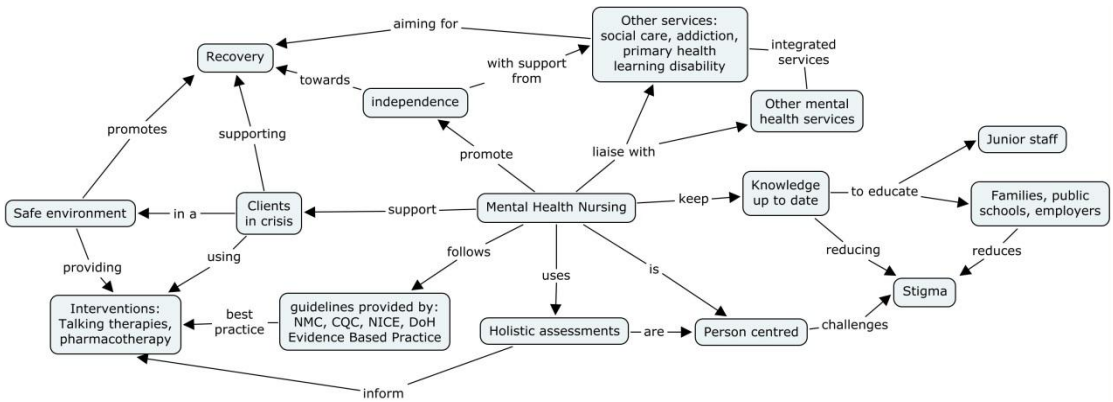

Fig. 2. Anna's last map

In interview Anna reported experiencing a significant change in her understanding of mental health nursing as a result of the academic programme and her clinical placements. She reported being able to see her learning in her maps. She reflected upon how naïve her first map was as she had believed Mental Health Nursing was overly simplistic. Whilst her final map is more complex than the first map, Anna reported that she found it difficult to capture the complexity of Mental Health Nursing in a single map:

> '*I can see so many connections in these maps. I could go on all day connecting ideas, but I think these are the key ones.'*

Ben

Ben's first map (Fig. 3) was structured as a spoke with 24 concepts and 23 links. The spoke structure of this map suggests that Ben is ready to learn at the beginning of the course. His use of concepts seems to describe an idealised image of a Mental Health Nurse. This suggests he has an aspiration of what a Mental Health Nurse is and what he hopes to be when he completes the programme.

The final map (Fig. 4) appeared mostly unchanged with an identical number of concepts and links to the first map. Whilst some of the concepts had changed none were well integrated into the structure. This suggests that Ben has not achieved the change he aspired to at the beginning of the course. This lack of change in knowledge structure suggests that Ben had not learned deeply from the course.

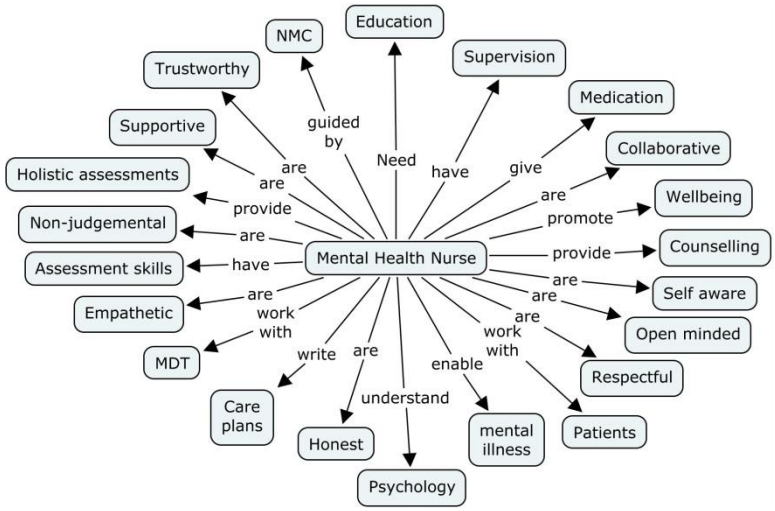

Fig. 3. Ben's first map

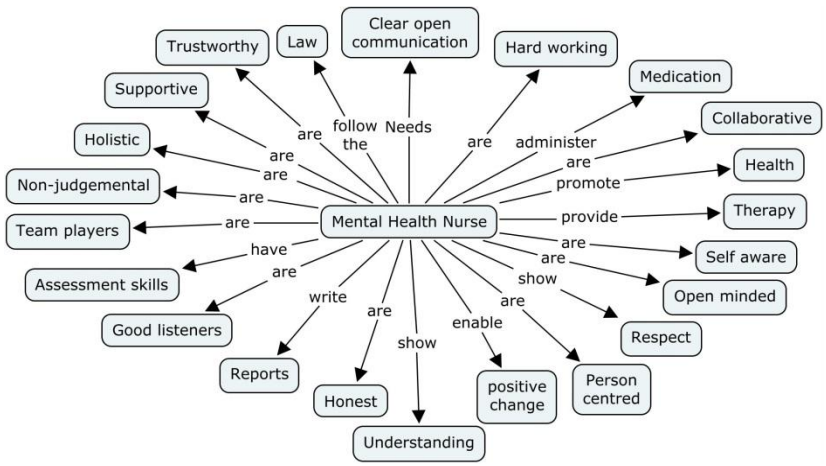

Fig. 4. Ben's last map

In interview, Ben reported that he learned most from clinical practice and often found it difficult to relate academic concepts to clinical practice in a meaningful way. For

Ben there was a clear theory-practice gap, which he has been so far unable to bridge. Ben reported '*You hear about things in class, and they are, kind of, interesting, but then there is what happens on placement. That is real. That is what I learn from'.* He appears to have adopted a strategic approach to learning; he has met all the requirements of the course by demonstrating the correct level of clinical competence, but his knowledge structure remains largely unchanged.

Clare

Clare's first map as shown in Fig. 5 was a simple network comprising 11 concepts and 12 links. These are loosely integrated with minimal linkage between many of the concepts. Some of the concepts are about Clare's choice for staring a course in Mental Health Nursing; she identifies that 'Mental Health Nursing is rewarding' and 'provides an opportunity to move up in [her] career'. This may suggest that when she started the programme she was keen to ensure that she passed the course and believed that working as a qualified nurse would afford her a career that she would enjoy more than previous jobs. At this stage in her learning there are only a few concepts included in the map that relate to other areas of Mental Health Nursing, showing only a superficial understanding; e.g. 'Vulnerable people needing treatments'.

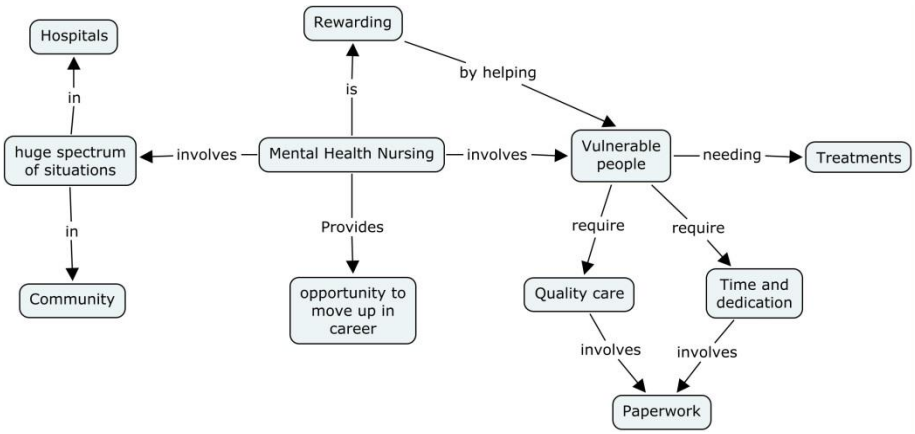

Fig. 5. Clare's first map

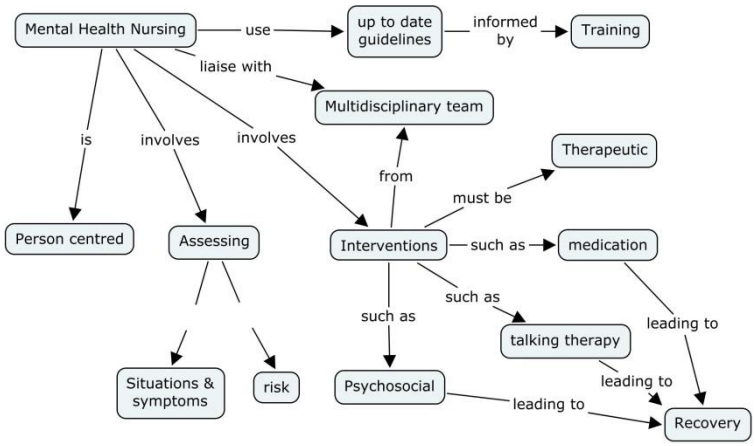

Fig. 6. Clare's last map

Clare's final map (Fig. 6) was also a network and is comprised of 14 concepts and 16 links. There has been an improvement in her understanding which is indicated by an increase in both concepts and links, and the concepts are also more meaningful. However, these concepts are not always well integrated into the map. For example, 'Person centred' is now included in the final map; this is a very important and meaningful concept that underpins nursing care, but it is only loosely integrated into the periphery of this map. Similarly, 'Recovery' is a key idea in contemporary Mental Health Nursing, and like 'Person centred' care, it is a driver to all other aspects of care delivery. All paths in Clare's map lead to 'Recovery', suggesting that for Clare Recovery is an end product of the work of a Mental Health Nurse, rather than it being a fundamental guiding principle. All of this suggests Clare may have learned strategically and made some rather superficial connections between important aspects of the mental health nursing role.

Clare reported in interview many of the concepts in her maps unproblematically. Trying to unpack some areas of the map was difficult; For example, asking questions about how medication or talking therapy leads to recovery did not reveal any further insights into this process. She was able to reflect that her initial understanding of Mental Health Nursing was somewhat superficial and could see how her understanding had positively progressed over time. Clare had achieved her registration and qualification as a mental health nurse but her final concept map structures and contents did not clearly reflect the same level of awareness of the depth and complexities involved in mental health nursing that was seen in some of the other participants' maps.

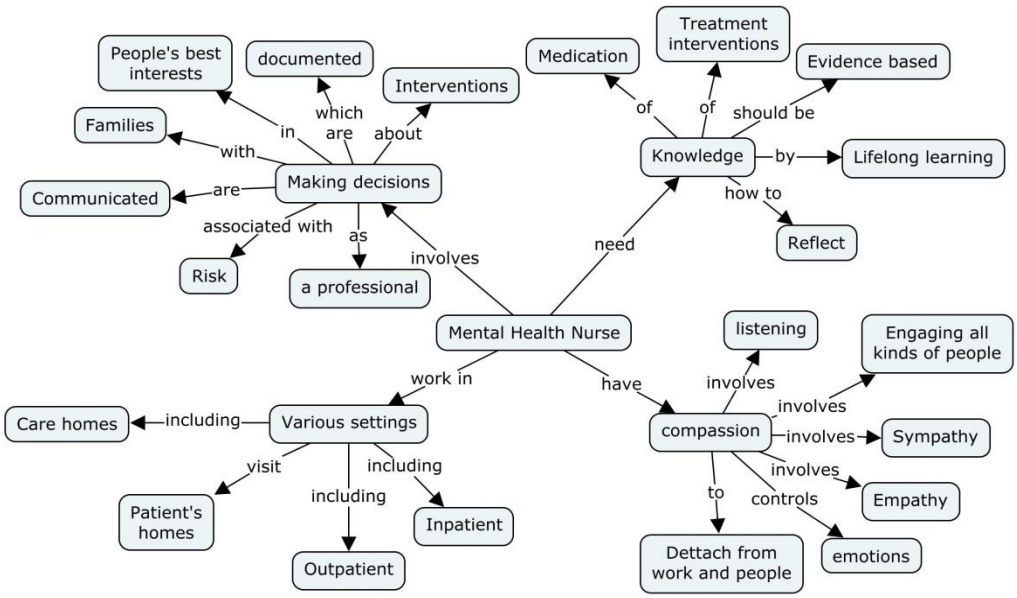

Fig. 7. Debbie's first map

Debbie

Debbie's first map (Fig. 7) was structured as a series of spokes with 28 concepts and 27 links. The spoke structure of this map suggests that Debbie is ready to learn. However, Debbie's first map shows her understanding of mental health nursing is centred around four concepts: Making decisions, knowledge, compassion and where nurses work. This

shows a relatively sophisticated knowledge structure for a student beginning their nursing programme. Debbie had worked previously as a Healthcare Assistant so had worked alongside qualified mental health nurses and seen how they work. This experience gave Debbie a strong starting position for her training.

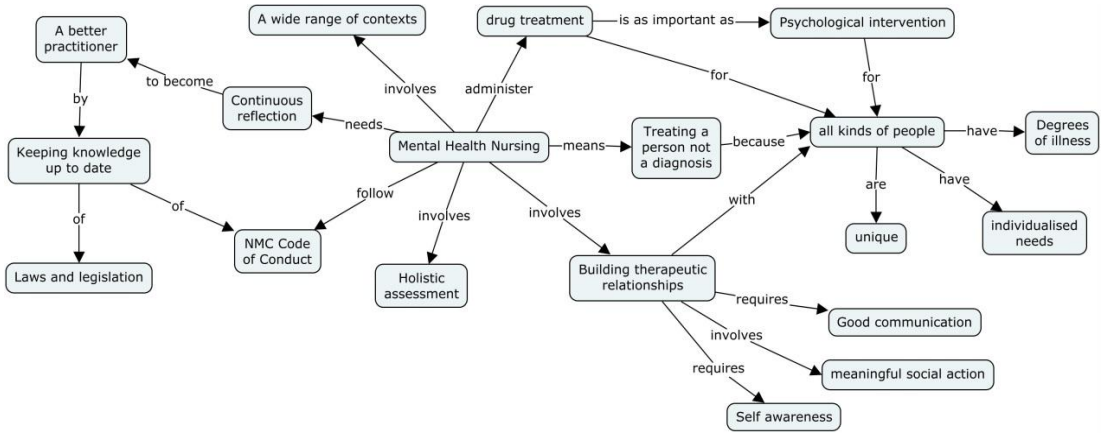

Fig. 8. Debbie's last map

Debbie's last map (Fig. 8) was structured as a network with 19 concept and 22 links. This is a reduction on her first map but the quality of her concepts and links have become richer and more intricately linked. The four central concepts to her first map have largely been replaced by more meaningful concepts and links. One area where this is apparent is her understanding that a nurse's work is about 'treating a person, not a diagnosis' as people are unique, have degrees of illness and have highly individualised needs. This is clearly a patient-centred perspective that is much richer than her first map. The transition from the first map to the last demonstrates the criteria for transformative learning (Mezirow, 1990; Wells & Hay, 2008).

In interview, Debbie was very excited to see her journey in the concept maps, which she described as a personal transformation. She said that her knowledge of mental health nursing had originated from watching the nurses when she worked as a healthcare assistant. She felt that, retrospectively, she had not really appreciated the complexity of mental health nursing prior to starting the programme. She acknowledged how the academic learning and practice had helped her develop her understanding of working with the person, rather than the illness, and how this had become key to her understanding of the work. She reported '*I have seen staff treat people like objects and I knew it wasn't right. Once I heard about the ideas around working in a person-centred way it completely changed how I understand the work as a nurse'.* She was pleased at how far she had come in her training and how much more confident she felt in her work. However, she also noted that she had much more she wanted to learn. She noted that whilst some parts of her map were well developed, such as the area around treating the person, other concepts were less developed and less integrated, such as holistic assessment. She reported that this was an area where she was not so confident.

Ellen

Ellen's first map (Fig. 9) was a spoke with 10 concepts and 11 links. This structure is suggestive that she is ready to learn. There is a rudimentary understanding of nursing beyond a lay person's perspective. Ellen reported that her mother was a nurse so she had

some knowledge of the role, but no first-hand experience of healthcare. It is clear that some of the key ideas are present but these lack meaningful connections. For example, whilst Ellen saw medication and interventions as things that mental health nurses do, she sees no connection between them.

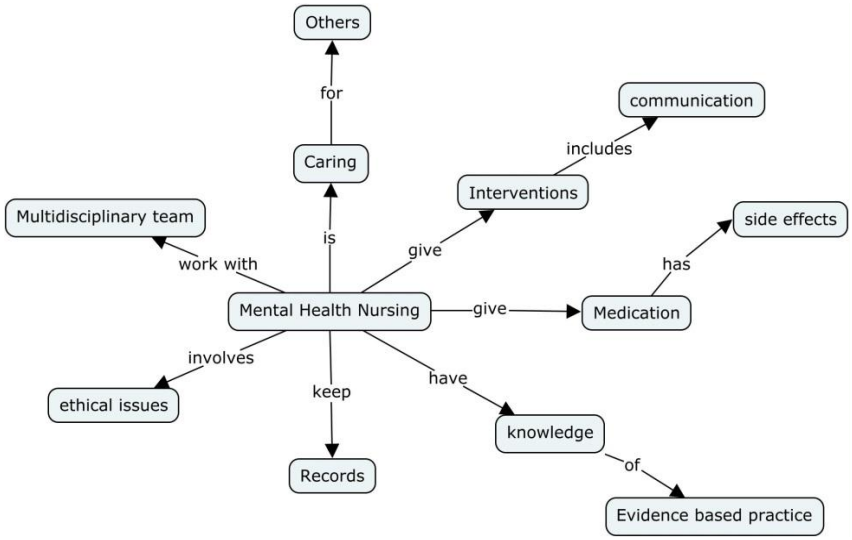

Fig. 9. Ellen's first map

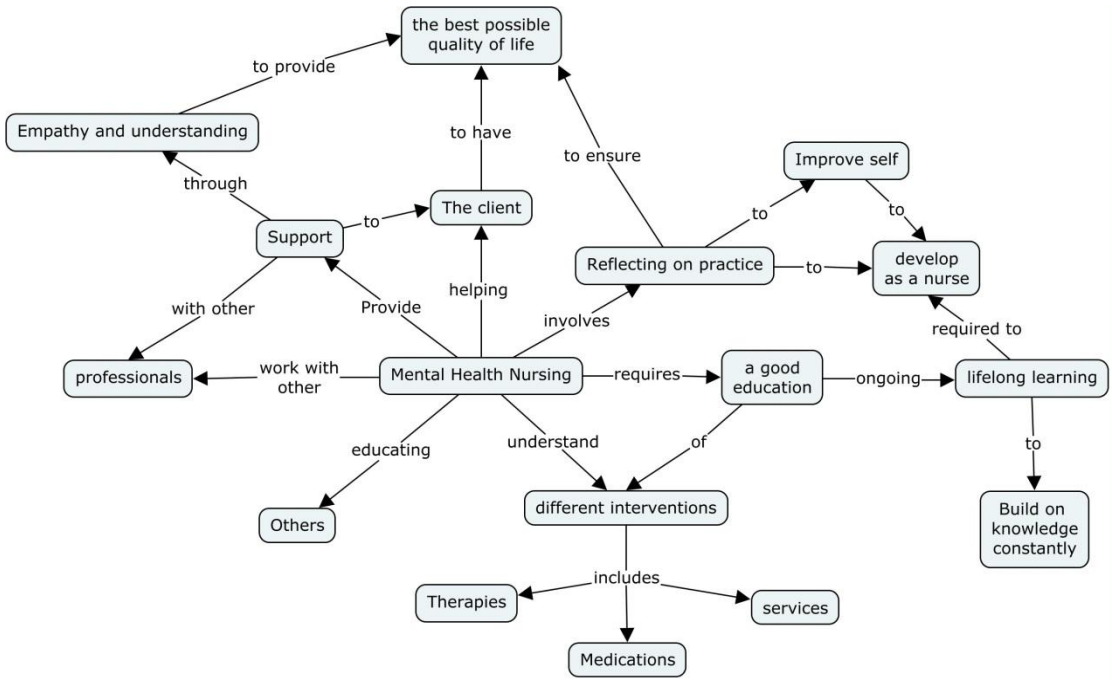

Fig. 10. Ellen's last map

Ellen's final map (Fig. 10) was structured as a network with 17 concepts and 23 links. Her understanding of the concepts and the connections has become richer and more

meaningfully integrated. It can be said that Ellen has learned meaningfully from the course. However, it is worth noting that the some of the interventions in the final map remain disconnected from each other; therapies and medication are seen as different interventions with no connection between them. This suggests that Ellen does not see a role for talking to clients about their medication. This is, perhaps, an indication of a modular approach to course delivery that separates psychological and pharmacological interventions with no space for a consideration of their integration. This suggests that perhaps more emphasis should be placed on reinforcing these connections during the programme.

In interview, Ellen was amazed by her simplistic understanding of her initial map. She could see how far her knowledge had developed as a product of her education. She reported that she found that the taught aspects of the course interesting, but often the priority became getting a good grade, rather than learning for being a better nurse. She felt that the theory did help her to make sense of her experiences in practice. However, it was perhaps the more informal aspects of the education, such as peer support and small group discussions, which have been most helpful. She reported '*I most enjoyed the time to discuss ideas. I understand the theories, to a certain extent, but it was through talking about and playing with these ideas that they really took meaning. I could then apply them in practice. Time for these discussions was so important'.* She reported that her journey into nursing was a process of growing up as she had commenced her studies on leaving 6th form. Completing the programme and registering as a mental health nurse indicated a 'coming of age' both for herself and for her family.

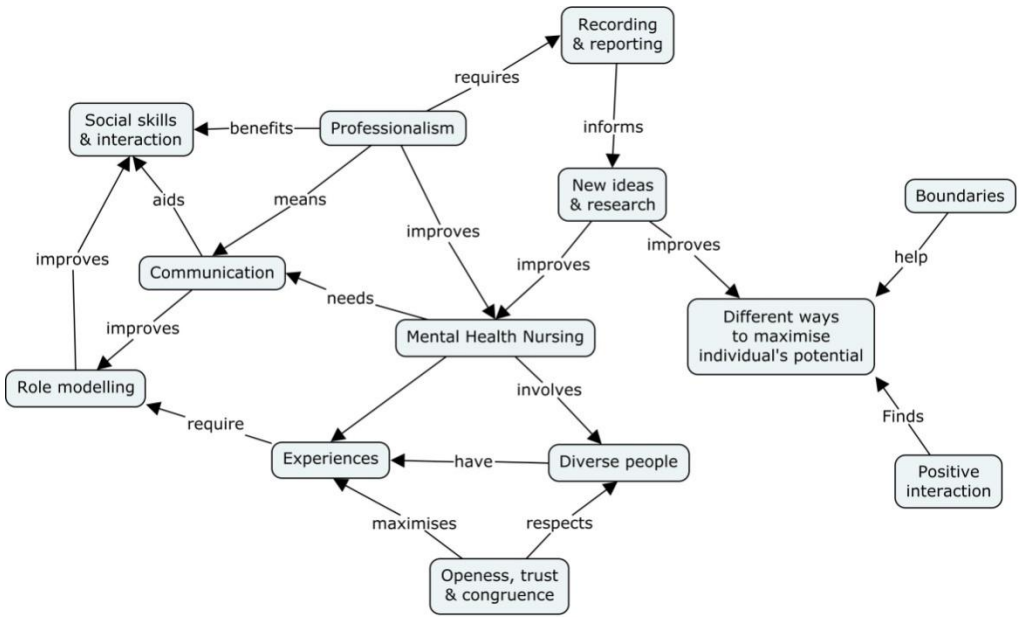

Fig. 11. Frank's first map

Frank

Frank's first map (Fig. 11) was structured as a network with 13 concepts and 13 links. The network structure of this map suggests that Frank already has a robust knowledge structure. Frank, like Debbie, has worked as a Healthcare Assistant in mental health

settings prior to the start of his nursing training. This gave him a strong foundation upon which to build his learning.

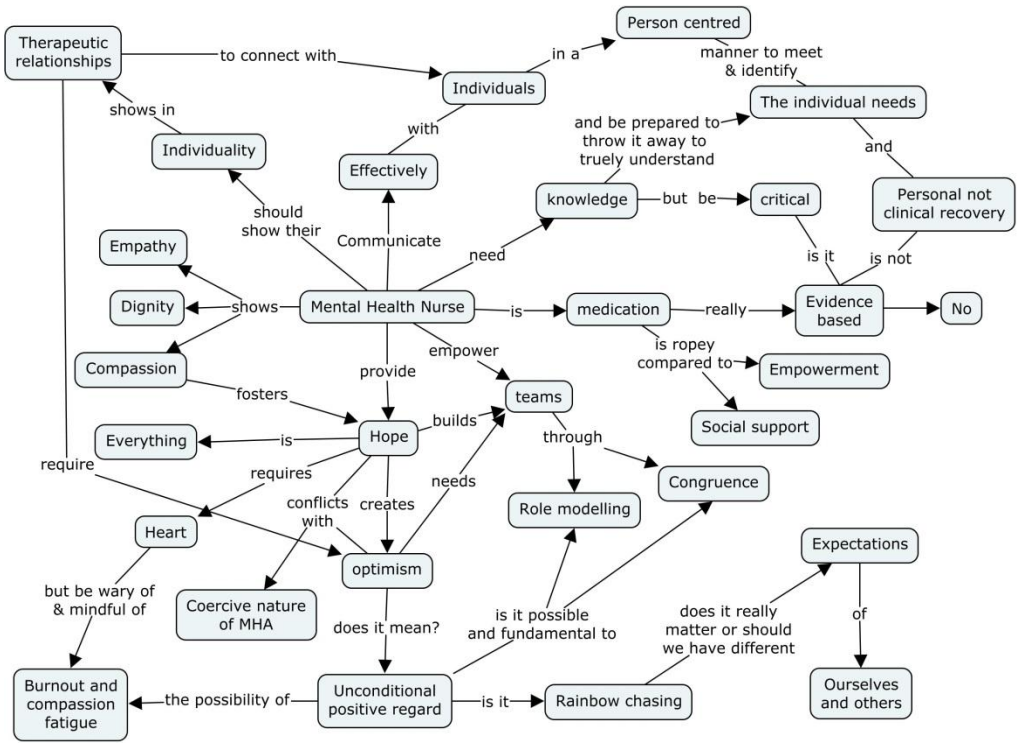

Fig. 12. Frank's last map

Frank's final map (Fig. 12) was also a network and comprises 31 concepts and 40 links. There has been a significant increase in both concepts and links; the concepts are more meaningful and more integrated. Frank has used the map to ask himself questions, or possibly to express his doubts. For example, he states 'personal not clinical recovery' is not 'evidence based', and accepts that a nurse should be prepared to throw away what they know in order to understand an individual's needs. Frank clearly understood the limitations of what he has been taught and has integrated his learning with his foundation experience that he brought with him into the nurse training.

In interview, Frank was critical of many of the 'truths' of mental health nursing, such as a reliance on medication as the primary intervention type. He could clearly articulate some of the key principles of contemporary mental health nursing, such as empathy, hope, and unconditional positive regard, but he could also see the amount of personal effort that this way of working takes and potential for burnout. Frank said '*These things* [empathy, hope, compassion] *are important but I wonder how realistic they are. They are something to aspire to, to work towards, but I worry about the costs to the person. I mean, how much can one person give and remain well?'* Frank approached his training by trying to make sense of the theory by relating it to his practice experience. Unlike Ben, he was able to incorporate the theory with the practice by retaining his criticality and curiosity.

4. Discussion

It is clear from an initial appraisal of the maps that they have not been structured hierarchically. Whilst this is a deviation from the guidelines for concept mapping it is entirely understandable given the abstract nature of Mental Health Nursing. Trying to decide which is a higher level concept, *empathy* or *medication* is a problem that has been encountered previously in exploring Mental Healthcare using concept mapping (Bressington, Wells, & Graham, 2011; Bressington, Mui, & Wells, 2013).

The presence of some superficial and non-learners (as suggested by the structure and contents of their concept maps) on a three-year nursing programme is somewhat disappointing, and may indicate that some participants have not yet been able to develop as integrated and sophisticated a concept of the role of the mental health nurse as their educators may have intended. Nursing students in the UK have to complete 2300 hours of theory and 2300 hours of clinical practice to be eligible to be included on the nursing register; it seems that our findings from analysis of the concept maps indicate that some of the participants in this case series found it difficult to connect these two essential areas of learning. Perhaps the modular mode of programme delivery and drive towards *competency* has influenced what people focus their attention towards.

The UK's Chief Nursing Officer required all nursing programmes to assess specific competency themes throughout the training (NMC, 2010). However, some educational researchers argue that competency benchmarks fail to capture the essence of what it means to be a professional as they highlight the technical aspects rather than the values that underpin the profession. Zhang, Luk, Arthur, & Wong (2001) concur and assert that within the nursing profession an individual's motives, traits and attitudes will directly influence how knowledge and skills are understood and translated into clinical competence; furthermore, these personal qualities may change over time in response to clinical experiences. Similarly, Eraut (2009) argued that professional competencies create '*the widespread delusion that a professional qualification represents competence in some all-encompassing generic form'* (p.6). The finding that some students can emerge from a three-year programme with their original knowledge structure unchanged could challenge the notion that performance related competencies are worth assessing.

Whilst Eraut has exposed the misconceptions underlying competency based education, the culture of healthcare in the UK in the wake of the mid-Staffordshire scandal (Francis, 2013) has also brought into sharp focus the consequences of the neglect of values in the preparation of practitioners. Such qualities were identified by Francis as a commitment to specific values and a preparedness for candour. It is possible that the learning of some mental health nursing students, revealed by their concept maps as superficial, has not been characterised by such traits, and that appropriate learning opportunities have not been offered to them. At a time when nurse education in England is subject to critical review in the post-Francis culture (Health Education England and Nursing & Midwifery Council, 2014), it is to be hoped that closer attention may be paid in the publication of guidance and standards that follow the final report – expected in February 2015 – to the stimulation of deeper learning in all nursing students, as well as the need to recruit students already possessed of values deemed essential to healthcare (Health Education England, 2014).

Another possibility is that the nature of the research study has influenced some of the participants to take a strategic approach to developing their concept maps. Given that maps were created three times during each academic year for three years makes this a repetitive task with no university credit assigned to the task. The interviews were used to

explore the individual's perception of the topic and no feedback was provided to the participant about the quality of the map. This may result in the participant feeling frustrated and, not wanting to ruin the research or upset the researchers, took a strategic approach and did not put much effort into their map. Whilst this is possible, it is inconsistent with the researchers' experience of working with the participants. The participants attended the research sessions regularly and were active contributors during interviews. This suggests that the concept maps are reliable and valid measures.

Several students highlighted a theory-practice gap in their education. They reported learning one thing in university and seeing another in practice. This discrepancy between what one is taught and what one actually does created a problem in understanding nursing for a number of participants, resulting in confusion and frustration. Whilst this is not a new issue (Benner, 1984), it is clearly an ongoing problem for nursing education and it is concerning it has been regularly highlighted as a problem for over 40 years (Bendall, 1976).

Numerous studies conducted in various different countries have reported that the theory-practice gap is magnified in the perceptions of newly qualified nurses due to a conflict between the ideals taught in university and the often brutal reality of the frequently institutionalised clinical setting (Duchscher, 2001; Gray & Smith, 1999). A more recent study (Maben, Latter, & Macleod-Clark, 2006) using in-depth interviews to explore nurses' views at 6 and 15 months post-qualification found that various professional and organisational factors eroded the ideals and values held at the point of qualification. Our study appears to show that not only do these issues persist; they are seen in some nurses that have yet to work as a qualified nurse. In addition, some of the participants in the current study seem to have their ability or willingness to learn meaningfully impeded by the obvious differences between what is taught and what they observe on the wards. As the division between universities and clinical areas appears to grow, proactive strategies are needed to address this, with this familiar problem featuring no doubt as a major issue in the "Shape of Caring" review (Health Education England and Nursing & Midwifery Council, 2014). Professional knowledge and skills, Schon made clear, are all too easily compromised by the necessity of having to navigate the "swampy lowlands" of practice without sufficient opportunity or capacity for guided reflection (Schon, 1987).

Participants in this study reported that more was learned from practice areas than from the classroom. Participants highlighted how the socialising effect of practice was more powerful than the abstract ideas taught in university. Looking again at Ibarra's (1999) three basic tasks of becoming a professional: 1) observing role models, 2) experimenting with new self-identities, 3) evaluating progress through self-examination and external feedback, it is clear that these are more available and achievable through practice-based experience than through classroom based education. Whilst there is regular feedback on academic performance within university education, through grades and lecturer comments, the academic tasks are not the central focus of a profession such as nursing, which is very hands on and interpersonal. The academic work is a means to the end for many students and bears little relationship to the key tasks of nursing. Equally, Eraut (2008) found that the majority of professional learning is achieved as a by-product of participating in the day by day work processes, especially *'participation in groups, working alongside others, consulting colleagues, tackling challenging tasks and roles, problem solving, extending and refining skills, and working with clients'* (p.148). These tasks occur more frequently in clinical practice, and are often more powerful learning experiences than purely classroom-based sessions.

The finding that students feel more heavily influenced by practice areas than by university education suggests that universities need to renew their consideration of their role in professional education. The relationship between research theory, education and practice are often perceived as 'top down' - research, theory, and education informs practice (Sabatier, 1986). However, the findings from this study suggest that universities should adjust their educational approach away from the traditional 'ivory tower' top-down approach towards a model that supports students learning primarily from practice and the university to provide support to facilitate learning. One such method may be to make greater use of clinical supervision and small reflective groups as a model for learning.

A final possible explanation for the presence of some superficial and non-learners is that significant learning occurs in the first 12 months following registration. Duchscher (2008) proposed that significant transformations occur in personal identity during the first year as a qualified nurse. This study has not yet had the opportunity to follow up on the participants in this study; it is possible, however, that the process of qualifying and working as a registered nurse, as opposed to being a student-nurse (as participants were in this study) provides the context in which other changes occur in knowledge and understanding. A follow up study may help to shed further light on this process.

The majority of students did achieve deep meaningful learning whilst on the nursing programme. Many of these students reported experiencing a personal transformation whilst on their training (Mezirow, 1990) and this appeared in several students' maps as described by Hay, Wells, and Kinchin, (2008). In this selected group of six students, transformation was a more common outcome of the programme than non-learning. This is clearly a positive outcome and a more detailed examination of the entire dataset will reveal more about the transformational nature of professional education.

5. Limitations

One limitation of this study is that the participants who took part in the interview aspects of this study were largely self-selecting. Whilst it does not undermine their own concept maps or learning trajectory, it may exclude the less enthusiastic or less outgoing students from participating in this part of the study.

A further limitation of this study is that the researchers are tutors on the nursing programmes and this may have influenced both the students' responses and the interpretation of the findings. An attempt to manage this was achieved by each researcher leading the study in the other's university and interviews were conducted by the external researcher.

6. Implications for mental health nursing education and future research

There is a potential danger of encouraging superficial strategic learning by nursing education programmes placing too much emphasis on purely performance-based competency assessment. Clearly, nurses need to be safe and competent when delivering clinical care, but they also need to be mindful of how their personal values and knowledge will underpin their practice. Dissonance between what is taught in university and what is witnessed in practice placements may suggest the need for ongoing regular supervision sessions which aim to facilitate reflection on how knowledge is transferred into practice and how to avoid rejecting previously held positive values in response to

challenges faced in the workplace. Nurse educators should be aware that frustrations resulting from what is witnessed in clinical practice may present a significant barrier to meaningful learning. These barriers, the questioning of personal values and learning trajectories can be accessed through the use of concept mapping within tutorial settings and research interviews.

In accordance with our observations from this study, we propose that concept maps could be used effectively as an educational intervention and not just as a method of visualising changes in understanding of students within mental health nurse training or as a research tool. Despite its necessity as a compulsory competency for a registered nurse (NMC, 2010), the effective facilitation of reflective learning is often a real challenge in nurse education (Teekman, 2000). It has also been proposed that one of the reasons for a widening theory-practice gap is an inability to learn through reflection (Epp, 2008). Traditional approaches employed to encourage learning through reflection (i.e. reflective journals) in undergraduate nursing students are only supported by a very limited evidence base and have varied success rates (Epp, 2008). An increasing number of researchers have reported that making concept maps the main focus of discussion within tutorials can effectively slow down recall and therefore this may be an effective educational strategy to employ (Kinchin, Cabot, & Hay, 2008; Bressington, Mui & Wells, 2013; Bressington, Wells, & Graham, 2011; Kandiko & Kinchin, 2012).

7. Conclusion

This study has reported on the early findings of a three year longitudinal study exploring how students' perceptions of Mental Health Nursing changed as a result of their educational programme and clinical practice. The study has revealed that most participants have learned deeply and experienced transformative learning experiences whilst on their professional training. However, some students appear to have learned strategically and others appear not to have learned from the programme. This has raised issues of competency-based trainings and the widening theory-practice gap in professional education. A more detailed analysis of this longitudinal data will no doubt reveal further insights into professional training programmes.

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References

Bendall, E. (1976). Learning for reality. *Journal of Advanced Nursing, 1*, 3–9.

Benner, P. (1984). *From novice to expert*. Menlo Park: Addison Wesley.

Borneuf, A. M., & Haigh, C. (2010). The who and where of clinical skills teaching: A review from the UK perspective. *Nurse Education Today, 30*(2), 197–201.

Braun, V., & Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101.

Bressington, D., Mui, J., & Wells, H. (2013). The effects of medication-management training on clinicians' understanding and clinical practice in Hong Kong. *Nurse Education Today, 33*(9), 969–975

Bressington, D. T., Wells, H., & Graham, M., (2011). A concept mapping exploration of social workers' and mental health nurses' understanding of the role of the Approved

Mental Health Professional. *Nurse Education Today, 31*, 564–570.
Duchscher, J. E. B. (2001). Out in the real world: newly graduated nurses in acute-care speak out. *Journal of Nursing Administration, 31*, 426–439.
Duchscher, J. B. (2008). A process of becoming: the stages of new nursing graduate professional role transition. *The Journal of Continuing Education in Nursing, 39*, 441– 450.
Epp, S. (2008). The value of reflective journaling in undergraduate nursing education: A literature review. *International journal of nursing studies, 45*(9), 1379–1388.
Eraut, M. (2008). Using research into how professionals learn at work for enhancing placement learning. In *WACE/ACEN Asia Pacific Conference 2008 E-Proceedings* (p. 148). ISBN 978-0-9805706-0-1
Eraut, M. (2009). *Learning to be a professional*. Retrieved from http://learningtobeprofessional.pbworks.com/w/page/15914995/Michael%20Eraut
Fitzpatrick, J. M., While, A. E., & Roberts, J. D. (1996). Key influences on the professional socialisation and practice of students undertaking different preregistration nurse education programmes in the United Kingdom. *International Journal of Nursing Studies, 33*(5), 506–518.
Francis, R. (2013). Report of the Mid Staffordshire NHS Foundation trust public inquiry. London: The Stationery Office. Retrieved from http://www.midstaffspublicinquiry.com
Gray, M., & Smith, L. N. (1999). The professional socialisation of diploma students of higher education in nursing (Project 2000): A longitudinal qualitative study. *Journal of Advanced Nursing, 29*, 639–647.
Hay, D. B. (2007). Using concept maps to measure deep, surface and non-learning outcomes. *Studies in Higher Education, 32*(1), 39–57.
Hay, D. B., & Kinchin, I. M. (2006). Using concept maps to reveal conceptual typologies. *Education and Training, 48*, 127–142.
Hay, D. B., Wells, H., & Kinchin, I. M. (2008). Quantitative and qualitative measures of student learning at university level. *Higher Education, 56*, 221–239.
Health Education England. (2014). *Values based recruitment*. Retrieved from http://hee.nhs.uk/work-programmes/values-based-recruitment/
Health Education England and Nursing & Midwifery Council. (2014). Shape of caring review. Retrieved from http://hee.nhs.uk/work-programmes/shape-of-caring-review/
Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly, 44*(4), 764–791.
Ibarra, H., & Barbulescu, R. (2010). Identity as narrative: Prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions. *Academy of Management Review, 35*(1), 135–154.
Kandiko, C. B., & Kinchin, I. M. (2012). What is a doctorate? A concept-mapping analysis of process versus product in the supervision of lab-based PhDs. *Educational Research, 54*(1), 3–16.
Kinchin, I. M., Cabot, L. B., & Hay, D. B. (2008). Using concept mapping to locate the tacit dimension of clinical expertise: Towards a theoretical framework to support critical reflection on teaching. *Learning in Health and Social Care, 7*(2), 93–104.
Kinchin, I. M., Hay, D. B., & Adams, A. (2000). How a qualitative approach to concept map analysis can be used to aid learning by illustrating patterns of conceptual development. *Educational Research, 42*(1), 43–57.
Kinchin, I., Streatfield, D., & Hay, D. (2010). Using concept mapping to enhance the research interview. *International Journal of Qualitative Methods, 9*(1), 52–68.
Longley, M., Shaw, C., & Dolan, G. (2007). *Nursing: Towards 2015*. Welsh Institute for Health and Social Care, University of Glamorgan.

Maben, J., Latter, S., & Macleod-Clark, J. (2006). The theory–practice gap: impact of professional–bureaucratic work conflict on newly - qualified nurses. *Journal of Advanced Nursing, 55*(4), 465–477.

Mezirow, J. (1990). *Fostering critical reflection in adulthood*. San Fransisco: Jossey-Bass Publishers.

Novak, J. D. (1990). Concept mapping: A useful tool for science education. *Journal of Research in Science Teaching, 27*(10), 937–949.

Nursing and Midwifery Council (NMC). (2010). *The code: Standards of conduct, performance and ethics for nurses and midwives*. Retrieved from http://www.nmc-uk.org/Documents/Standards/The-code-A4-20100406.pdf

Sabatier, P. A. (1986). Top-down and bottom-up approaches to implementation research: A critical analysis and suggested synthesis. *Journal of Public Policy, 6*, 21–48.

Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Fransisco: Jossey Bass.

Teekman. B. (2000). Exploring reflective thinking in nursing practice. *Journal of Advanced Nursing, 31*(5), 1125–1135.

Wells, H., & Hay, D. B. (2008). *The impact of lecturers' academic development on the quality of their students' learning: The importance of students' prior knowledge structure in mental health nursing*. Poster session presented at the King's Learning Institute Conference, King's College London, London.

Zhang, Z. X., Luk, W., Arthur, D., & Wong, T. (2001). Nursing competencies: Personal characteristics contributing to effective nursing performance. *Journal of Advanced Nursing, 33*(4), 467–474.