

Review

A paradigm shift from competence to Capability in neonatal nursing

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A B S T R A C T

A literature review by Bromley (2014) focussing on competence in nursing identified ambiguity and inconsistencies in the assessment or evaluation competence on nurses' clinical practice (Bromley, 2014; Watson et al., 2002). Flinkman et al. (2017, p. 1036) agree that “there continues to be no consensus on the definition of competence” and that it is a “highly abstract phenomenon ... complicated to assess and measure”.

A continued review of the literature has identified the theories of capability in higher education and capable graduates. This follow up review will explore the origins of competence and clinical competence as it relates to the nursing profession and compare this with Capability as a means of developing Capable Neonatal Intensive Care (NIC) nursing graduates.

Competence and vocational training

Historically, competency-based national frameworks of vocational qualifications were developed from industry standards as indicators to ensure minimum performance requirements were met (O'Connell et al., 2014; Stephenson and Yorke, 2012). Subsequently clinical competence was conceived around the manual job market, where rather than a high level of intelligence, only skill proficiency was considered necessary, and workers were trained to perform such skills (Watson et al., 2002).

During the 1990s, nursing education progressed from hospital-based (or vocational) training, to university-based degree programs. In order to ensure minimum standards were met in clinical practice, the concepts of nursing competency standards and clinical competence continued to be a marker for clinical performance. Nursing regulatory authorities measured practice and licensure against them; nursing curricula was designed around them; and nursing students were assessed against them (O'Connell et al., 2014). However, Ebrall (2007) points out that “registration boards and other licensing authorities can only measure the suitability of a person to enter the profession at the point of entry to the profession”. Bromley (2014) identified that even though competence and competencies have been an ongoing means of evaluating nurses' practice, assessing competence has often been problematic. Furthermore, competence is a *highly abstract* concept and *difficult to measure* in practice (Flinkman et al. 2017).

Why competence is no longer applicable

Over the past 30 years, and particularly the past 10 years, it has been recognised that competence has limitations for assessing nursing

practice (Sasso et al., 2016). In order to standardise practice, competence has been simplified by the use of competencies, which are often reduced to a tick box of skills in which to achieve proficiency, primarily used in assessing performance of tasks in the workplace. The use of competencies as tools for evaluating practice present a reductionist approach to the assessment (Giro, 2000), have become simplistic and prescriptive (O'Connell et al., 2014), and limit competence to the acquisition of knowledge and skills, failing to empower people to reach their full potential (Hase and Davis, 1999). Ebrall (2007) declared that “competencies are now seen as a relatively blunt educational tool within the university setting with limited application” to contemporary practice, and that tomorrow's graduate requires a “skill set that goes beyond competency to facilitate best practice no matter the environment of the graduate”.

From competence to Capability¹

The concept of graduate capability has gained strength in the higher education sector and more lately, in nursing practice and education (Coetzee, 2014; Scott et al., 2010). So much so, that the Australian nursing regulatory authority, the Nursing and Midwifery Board of Australia (NMBA), has recently acknowledged Capability in nursing practice, rather than competence. In June 2016 the “National Competencies for the Registered Nurse” (Nursing and Midwifery Board of Australia, 2006) were superseded by the “Registered Nurse Standards for Practice”, where Standard 3 states the Registered Nurse Maintains Capability for Practice (Nursing and Midwifery Board of Australia (NMBA), 2016). However, the NMBA Standards for Practice do not define Capability, and there has been limited follow up in the education

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¹ Where it specifically refers to nursing, this paper will identify this type of Capability with a capital letter ‘C’. In all other contexts capability will be identified with a lower case letter ‘c’.

and practice sectors to clarify Capability for nurses.

What is Capability?

Stephenson and Yorke (2012) first introduced the concept of *capability and quality in higher education* in the 1990s. To summarise, they declared:

Capability is a broader concept than that of competence ... Capability embraces competence but is also forward looking, concerned with the realization of potential ... Capability is an integration of knowledge, skills, personal qualities and understanding used appropriately and effectively – not just in familiar and highly focused specialist contexts but in response to new and changing circumstance ... to take actions in uncertainty and to see initial failure as a basis of learning how to do better (Stephenson and Yorke, 2012).

Dependent capability

Stephenson and Yorke (2012) identified two types of capability, dependent and independent. For much of the time, most of us work in familiar environments, using familiar solutions to solve familiar problems which may, or may not, require a degree of technical aptitude and knowledge. They called this ‘Position Y’ (Fig. 1). This familiarity has shaped didactic teaching styles, which encourage dependent capability by providing a *this is what you need to know* approach to education. Students are furnished with information on the kinds of problems they will face in the work context, along with details of known effective solutions. Essentially dependent capability is developed through passing on peoples’ experiences, knowledge and solutions to problems. This would be excellent, if all the graduate ever needed was to function in position Y.

Independent capability

However, Stephenson and Yorke (2012) declared contemporary graduates are required to function in less familiar contexts, devising unfamiliar solutions to unfamiliar problems. They referred to this situation as Position Z (Fig. 1), noting that “the slavish application of solutions perfected for familiar problems may have disastrous effects in Position Z” (Stephenson and Yorke, 2012). They described Position Z as a learning situation where new problems require the development of new solutions and furthermore, a situation where there is no guarantee that the proposed solutions will work. In order to function in this position, new graduates need “confidence in themselves and in their judgements, to take actions in uncertainty, and to see initial failure as a basis of learning how to do better” (Stephenson and Yorke, 2012).

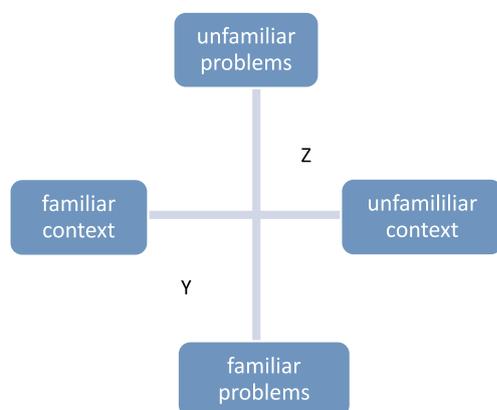


Fig. 1. Plotting capability.

Defining Capability

Stephenson and Yorke (2012) define Capable people as being able to:

Integrate knowledge, skills, personal qualities and understanding, used appropriately and effectively, in familiar contexts as well as responding to new and changing circumstances. And that Capable people are able to; take effective and appropriate action, explain what they are about, live and work effectively with others, and to continue to learn from their experiences as individuals and in association with others, in a diverse and changing society.

Many contemporary definitions of Capability have evolved from Stephenson and Yorke's (2012) ideas initially published in 1998.

In their report on the future need for K-12 education in Australia, Torii and O'Connell (2017) advised that a renewed focus on capability is required in order to bridge the vocational and academic divide. They argue “capabilities (also referred to as non-cognitive skills, enterprise skills, 21st Century skills) include: critical thinking, problem solving, creativity, curiosity, interpersonal and communication skills, self-regulation, grit, entrepreneurial skills, teamwork and craftsmanship”.

In their study of Capability in newly graduated nurses, Scott et al. (2010) suggested that Capability “involves a mixture of emotional and cognitive intelligence including the ability to determine when and when not to deploy these competences”. O'Connell et al. (2014) explored Capability in the context of nurses of advanced practice (Nurse Practitioners) and described Capable people as being “creative, have a high degree of self-efficacy, know how to learn, can take appropriate and effective action to formulate and solve problems, can apply competencies in unfamiliar and familiar situations, and work well with others” (2014, p. 2731). Brewer et al. (2014) claimed that working within a multidisciplinary healthcare team demands capability which “extend well beyond discipline knowledge and understanding. [It includes] communication, reflective skills, team function, conflict resolution and client-centred care” and that graduates require “a sophisticated, integrated set of capabilities that encompass more than discipline specific knowledge, skills and understandings”. Bromley (2018b) states the neonatal nurse demonstrates Capability through:

Professionalism (problem solving, analytical thinking), their Interpersonal Interactions (ethical behaviour, presenting and applying information and interactive skills), and their Knowledge and Skills (recognising incomplete praxis and ongoing learning needs, and effective time management). The Capable neonatal nurse can be relied on to work just as well in familiar and unfamiliar environments, with well-developed clinical reasoning skills providing the means to devise novel solutions to unfamiliar problems, has a justified confidence in her or his clinical decision making and is able to learn from success and failure

Capability, therefore, is considered within an holistic framework of which competence is just one aspect (O'Connell et al., 2014; Sasso et al., 2016). Capability is forward looking, it is about being creative, problem-solving in familiar and unfamiliar contexts, being an effective communicator, and having confidence in one's decision-making. It recognises the process of problem-solving is a learning experience.

The Capable graduate

Scott and his counterparts (2010) categorised the capabilities of successful nursing graduates into the four main domains of; *personal capabilities, interpersonal capabilities, cognitive abilities and, generic skills and knowledge*. These domains are comparable to the components of Stephenson and Yorke's (2012) concepts of Capability.

Similarly, Coetzee (2014) research into the concept of ‘graduate-ness’ in students of economic and management sciences, described capability as “the quality of personal growth and intellectual

development of the graduates ... and the relevance of the skills and attributes they bring to the workplace". She identified eight 'core skills' that constitute graduateness, which are embedded in the three domains of: *scholarship* (problem-solving and decision-making skills, analytical thinking skills, enterprising skills), *global and moral citizenship* (ethical and responsible behaviour, presenting and applying information skills, interactive skills), and *lifelong learning* (goal-directed behaviour and continuous learning orientation). Although her research was specific to one specialty area, her conclusions align very closely with the concepts of capability proposed by both Stephenson and Yorke (2012) and Scott et al. (2010).

Bromley (2018c) summarised these key concepts regarding Capability from these three positions along with her findings from the Neonatal Postgraduate perspective. The comparison not only showed an alignment between Stephenson and Yorke's (2012) original concept of Capability, and those of Scott et al. (2010), and Coetzee (2014), but it also highlighted the specifics of Capability, which help to clarify the concepts of Capability that are common in the research studies. Although these concepts have been identified in the literature for a number of years, they have not been well embedded into nursing education in general or neonatal nursing education in particular. This is partly due to the continued dependence on the evaluation of competence in clinical practice.

Moving from competence to Capability in Neonatal Intensive Care (NIC) graduates

Ebrall (2007) argued that a clinician who is empowered to think, interpret and adapt is a far "superior product to one who simply demonstrates competency". It is the role of institutions of higher education, therefore, to provide opportunities to develop such graduates, who are able to work in familiar and unfamiliar contexts, and rapidly changing occupational worlds (Coetzee, 2014).

A career in nursing, and in neonatal nursing in particular, is complex and often fast paced with changing work environments. The contemporary neonatal nurse is required to respond to circumstances, which they may not have previously encountered. The neonatal environment encompasses both the highly technical intensive care setting, to the provision of care in less developed countries with minimal resources. Technology and new models of care (McKechnie, 2016) drive change, therefore, neonatal nursing requires Capable graduates. Education needs to provide them with well-developed clinical reasoning skills in order to work confidently in familiar and unfamiliar contexts. To use experience and analytical thinking to find solutions to new or unfamiliar problems. It needs to prepare the graduate to be personally effective within the circumstances of their lives and work. To pursue excellence in the development, acquisition and application of knowledge and skills.

A Capability Framework to guide the curriculum

O'Connell et al. (2014) claimed that "to ensure healthcare delivery keeps pace with the increased demand and continually changing contexts there is a need to embrace capability as a framework". Capability needs to be developed in a coherent and structured way (Spencer et al., 2012). Furthermore, Carryer et al. (2007) suggested a Capability Framework is required to guide practice for Nurse Practitioners. In Australia, nursing curricula continues to focus on competence and as such does not embrace a Capability Framework in either undergraduate or, until now, postgraduate nursing studies.

Just as there is a need for discipline specific Graduate Attributes, Capability Frameworks need to be discipline specific in the postgraduate context, in order to capture the nuances of the specialty area. For neonatal education to *keep pace* and cultivate the Capable NIC graduate, a framework specific to Capability in NIC nursing has been developed (Bromley, 2015). This framework clarifies what is meant by

Capability in NIC nursing, how Capability develops throughout the Postgraduate Certificate in Neonatal Intensive Care (PG Cert NIC) nursing course. Bromley (2018c) has also identified how Capability is recognised in NIC students by their mentors².

Ebrall (2007) has argued for a Capability Curriculum to drive change in this direction, suggesting it will narrow if not close the theory/practice gap. Spencer et al. (2012) explained that graduate capability is specific to the disciplinary context and teaching such disciplinary capability should be intertwined with the disciplinary content. For nursing education in general, and neonatal education in particular, it is time to move beyond the reductionist approach of competencies to the more holistic concept of Capability. A start has been made in neonatal postgraduate education however, further research is required to embed Capability into the general nursing curriculum.

A Capability Framework for NIC nursing has not existed in Australia or internationally. The Royal College of Nursing in the United Kingdom has a "Career, education and competence framework for neonatal nursing in the UK" (Royal College of Nursing, 2015), however, this is not an educational tool. It maps the career progression through seven levels, from the health care support worker/nursery nurse with National Vocational Qualifications (NVQ) (levels 2, 3, and 4), through the Registered Nurse/Midwife (levels 5), to post registration qualifications, equivalent in Australia to postgraduate certificate, diploma, honours (level 6) and masters (levels 7 and 8). At each level there are 'core competencies for neonatal practice'. These are comprehensive lists of activities expected of the health care support worker or nurse at that level. Although comprehensive, this document's focus is competence and as such is easily reduced to a list of tasks to be undertaken and assessed. Consequently, it does not foster the development Capability. In Australia, for the neonatal curriculum to focus on developing Capability in professional practice, the starting point is the development of the PG Cert NIC Capability Framework (Bromley, 2015).

Specialist nursing areas need to consider what is unique to that specialty that identifies Capability in that specialty in order to model or design the curriculum around these specifics. Research by Bromley (2018a, b) shows there to be a hierarchy to developing Capability; where Capability moves beyond the level of competence (Spencer et al., 2012), and discipline specific Graduate Attributes. However, it is essential to have competence and Graduate Attributes on which to build, to develop an understanding of the requirements for discipline specific graduate Capability.

The research surrounding capability and the concept of 'graduateness' has developed from the perspective of undergraduate study. However, this body of research (Bromley, 2015, 2018b, c) adds to the research by seeking to understand Capability from the perspective of the postgraduate neonatal nurse, using the conceptualisation of Capability of Stephenson and Yorke (2012), Coetzee (2014) and Scott et al. (2010) to support this endeavour.

Conclusion

A previous literature review (Bromley, 2014) recognised that evaluating competence in clinical practice posed a reductionist, *tick box* approach to evaluating practice. This paper discusses the more useful concept of Capability both in general nursing and, more specifically, NIC nursing. The paper argues for a move away from competence to the more holistic view of Capability in NIC nursing, justifying the inadequacy of a competency approach in contemporary complex nursing practice. Bromley (2018b) has defined Capability in relation to NIC nursing and contextualised Capability in NIC nursing through the development of a Capability Framework (Bromley, 2015) and the

² The term 'mentor' has been used to collectively identify a qualified neonatal nurse who supports the PG Cert NIC students in clinical practice, whether they be preceptor, clinical supervisor, or clinical nurse educator.

Capability Wheel (Bromley, 2018b) which could be used to support the development of a Capability curriculum. As Capability has not been explored in this context before, this research has been breaking new ground.

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