
Manuscript 1310

Nursing Education: What Fits Best in a Changing World of Education Gogies?

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Introduction

Early nurses were often associated with religious orders, such as the grey nuns, and education about how to nurse was passed on by word of mouth from nurse to nurse or from Indigenous peoples who shared their knowledge about healing (Paul, 2005; Wytenbroek & Vandenberg, 2017). Women often cared for ill members of their families as it was assumed that knowledge of how to nurse was present by virtue of being female (Anthony & Landeen, 2009). Nursing education has evolved from knowledge being passed from nurse to nurse to university education inclusive of diverse approaches and individuals. In this discussion paper, we examine how nursing education has evolved and the broader concepts of pedagogy, andragogy, heutagogy, and academagogy, and discuss how these fit within learner-centred approaches to nursing education.

The Evolution of Nursing Education

Nursing's roots have been firmly planted in the beginning practices of "training" people to facilitate the care and wellness of others. Florence Nightingale was a strong advocate for nursing training and education in the Victorian age (Walker & Holmes, 2008). The nursing education program that Nightingale founded focused on obedience to the physician and used an apprentice model, concentrating more on practical knowledge than theoretical understanding. The legacy of nursing education that followed for decades emphasized the pragmatics of nursing practice rather than emphasizing thinking (Walker & Holmes, 2008). Walker and Holmes (2008) also contended that nursing education has muted nurses' political voice. For example, physicians often gave lectures, and there was a predominance of practical "training" on the hygiene and dietetic needs of patients (Walker & Holmes, 2008). By the 1950s, nursing had taken control over nursing education, yet the emphasis on good character and cleanliness continued as rooted values. Many of the early nursing programs were part of a hospital, with nursing students providing labour in return for room and board (Grypma, 2017). Scholars who have analyzed early textbooks of nursing education highlight the focus of nursing on the practical application of the fundamentals of nursing, such as hygiene and dietetic needs (Boschma et al., 2008; Walker & Holmes, 2008). Scholars have also noted a strong emphasis on discipline and commitment to humanity within nursing education in historical data (Karseth, 2004; Walker & Holmes, 2008).

By the 1960s, nurse educators who believed the education approaches were outdated began to theorize about nursing (Thorne, 2017). The challenge of the theorists was to incorporate the general knowledge needed in nursing into how nurses used that knowledge in practical application with those in their care. Nursing programs began to move out of hospitals into community colleges, and at the same time there was a movement to bring nursing education to a baccalaureate level. Taking charge of nursing education and the development of nursing-focused research has resulted in nursing being established as a distinct health care discipline (Thorne, 2017). This has not been without growing pains, or challenges, not the least of which is how to approach nursing education in an evidence-based way. Scholars suggest that Nightingale's use of statistics to understand patient mortality was the first nursing example of using evidence to refine nursing practice (Mackey & Bassendowski, 2017). They suggest that both Nightingale and evidence-based medicine have contributed to evidence-based nursing, which aims to improve patient safety and provide a framework for nursing decisions and has led to best practice guidelines in practice and education (Mackey & Bassendowski, 2017).

Along with the emphasis on best practices, the scholarship of teaching and learning has been discussed in the literature, often emphasizing Boyer's views of scholarship (Oermann, 2014). Oermann (2014) suggested that nurse educators reflect on their current teaching practices, question whether there are better ways to promote learning, and share ideas of learning with colleagues as ways to enact the scholarship of teaching. Nurse educators and many educators in other disciplines have demonstrated a growing desire to engage in learner-centred approaches to education. Placing the learner at the centre within the learning environment has shifted the emphasis in nursing education to learning rather than teaching. As all learners have individual ways they learn best, the importance of learning and facilitating learners' understanding has become central to how educators craft learning opportunities in the classroom, lab, simulation, clinical setting, and other contexts in which nursing education occurs (Oermann et al., 2017).

Learner-centred approaches expand the breadth and type of concepts educators must consider. It is important that educators understand how a learner-centred perspective incorporates learner attributes, culture, learning style preferences, motivation, and the relational space in which the teacher and learner interact (Oermann et al. 2017). Harris and Cullen (2010) described educators in learner-centred practice as being facilitators of learning, with emphasis on how learning occurs rather than what is learned. There are numerous philosophical approaches describing how learning may occur. These, represented by key terms in education, often end with the suffix -gogy, to indicate the study of or a specific approach to education.

Examining the “Gogies”

Nursing education faces challenges in ensuring that graduates have the knowledge, skills, and values to meet entry-to-practice nursing competencies, while emphasizing learner-centred approaches to education. An examination of pedagogy, andragogy, heutagogy, and academagogy provides insights into how best to balance the tensions in nursing education of making sure learners gain required knowledge and competencies and yet are able to engage in their own learning through a learner-centred approach to their development.

Pedagogy

Pedagogy is a concept that is widely used without recognition that it may mean different things to different people. Some scholars define pedagogy as education associated with children in which the educator has full responsibility for making decisions about what is learned, how and when it will be learned, and whether it has been learned (Forrest & Peterson, 2006; Knowles et al., 2005). Other scholars define pedagogy “as the art and science of teaching” (Maddalena, 2015, p. 1) or as methods of teaching or imparting knowledge (Jones et al., 2019), not necessarily specific to children. Murphy's (1996) examination of historical ideas of pedagogy suggests that from the 1890s to 1900s, learners were passive recipients in their education. With the emergence of constructivist and sociocultural theories of learning that considered the social influences in education and the human capacity to learn, child-centred theories of learning were developed. Child-centred or learner-responsive pedagogy is thought to be best when it takes place across social practices and settings (Kaliyadan & Nagaraj, 2011). Supported by other theories, the term pedagogy can encompass various approaches to knowledge and its development.

Theories such as constructivism and sociocultural theories of learning situate the learner as an active constructor of meaning and knowledge (Murphy, 1996). These theories were a result of the reactions to didactic learning affiliated with behaviourism and teacher-led training (Oermann et al., 2018). In these theories, the context and the processes of learning are prominent in an active

construction of knowledge where individual learner reflection takes place. In addition to context and engagement of the learner, psychologists have highlighted the importance of language in a constructivist understanding of learning (Kramsch & Sullivan, 1996; Murphy, 1996). Thus, the educator is seen as more than the provider of knowledge. The educator recognizes the complexity of the environment, culture, individual engagement in learning, and the need for individual reflection for engagement. In this sense, educators must focus the learners' attention on relevant concepts and highlight what learners should consider. The educator supports learners until they are able to be competent in their own learning so that they can find and create meaning independently. Murphy (1996) suggested that context or making sense of what the learner knows and understands is an integral aspect of learner-centred teaching. Learners in these theories of learning must engage in dialogue with other learners and their educators to validate what they understand, rather than being passive recipients. In this sense, constructivist learning is made meaningful through active experience and involvement in the wider contexts pertinent to learning. In summary, some criticize pedagogy as suitable only for children, or a process in which the educator imparts knowledge to passive learner recipients. Others suggest that when constructivism and sociocultural theories are used within pedagogy, educators encourage learners to reflect on their learning processes and become more independent in their learning.

Andragogy

Another important -gogy when discussing adult learning and learner-centred approaches to nursing education is andragogy. Malcolm Knowles is credited with developing the concept of andragogy, which is based on the premise that adults have different learning needs than children (Knowles et al., 2005; Pratt, 1988). Adult learning needs are underscored by a set of assumptions that include (a) the need to know, (b) the learners self-concept, (c) the role of the learner's experiences, (d) readiness to learn, (e) orientation to learning, and (f) motivations (Brockett, 2015; Forrest & Peterson, 2006; Knowles et al., 2005; Pratt, 1988; Zmeyov, 1998). In other words, adults need to understand why they need to learn something before learning it; they are accustomed to being responsible for their decisions; they come with vast previous experiences; they are motivated to learn to the extent that they believe the learning will help them; and they are motivated by external factors such as a better job or more money.

The andragogical process has eight steps: (a) preparing the learner by providing information, preparing them for participation, and developing realistic expectations; (b) creating a climate that is relaxed, trusting, collaborative, and supportive, with authenticity and humanness; (c) planning—creating a mechanism for mutual planning by learners and educator; (d) diagnosing the needs for learning through mutual assessment; (e) setting objectives through mutual agreement; (f) designing learning plans; (g) constructing experiential learning activities; and (h) evaluating through pre/post testing of knowledge, end-of-program discussions, and evaluation forms (Knowles et al., 2005). Knowles had intended andragogy to be a flexible process that factored in whether the learner was learning something completely new to them, in which they would likely be dependent, or was expanding on something they already knew, in which they would be more independent (Knowles et al., 2005). If the learner was dependent, an andragogy approach was intended to bring them to the place where they could increasingly take initiative in their own learning.

Criticisms of andragogy are that it has focused on individual learning and does not include a critical social perspective, rather it is situated in a humanistic and pragmatic philosophical perspective (Knowles et al., 2005) without clear links to a wider context that includes sociopolitical

influences. Moreover, collaboration in learning requires the ability to cooperate, a cognitive style that is conducive to collaboration, and the ability to take on an equal role with the educator (Pratt, 1988). “Learners need direction when they lack the necessary knowledge or skills to make informed choices—when they are unable to be self-directed” (Pratt, 1988, p. 165). Scholars discuss learners’ dependence on educators in both pedagogy and andragogy in terms of how much direction the learner requires, with increased need for direction suggesting more learner dependence (Forrest & Peterson, 2006; Maddalena, 2015; Pratt, 1988). Despite criticism, andragogy has been widely taken up and adapted around the world as an approach to education that is respectful, trusting, supportive, and collaborative (Henschke, 2011). This could be because in andragogy, an educator’s goal is to support learners in moving from dependence on the educator to self-directed learning, recognizing their past experiences and their own learning goals. Principles of andragogy have been used extensively in management and human resources development courses with adults (Forrest & Peterson, 2006; Knowles et al., 2005) and remain foundational to the practice of higher education, including nursing education.

Heutagogy

Heutagogy was defined by Hase and Kenyon (2000) as an instructional approach that emphasizes self-determination in learners, based on their experience that people change only in response to a clear need and when they are self-determined to do so (Hase & Kenyon, 2007; Moore, 2020). Hase and Kenyon (2007) explained that they saw heutagogy as an extension to pedagogy and andragogy, necessary in our modern and complex world. They claimed to add to andragogy and pedagogy by drawing on complexity theory, action research, the capability of the learner, and double-loop learning within heutagogy (Hase & Kenyon, 2007; Moore, 2020). Hase and Kenyon (2007) differentiate between knowledge and competency acquisition and learning, defining learning as “an integrative experience where a change in behaviour, knowledge, or understanding is incorporated into the person’s existing repertoire of behaviour and schema (values, attitudes, and beliefs)” (p. 112).

Characteristics of heutagogy are (a) double-loop learning, (b) an emphasis on developing learner capacity, (c) facilitation of learner-determined curricula and assessment, (d) learner-centred management of learning, and (e) a focus on learners and their understanding about how they learn (Agonacs & Matos, 2019; Hase & Kenyon, 2007; Moore, 2020). Double-loop learning could be considered deep learning and often requires reflection to change the learners’ schema (Knowles et al., 2005). Learning something that fits with prior experiences has been called single-loop learning, whereas double-loop learning is learning that does not fit with prior experiences and requires a change in mental schema (Argyris, 2002; Knowles et al., 2005). A process of sharing and critical reflection is needed to form new schemas within heutagogy (Jones et al., 2019).

Agonacs and Matos’s (2019) literature review of the art of heutagogy revealed that most publications focused on the value of double-loop learning and the question of learner-centredness, and that the learners’ self-motivation played an important role in their succeeding as a self-determined learner, with minimal research focused on learner capability development. Moore’s (2020) comprehensive review of heutagogy related to online learning suggested that heutagogy focuses on skill development and knowledge application, and it is a good match with technology as it encourages self-determination and independent learning. Although heutagogy was developed for distance education, it has been applied to a wide range of educational contexts (Jones et al., 2019), including nursing education.

We found a few nursing authors who reported on their use of heutagogy. Maykut et al. (2019) described how a fourth-year elective combined caring sciences and transformed learning to a co-relational space in which learner and educator negotiated and derived meaning from human and ethical transactions. They claim the use of caring to embody the shared space highlighted the learner-driven and empowered nature of learning in nursing education. Green and Schlairet (2017) reported that the use of a flipped classroom was movement towards heutagogical learning. Learners were responsible for reviewing and learning content before the application activities in the designated learning session. We question the authors' interpretation of completing pre-learning before lecture as demonstrating aspects of heutagogy. Their description did not indicate learner self-determination (a key component of heutagogy) regarding what the learner wanted or believed they needed to learn. Rather, learners were reviewing and learning content that was prescribed for the next in-person class. Perhaps reports that heutagogy was useful in online learning was misinterpreted by these authors as pre-reading materials.

Durkin-Boyle (2017) suggested that prior learning assessments (PLA) in which learners demonstrate how their prior learning could be recognized as some of the competencies for a nursing program are a form of heutagogy. Again, we disagree with the author's interpretation of heutagogy as the learner is not seeking to learn something new when requesting a PLA; rather, they are trying to get recognition for previous experiences that demonstrate prior learning, which could have been accomplished through a variety of methods. Learning about prior experiences is considered single-loop learning whereas heutagogy is associated with double-loop learning (Agonacs & Matos, 2019; Hase & Kenyon, 2007; Moore, 2020). It is apparent that not much has been written about heutagogy in nursing education and that more exploration would assist in applying this approach to different contexts in which students learn, such as in theory and clinical courses.

Academagogy

In the above descriptions of pedagogy, andragogy, and heutagogy, a continuum of learning strategies can be seen. Academagogy is a concept that describes a framework that educators can use to pick the gogies that best meet learners needs (Jones et al., 2019). Winter et al. (2009) coined *academagogy* as an umbrella term that would allow educators to draw from a wide range of teaching approaches. Murthy (2011) suggested educators who use academagogy gain a framework for structuring learning activities in ways that encourage group work, flexible settings, social connections, and lifelong learning and are more likely to meet the needs of millennial learners, who are looking for education to build their competency in a knowledge-driven world. The need to develop competency in a knowledge-driven world is important for all learners. Although not much has been written about academagogy, the potential of combining different approaches as the context and learner change over time is enticing. One could say academagogy is a pragmatic way of using theories and approaches that work in learning situations.

Through the lens of academagogy, pedagogy is seen as occurring when the educator develops the learning objectives to support learning and learning strategies are under the educators' control. Certainly, learning strategies could be interactive to support the learner in developing knowledge, competence, and confidence in their ability to learn. In an andragogy approach, the educator would have developed the learning objectives, but the learning process could be mutually agreed upon with the learner to guide self-directed learning. When educators are using heutagogy, they are facilitating learners' curiosity and providing learners with the opportunity to determine the focus of the learning, to negotiate learning outcomes, and to set the nature of assessments.

Jones et al. (2019) used academagogy as an overarching process that allows educators to view pedagogy, andragogy, and heutagogy as a continuum of approaches. This continuum-driven view allows educators to choose how to best meet learners' needs by using pedagogy, andragogy, and heutagogy approaches when needed. The concept of academagogy is intended to free educators to use different approaches, situating academagogy as the main descriptive process to move between the gogies and choose how to best meet learners' needs. Although adding another gogy such as academagogy into the mix can be confusing to some and may require a paradigm shift for educators, it does provide some clarity about how and when an educator could use different approaches and where these approaches fit along the gogy continuum.

Nursing Education's Fit with the Gogies

At the end of a nursing program, graduates are required to pass a licensure exam developed by nurse regulators to ensure licensed practising nurses have a base of knowledge and skills. Moreover, practising nurses must have the capacity to assess their personal learning needs and independently seek knowledge or skills to meet these needs. We believe the academagogy framework has the potential to allow nurse educators to choose an approach to learning that will facilitate learners' gaining the knowledge, skills, and values needed to meet the learning outcomes of nursing programs and entry-to-practice competencies, as well as learning how to independently meet their own learning needs in the future. Nurse educators and learners are not able to decide what entry-to-practice learning competencies drive learning outcomes; they are prescribed by the nursing licensure. Thus, nursing educators must balance the required learning (learning outcomes) with consideration of how this learning could occur from a learner-centred approach to foster learners' development in learning the content, skill, or value required; at the same time, they must consider how to foster independence in the learners' ability to recognize what they need to learn and how to approach learning it. Academagogy provides educators with a guide to choosing a gogy appropriate to the given circumstance, along with the purposeful rationale to support it. Educators could choose the gogy to suit the content that needs to be learned and or the context in which the learning is taking place—for example, in clinical settings. In what follows, we examine the content, the clinical contexts, graduate education, and the role of the educator and learner within the use of the gogies in nursing education.

Content

A possible deciding factor in choosing which type of gogy to use might be the content of the learning or the knowledge associated with the knowledge area. There are some concepts and areas of knowledge that nursing learners must learn, such as anatomy, pharmacology, pathophysiology, to become a nurse. To learn foundational knowledge related to these topic areas, a more structured pedagogical approach may be appropriate, given the fact-based nature of the learning. We would, however, challenge the notion that science-based knowledge is learned only through a pedagogical lens. The choice of pedagogy or andragogy may depend on the learner's capacity to be self-directed; for example, learners who have more life experience and another degree may benefit from an andragogical approach. Regardless, the objective in foundational knowledge areas is to create a solid base of understanding that can then be applied. Introductory content may require a pedagogical approach to introduce the learner to the discipline.

In other fundamental courses where knowledge is situated within nursing processes, such as how health care systems work, or psychomotor skills related to the fundamentals of nursing, a mix of pedagogy and andragogy could be used. Flexibility in the approach to learning provides

opportunities to use andragogy as learners draw on and use their past experiences to situate what they are learning about nursing. For example, when teaching about leadership in nursing, learners can be encouraged to reflect on their experiences both as a leader and as someone experiencing different types of leaders. Moreover, as learners progress through the program, they are able to build on previous learning using heutagogy. This could facilitate learners' transition to higher level competencies by building on the knowledge they have already mastered. As learning moves from cognitive to metacognitive, andragogy or heutagogy may be a fit for structuring learning activities.

Context

In addition to content, the clinical context also impacts which gogy educators may choose to use for learners' experiences. Specifically, when learners are in their clinical courses within health care settings, there may be different resources and processes, depending on the type of health care setting or the institutional policies. In these clinical contexts, the educator may use a variety of gogies, depending on the level of the student and their learning. Generally speaking, in clinical courses, there is room for the learner to identify individual learning needs, develop a learning plan, and be an active participant in seeking opportunities to meet the required objectives and outcomes for the course and beyond. In this sense, clinical learning can facilitate movement towards an andragogical approach in which the learner decides how best to use the clinical context to learn what is needed.

In final undergraduate practicums or graduate placements, students engage in clinical areas of interest, seeking out, engaging in, and then ultimately developing expertise in specialized knowledge. The more applicable and real the learning is, the more learners tend to be self-directed. This could be an example of andragogy, where learners are self-directed and engaged in learning aligned with their goals.

In summary, regardless of the clinical context, and even in theory courses, we believe that the educator has a role to play in facilitating the development of self-directed and self-determined learners. If the educator chooses only learner strategies that promote passive learners, then learners may find it challenging when another educator presents them with learning strategies that encourage their growth as a self-directed or self-determined learner. It is educators' ultimate responsibility to foster learners' development towards becoming independent nurse professionals who must continually assess what they do not know and be self-directed in obtaining the required knowledge or skill to provide evidence-based care.

Graduate Education

When nursing professionals enter graduate programs, they tend to know more about what they want to learn and engage more autonomously compared with undergraduate students who are still building knowledge foundations. Thus, as learners progress in their graduate education, there are more opportunities to use both andragogy and heutagogy to support learners in choosing their topic of interest and applying it to their assignments. Research is also often embedded in those educational trajectories. In the andragogical and heutagogical approaches, the resources are more collaboratively decided upon and learner driven. These approaches are more suited to supporting students to choose their research topic, question, and method of inquiry.

Role of the Educator and the Learner

The role of the educator and the learner is another area that will determine which gogy may be more effective at certain points in nursing education. Learners change over time depending on

the content and context of the learning. Benner (1984) identified that learners are often novice at the start of any task or learning of a task, thereby warranting consideration of the need for levelling, dependent on their familiarity with the task. We agree with Pratt (1988) that self-direction is not necessarily an attribute of adults alone. Learners are not all the same, regardless of whether they are adults with experience or young people who have just finished high school; they all may have varying levels of confidence and self-direction that change throughout their course of learning.

At the start of the undergraduate nursing education journey, educators may have to take more of a lead in the learning and role model the methods and processes of critical thinking. This pedagogical approach will often see educators prioritize what learning is important and can direct which aspects of the knowledge they may need to emphasize. The challenge for the educators, particularly when teaching in large classes of 100 or more, is to balance their use of the gogies with learners' needs. To facilitate this, educators must provide clear learning objectives that give learners an understanding of what knowledge is required (for learners who are dependent because they are learning something novel) and at the same time structure learning activities to provide learners with the opportunity to engage with one another and develop the confidence and curiosity to become self-directed in a topic of interest. This, we believe, requires a blend of pedagogy and andragogy.

As education progresses and learners gain knowledge, educators can facilitate self-directed learning and application activities. This is an andragogical approach to encouraging learners to be autonomous, with educators helping learners to solve problems versus highlighting foundational knowledge. This could also be an opportunity to use heutagogy to develop learners' capacity for learning and support the transition from self-direction to self-determination. Depending on the learner, learning to become a nurse may require a change in schema (values, attitudes, and beliefs), which is associated with heutagogy. For example, nurses are professionals who serve humanity, regardless of the values and beliefs of those with whom they engage in care. Some of the people nurses must care for might have values and beliefs that are quite different from the nurses' personal values and beliefs. Learning to become a nurse may require learners to change their schema about specific groups so that they can provide professional care. To facilitate this, educators may need to foster learners' curiosity and inquisitiveness about people who might be quite different from them. In this way, educators can facilitate student reflection and deep learning (the double-loop learning that is a part of heutagogy) about what it means to be a professional nurse.

Those learning to be nurses are engaged in a socialization process in which, over time, they assimilate values about the commitment to serve humanity and respectfully engage with people who may have diverse values and beliefs and are often in the most challenging moments of their lives. For some learners, this is more challenging than for others. We wonder whether the overall socialization process is an element of heutagogy, whether social learning theory can better explain this process, and whether heutagogy could be considered an aspect of social learning theory.

Bandura's (1971) social learning theory explained that learners learn from what they observe, see, and hear in their social environment, which in the nursing context includes both theory and clinical courses in which learners are exposed to practising nurses and nursing educators. Grusec (1992) explained that in Bandura's observational learning there are four components that play a role in the learner's acquisition of the new knowledge, behaviour, or value. First, the learner pays attention to events either live or symbolic that are modelled. Second, the learner remembers what they observed. Third, a symbolic representation that was remembered must now be put into action. The final component is motivation, in that the learner must be

motivated to put into action the modelled behaviours. Observational learning helps to explain how some of the practical aspects of nursing are learned. However, it is not clear whether observation on its own can explain how values and beliefs about service to humanity and respect for people with diverse values and beliefs are assimilated in the learning nurse. This, we believe, may require heutagogy. Double-loop learning (a key aspect of heutagogy) helps students reflect on their learning and start to think differently about their new experiences or environments. Learners are also socialized to be a nurse within the social environments of clinical situations. In these environments, educators must draw on heutagogy to promote curiosity for learning by pointing out the experiences that may require further reflection.

Conclusion

In conclusion, content, contexts, and the role of the educator and learner influences which gogy may offer the best tool to enhance nursing students learning. Academagogy offers a pragmatic framework from which educators can choose an approach that underscores the objective, the level of learning, and the context in which learning is taking place. This means there is a need for varying educator roles to align with the complexity of learning. Educators must have a wide understanding of and large toolkit from which to choose to address the multifaceted, individual yet collective nature of nursing education. It is imperative that educators not lose sight of their responsibility in facilitating the final outcome: graduate nurses who have the knowledge, skills, and values of the profession *and* the capacity to be self-directed or self-determined learners.

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