The Art and Science of Education - Models

How do they compare?

Research Paper

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Submitted in partial fulfillment of  
the requirements for

ADED 3P11

Lifelong Learning in Later Life

Bachelor of Education/Certificate in Adult Education Program

Centre for Adult Education and Community Outreach

Faculty of Education, Brock University

St. Catharines, Ontario

Eric Brigigg, Facilitator

June 29, 2014

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How do they compare?

How can we find similarities in three separately categorized theories in the art and science of education; namely, pedagogy, andragogy and geragogy, and yet find underlying concepts in their differences? Before we can determine what the major differences are, we should look at what makes them each so unique. In order to do that, it is vital to first define each category through the works of theorists and authors, and other sources, that have studied them. With this information, we can then look closely how they compare. The main focus of this paper will lean towards geragogy and due to the fact that it is the newest of the three categories that makes it intriguing to study further. Geragogy “achieved prominence in the United States and Britain after appearing in Lebel’s (1978) article *Lifelong learning: The adult years* which argued that older adults were sufficiently different to warrant a separate educational theory” (Findsen and Formosa, 2011, p.105). This in turn deserves more in-depth knowledge and discovery through further research on what makes it a unique and stand-alone category in comparison to the other two models.

*Definitions*

Firstly, we will begin to define the pedagogical model as the art and science of education where the students are simply the learners and the teacher is responsible for decision-making on what is to be learned, the methodology and when the learning will take place. Here the teacher has full responsibility for making decisions about what will be learned, how it will be learned, when it will be learned, and if the material has been learned. This forum of teacher-directed requires the student to listen and act on the instructions provided by the teacher. It presents the assumption that what the teacher lectures on is what the students need to understand and that the learners are primarily children. This forms a dependency on the teacher on what is taught and learned (Knowles, 1984). According to Smith (2012), “education is a deliberate process of drawing out learning [], of encouraging and giving time to discovery. It is an intentional act”. Smith (2012) also explains that pedagogy is often mistaken “as primarily being about teaching” and that it needs further exploration into the minds and methods of the educators who stand by their students in their nurturing way. They open the doors from the classroom to the real world and that teaching is not an educator’s only responsibility; there are issues that come with pedagogical thinking. Findsen and Formosa (2011) define pedagogy as teacher-directed, didactic teaching with standardized curriculum, subject-focused, and motivated-learning through external influences. Smith (2012) writes that past experience is not recognized, and theoretical and practical elements are not connected in pedagogy.

Secondly, we will look at andragogy which places adults in its category of learners. The term “andragogy” dates back to 1833 by Alexander Kapp, a German educator, but it wasn’t until Knowles popularized the concept between the late 1960s to the early 1980s (Findsen and Formosa, 2011). Deciphering the age range seems unclear, but as defined by Knowles, it is “the art and science of helping adults learn” (Findsen and Formosa, 2011, p.103). Findsen and Formosa (2011), write that andragogical education is independent or self-directed learning, engaging and active, life applicable, experiential, and motivated-learning through internal factors. Students are provide learning tools and use them while applying, engaging, and interacting in subject-related activities; going beyond the lecture using critical thinking.

Finally, and the main focus of this paper, geragogy is known as the theory of lifelong learning in later life (Findsen and Formosa, 2011). It would be just to define geragogy succinctly linked to the andragogical model but with some physical, psychic and social realm that older adults inhabit and differently experienced by younger adults (ibid). Older adults are characterized “generally as post-work and post-family, and sometimes, frail with intellectual limitations”, including health issues such as poor sight, hearing and cognitive function (p.103). Returning to the classroom can “engender them with feelings of nervousness and trepidation as they tend to be unsure of what they are doing and afraid of not being able to relate well with more well-read peers” (p.107).

When I first learned about pedagogy, my perception was that it was simply the art and science of education, period. Then when I learned about andragogy, and now geragogy, I realized how common some characteristics are between all three models. Pedagogy is the art and science of education of children or in general, andragogy of adults, and geragogy of older adults. According to Findsen and Formosa (2011), we could perceive these models as “non-oppositional epistemologies” instead and to “conceive them as interrelated and overlapping fields, as a set of assumptions and guidelines about human learning in different phases of the life course” (p.105).

*Similarities*

The initial attribute that all three concepts can agree on is they can be defined as the art and science of education. Andragogy and geragogy both focus on the education of adults who have similar characteristics in terms of experiential application to the learning and previously-formulated attitudes towards learning and context. Middle-aged and older adults are very much alike in feeling somewhat awkward when returning to the classroom when there are younger adults present. The feeling of being out of the loop for a number of years can be demoralizing especially when new technologies are introduced. We can say all three models can produce learning in and out of the classroom; in everyday living.

A minimum amount of learning occurs in children and adults where the student recognizes an interest in a subject and engages in activities to gain more knowledge (Smith. N., 2014). Adults may have more drive as they become motivated in building a career or establish interest in the subject. Nina Smith (2014) also writes that “this presents the need for learning environment to be emotionally safe and supportive in order to encourage additional exploration”.

*Differences*

If we can define geragogy as learning in later life, then we need to allocate situational experiences as being different to those inhabited by the younger learners (Findsen and Formosa, 2011). It could have a different effect on learning. With respect to andragogy, Jarvis (1985) and Smith (1999), as cited in Findsen and Formosa (2011), state that, “age and life experience may make no or little difference to the learning experience, and in some situations such as when substantial amount of new information is required, experiential learning is even not appropriate” (p.103). True, but that is not the case all of the time and we must look at any past education and experience as worth considering and applying, perhaps with modification if necessary.

The decline in cognitive and physical abilities in later life are probably the biggest differentiation between geragogy and the other models. Instructors need to be sensitive to the needs of the older learners and customize the teaching methodologies to satisfy their unique characteristics (Findsen and Formosa, 2011). Older adults may also feel a sense of self-esteem being in a classroom of younger adults. Popularity in online learning may continue to increase for this older group of learners to avoid any embarrassment. Their physical appearance and inability to respond as quickly due to poor memory may be some of the contributing factors that could lead to avoidance or perhaps turning to an e-learning environment. Baby boomers may feel a sense of loss in computer literacy causing discouragement and fear towards the requirement of technological use in the learning process.

According to Knowles, pedagogy centers on teaching individuals, primarily children, with a lack of previous knowledge and experience requiring instruction and motivation externally (Findsen and Formosa, 2011). Quite different from andragogy and geragogy where there are assumptions of self-directed learning and application of experience gained through the years along with a better sense of drive to learn. Nina Smith (2014) writes that “many adult students are more fearful towards open-ended questions and tasks – simply because they have been conditioned to think there is a single one correct answer. Children don’t suffer as much from this mental block before they have been taught to do so”. As we grow older, we tend to be more aware of our surroundings and begin to feel a sense of being watched and monitored for correctness which could potentially create this fear.

To conclude, we have established that there are similarities related to the education of the different groups. Pedagogy relates to the education of children, andragogy relates to the education of adults, and geragogy relates to the education of older adults (Findsen and Formosa, 2011). Andragogy and pedagogy are similar in that these two groups carry a potential wealth of education and experience to apply to their learning, are mostly student-directed and motivated by internal factors. The differences being that with pedagogy, it is mostly teacher-directed and motived by external factors. With geragogy, there is the decline in cognitive and physical functions that can be damaging to an older adult’s self-esteem and ability to comprehend. In all cases, learning is the minimum outcome and how the teaching occurs and the ability to accept the learning is what can make the difference apparent. We may also be able to conclude that the models of andragogy and geragogy appear closer together than pedagogy. In closing, Nina Smith (2014) clearly defines that “the principles of meaningfulness and personalized learning must be present when teaching”, and this could work for all groups.

References

Findsen, B. and Formosa, M. (2011). *Lifelong Learning in Later Life.* Rotterdam: Sense Publishers

Knowles, M. (1984). *The adult learner: A neglected species*. Houston: Gulf Publishing

Smith, M. K. (2012). *What is pedagogy?* The encyclopedia of informal education. Retrieved 24 June from <http://infed.org/mobi/what-is-pedagogy>

Smith, N. (2014). *Andragogy and Pedagogy: Similarities in Teaching Adults and K-12 Students.* Retrieved June 27, 2014 from http://www.evolllution.com/opinions/andragogy-and-pedagogy-similarities-in-teaching-adults-and-k-12-students/