

TOWARD AN UNDERSTANDING OF ANDRAGOGY'S ROLE IN THE ONLINE CURRICULUM OF THE US HIGHER EDUCATION SYSTEM

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ABSTRACT

With adults constituting almost half of today's student body it would seem appropriate to consider the impact of andragogy in the online curriculum if higher education is to continue to meet the needs of the society it serves. To date Knowles' theory of andragogy is the most accepted model of adult learning. It is anticipated that the debate over andragogy and pedagogy will continue.

In spite of its limitations andragogy provides a starting point in both research and practice. It is predicted that over time andragogical assumptions will be in a more definitive place in the online curriculum in higher education.

Keywords: Andragogy, adult learning, training and development, pedagogy
Curriculum, online learning, blended learning.

INTRODUCTION

"Adults over the age of twenty-five have been a fast-growing group and currently represent about 44 percent of students in higher education" (Altbach, Berdahl, & Gumpert, 2005, p. 320). In other words, "adult education is big business" (Knowles, 1968, p. 350). There has been a great deal of discussion and debate about whether pedagogy or andragogy is the more appropriate learning theory for adult education. With adults constituting almost half of today's student body it would seem appropriate to consider the impact of andragogy in the college curriculum if higher education is to continue to meet the needs of the society it serves (Altbach et al., 2005).

The college curriculum should be flexible in relation to the needs of society inasmuch as higher education serves society at large. Consequently, higher education must provide what society wants. As the needs of society change over time higher education must be prepared to offer new approaches to learning or different teaching methods to fulfill those needs. The curriculum is "dynamic" (Altbach et al., 2005, p. 337).

In essence it is a living, breathing organism. It must be permitted to expand, to grow, and to develop. It is not a static thing. It cannot be set in stone. As the world changes so must the curriculum change and continue to be flexible in relation to increasing knowledge bases, the needs of society, and the interests of students and faculty (Altbach et al., 2005).

The purpose of the paper is to examine the basic principles of andragogy, the historical development of andragogy, and the current relationship of andragogy to the college

curriculum. The information in this paper was derived from articles, books, and online sources.

Has andragogy played a role in adult learning and curriculum design? According to Chaves (2009) the answer is yes. Unfortunately, curriculum designers may not be aware of the extent to which they are using principles of andragogy in designing courses. Adult students enroll in colleges and universities with their "social capital" (p. 2) and a heightened desire for success which in turn enhances their learning experience. This is characteristic of andragogy as explained by Malcolm Knowles' in his work on adult learning (Chaves, 2009; Knowles, Holton, & Swanson, 2005; Laird, 2003; Merriam, Caffarella, & Baumgartner, 2007; Noe, 2010).

The Basic Principles of Andragogy

Walter Metzger maintains that subjects go through a process of "subject dignification" (Altbach et al., 2005, p. 470) to gain legitimacy. Therefore, to understand andragogy it is first necessary to understand pedagogy and the differences between the two. The term pedagogy is derived from the Greek words *paid* meaning "child" and *agogus* meaning "leader of" (Knowles et al., 2005, p. 61). In pedagogy the teacher is the leader and is completely responsible and accountable for all learning decisions such as: what is to be taught, how it is to be taught, when it is to be taught, how learning is to be measured, etc.

The most significant difference between pedagogy and andragogy is the self-concept of the learner. A child sees himself or herself as totally dependent until at some point he or she begins to experience the joy of deciding things for him or herself. He or she eventually becomes an adult and visualizes himself or herself as a totally independent and self-directing individual. Andragogy is based on a need to be treated as a respected, self-directed adult (Knowles, 1968).

Andragogy encourages a relationship of mutuality and reciprocity between learner and teacher. Both learner and teacher, for example, are involved in designing the learning experience and in evaluating the learning experience (Noe, 2010). There is a mutual and reciprocal exchange between learner and teacher that engenders respect on the part of both parties.

As people mature, according to the theory of andragogy, they rely on past experiences, want to decide when to learn, feel the need to manage their own learning, and wish to schedule learning as they determine the need for learning. Supporters of andragogy maintain that how adults learn is different from how children learn. Thus, according to Knowles (Knowles et al., 2005), who has had significant influence in this area (Laird, 2003; Noe, 2010); adults must be taught differently from children if learning is to be effective. In other words, the curriculum should be flexible in relation to increased knowledge such as how adults learn. It needs to accommodate these additions resulting from the expansion of knowledge. As new information comes along it must be included in the curriculum. On the other hand, as information becomes obsolescent it may have to be modified or eliminated from the curriculum (Altbach et al., 2005).

Knowles et al. (2005) proposed six principles for the "Andragogy In Practice Model" (p. 148). These six principles are based on the learner's:

- need to know,
- b) self-concept,
- prior experience,
- readiness,

- orientation, and
- motivation.

The six principles are each defined by the learner. This communicates respect to the adult learner from the teacher.

According to Laird (2003) the model included the following features:

- a problem-centered orientation,
- active learner-teacher involvement,
- integration of past experiences into new learning,
- cooperative relationship between learner-teacher,
- learner-teacher planning collaboration,
- mutual learner-teacher evaluation,
- learner-teacher evaluation for redesigning learning activities, and
- experiential activities. These features suggest that learning is a cooperative endeavor for both teacher and learner.

Self-directed learning (SDL) is a widely accepted premise of andragogy. There are debates about whether SDL is characteristic of adult learners or whether teachers need to help learners become self-directed. Moreover, there are two interpretations of self-directed learning. First, learners carry out the role of teacher and teach themselves (autodidaxy). Second, learners control the learning and learn from a teacher in the more traditional form of learning. These two interpretations are not necessary mutually exclusive and may overlap. The key is to recognize that not all adults have full capacity for self-teaching in every learning situation. Learners are likely to display different preferences and abilities. Hence, learning is "situational" (Knowles et al., 2005, p. 186) and teachers must be prepared to match learning styles with teaching styles for successful adult learning outcomes.

HISTORICAL DEVELOPMENT OF ANDRAGOGY IN THE COLLEGE CURRICULUM

An extensive study of andragogy, conducted by Dutch adult educator Ger van Enckevoort, found that Alexander Kapp, a German grammar school teacher, originated the term andragogy (andragogik) in the 1830s. Plato, according to Kapp, used the concept of andragogy in his teaching without ever specifically using the word andragogy. Johan Friedrich Herbart, an influential German philosopher, during the same period as Kapp vigorously opposed the use of the term andragogy. Consequently, the term andragogy disappeared from the scene for nearly a century because of Herbart's strong opposition to its usage (Knowles et al., 2005).

In 1921 van Enckevoort discovered the use of the term andragogy again by Eugen Rosenstock, a teacher at the Academy of Labor in Frankfurt, who stated that adult education needed to consider "special teachers, special methods, and a special philosophy" (Knowles et al., 2005, p. 59).

Interestingly, Rosenthal thought that he was the originator of the term andragogy until he learned in 1962 of its earlier use by Kapp and Herbart.

Van Enckevoort learned that Heinrich Hanselmann, a Swiss psychiatrist, used the term in his book *Andragogy: Nature, Possibilities and Boundaries of Adult Education* published in 1951. The book addressed the "reeducation" (Knowles et al., 2005, p. 59) of adults. Then Franz Poggeler, a German teacher, published a book titled *Introduction to Andragogy: Basic Issues in Adult Education* in 1957. It was around this time that Europeans were beginning to use the term andragogy. In 1956 Yugoslavia, M. Ogrizovic published a

dissertation on "penological andragogy" (Knowles et al., 2005, p. 59) and in 1959 a book titled *Problems of Andragogy*.

Additional books were written by other recognized Yugoslavian educators of adults such as Filipovi, Samolovcev, and Savicevic. Doctoral degrees were offered in adult education at the universities of Zagreb and Belgrade in Yugoslavia and at the universities of Budapest and Debrecen in Hungary.

Current Dutch literature differentiates between "andragogy, andragogics, and andragology" (Knowles et al., 2005, p. 60). Andragogy is defined as "any intentional professionally guided activity that aims at a change in adult persons" (p. 60); andragogics is defined as "the background of methodological and ideological systems that govern the actual process of andragogy" (p. 60); and andragology is defined as "the scientific study of both andragogy and andragogics" (p. 60). Furthermore, Netherlands Professor T. T. ten Have began using the term during his lectures in 1954.

Andragogy has become recognized in higher education around the world during the past decade. The University of Amsterdam has offered a doctoral degree in andragogy since 1966 and in 1970 a department of pedagogical and andragogical sciences was formed within the division of social sciences. In 1973 Concordia University in Montreal began awarding a bachelor degree in andragogy. Further use of the term andragogy was seen in France by Bertrand Swartz, in England by J. A. Simpson, and in Venezuela by Felix Adam (Knowles et al., 2005).

As early as 1949 there were renewed attempts to define adult education (Knowles et al., 2005). These efforts were not an attempt to create a theoretical framework with which to work but were more in the nature of a listing of theoretical concepts. Meanwhile, a theoretical construct of adult learning had been developing in Europe. It was labeled andragogy separating it from pedagogy or "youth" (p. 58) learning. The first person to present andragogy to the educational community in America in 1967 was a Yugoslavian adult educator named Dusan Savicevic (Knowles et al., 2005).

In 1967 Malcolm Knowles, then professor of education and general consultant in adult education at Boston University received the Delbert Clark Award from West Georgia College. During his address at the Awards Banquet he stated that "the curriculum for adults looks increasingly different from the curriculum for youth" (Knowles, 1968, p. 386). His address published as an article titled "Androgogy, Not Pedagogy" appeared in *Adult Leadership* in April of 1968. The spelling of andragogy was later corrected as a result of communications with the publisher of Merriam-Webster dictionaries (Knowles et al., 2005).

CURRENT RELATINSHIP OF ANDRAGOGY TO THE COLLEGE CURRICULUM

Curiously, higher education does not tend to teach andragogy to aspiring educators (Brookfield, 2006).

Andragogy may be the accepted model for adult learning in spite of the fact that there is very little empirical work testing the validity in predicting how much learning is actually gained (Merriam et al, 2007; Stagnardo-Green, 2004).

Nevertheless, andragogy is slowly making its way into higher education through increased journal articles, major expositions, and research. Evidence indicates a growing use of andragogical theory in adult education curriculum, for example *Andragogy in Action* provides examples of a number of programs of the andragogical model (Knowles et al., 2005).

Technology continues to influence the curriculum in higher education through new forms of teaching, learning, and research (Altbach et al., 2005). Therefore, according to Kathleen Cercone (2008) curriculum designers and other professionals in online learning must understand andragogy and adult learning theories. With today's adult learners ranging in age from 25 to 50 taking online classes, "the more one understands the nature of adult learning, the better one can understand the nature of distance learning" (p. 139). Most adult learners enter college enthusiastically, schedule class activities around family and work responsibilities, are motivated to perform, and are task-oriented. Online learning for adult learners will continue to grow (Cercone, 2008) and to reshape the higher education curriculum (Altbach et al., 2005). This growth in online education and the increase in the number of adult learners in-turn challenges teachers to provide social opportunities in the virtual classrooms and the curricula (Cercone, 2008).

It is suggested that andragogy can "inform e-learning curriculum design" (Chaves, 2009, p. 2). Past experiences of students, level of commitment based on social and academic integration, and involvement in the learning process all together enhance learning for the adult learner. How can curriculum designers take the individual characteristics of the students into account when creating effective e-learning communities? This can be accomplished by incorporating the work completed by Knowles into curriculum design with a focus on the learner as an adult learner. As new subjects emerge, such as andragogy, they can help to refine the boundaries in more established fields of knowledge. This is known as "subject parturition" (Altbach et al., 2005, p. 470).

In a study conducted by Parker, Robinson, and Hannafin (2007), the researchers concluded that adult learning theories included in a blended (online and traditional face to face combination) course curriculum design produced positive learning outcomes. The approach utilized practical learning activities, critical reflection, communities of practice, and self-directed learning. The researchers reported that the use of technology in adult learning resulted in positive outcomes for both students and teachers. Technology is revolutionizing "teaching and learning practices and delivery systems for higher education" (Altbach et al., 2005, p. 395).

Terry O'Banion in 1997 addressed the impact of student-centered learning on the curriculum and the missions of community colleges as a result of the innovative learning communities. He claimed that a key principles for the learning college was that students are "full partners" (p. 47) in the education process and have full responsibility for their choices. This principle seems to coincide well with Knowles student-centered adult learning theory. Both O'Banion and Knowles claimed that education for adults should include experiential learning opportunities because students learn by doing.

In a study by Roisin Donnelly (2004) on higher education curriculum, the author criticized postgraduate curriculum designers for not nurturing adult students' creativity. Furthermore, the higher education curriculum tends to condition students' passivity during learning rather than encouraging students' "graduateness" (p.162). In order to increase the amount of learning taking place in the adult classroom teachers must use an "imaginative curriculum" (p.158) which incorporates creative teaching and creative techniques in the classroom.

Further research suggested that designing a curriculum for adult learners according to accepted andragogical principles produce enhanced adult learning. Experience with curriculum design that encourages the combination of students' previous experiences to the new learning experience, flexibility, and creativity (with regard to theory and practicality of the real world) proved to be an appropriate curriculum for student learning

outcomes. This curriculum design provided adult students opportunities to integrate academic learning into their everyday experiences (Ntiri, Schindler, & Henry, 2004).

Alex Stagnaro-Green (2004) addressed the use of learning communities in medical education. He recommended the implementation of adult learning theory principles to the medical education curriculum. The use of learning communities will enable medical school graduates to move through their medical careers with record-breaking results. This first step is to assure that learning communities are included in the mission statement and the reward system.

Communities of practice (groups of people who engage in a process of collective learning) have demonstrated numerous benefits according to higher education research. A curriculum that encourages the type of collaborative, self-directed learning grounded in communities of practice is thought to be effective for adult learners. Communities of practice include the following traits: autonomy, passion and interest in membership, involvement, synchronicity, flexibility, and unity. This shared identity is a motivating force that provides order and purpose for adult learners. It provides momentum through collaboration (Monaghan, 2010).

A number of implications emerged from a study completed by Hye Lim Choi (2010). First, curriculum plays a significant role in predicting a positive correlation of learning outcomes and supports formal education importance. Second, course design is important in adult education. For example if an objective of a course is application, teachers should focus the course design on activities involving hands-on learning that requires fostering transfer, problem solving, creativity, and self-regulated learning. Third, support for the practical needs of adult learners.

The findings of the study may guide administrators to consider how they can balance curriculum to apply pedagogical and andragogical approaches in adult learning. Therefore, administrators are encouraged to conduct outcome assessment studies to determine what their students are learning.

Community colleges have been innovators in incorporating distance learning in the college curriculum (Altbach et al., 2005).

In a study conducted by Chandris Christina Hinkson (2010) the researcher explored the perceptions of instruction of adult learners graduating from an urban community college.

Results showed that students supported Knowles' adult learning model by preferring the six principles (need to know, self-concept, prior experience, readiness, orientation, and motivation) in learning approaches in a continuing education curriculum. "Nontraditional adult learners, typically age 25 and older, learn more effectively with andragogical instruction versus pedagogical instruction" (p. 127).

The researcher contended that adult learners would benefit from andragogical instruction in the college course design. The adult learning model included in college continuing education curricula would ultimately produce productive individuals ready to enter the workplace and become successful citizens.

The ideal continuing education curriculum would be one that incorporates flexibility in the learner experiences, responsiveness to the needs of the adult learners, and cooperation for adult learners in the classroom (Hinkson, 2010).

A recent study published in *The Chronicle of Higher Education* (2011) reported that community college students perform worse online than face to face. Interestingly, the

study claimed that students enrolled in online courses tended to be from higher income families and more academically prepared than the traditional community college student. Students taking online courses early in their college experience were more likely to drop out than those students taking only face to face classes and those with the most online courses were least likely to graduate or go on to a four-year university.

The researchers cautioned those involved in college curriculum design to make certain that courses are not thrown together and that they are designed to serve the students. Just including flexibility in online course design for today's busy adult learners is not enough.

Students need technological support and teachers need more extensive training in online course development. A balance between efficiency and accessibility must be achieved. When this is accomplished, "adult learners can participate . . . on their own, at their own pace, and in their own space" (Altbach et al., 2005, p. 415).

According to Morey Schwartz (2006) a major problem with curriculum and curriculum writers is that the goal of curriculum is a "checklist of short-term and long-term goals and objectives that can potentially be measured" (p. 450). The researcher presented the idea that the curriculum users are the teachers and the receivers are the students.

Interestingly, Schwartz questioned the practicality of the traditional use of the curriculum. For example, he asked how the designers of curriculum can know the classrooms of the teachers. In reality the teachers are acting out a think on your feet effort to follow the intentions of the curriculum designers.

All too often curriculum writers criticize the teachers for being the weak link regarding the use of the "wise" curriculum. The author presented the idea of the rehearsal curriculum wherein the teacher is presented with the material to review, the teacher prepares the lesson plan, and finally the teacher evaluates and re-thinks the learning process (Schwartz, 2006).

Would the continuous debate between andragogy and pedagogy, according to Sandra Kerka (2002) be more appropriate if it is accepted that no one theory can explain how adults learn versus how children learn?

For example, the current debate addresses the differences between adults as learners and children as learners and the degree of experience, the ability for critical thinking, the degree of personality dependence versus personality independence, the readiness to learn, the orientation to learning specific subjects, and the internal motivation versus external motivation.

The concept of curriculum debate is not unique to the topic of this paper and new developments are likely to continue to produce "contemporary debates" (Altbach et al., 2005, p. 465).

The difference between an andragogical curriculum and a pedagogical curriculum is about who is the deciding power. In other words, who makes the decisions for what should be learned and the knowledge considered important for the learning. This is opposed to a flexible, learner-centered, individualized, and self-directed curriculum on the part of the empowered adult learner. As more is learned about how adults learn and how children learn Kerka presented the position that it might be more appropriate to be concerned about teaching different adults differently and teaching different children differently (Kerka, 2002).

After all, Knowles (1968) stated that many things we have learned about how adults learn can also apply to children. As children mature and become adults, individual adulthood is reached at differing times in children and youth.

To date Knowles' theory of andragogy is the most accepted model of adult learning. It is anticipated that the debate over andragogy and pedagogy will continue. In spite of its limitations andragogy provides a starting point in both research and practice. It is predicted that over time the andragogical curriculum will be in a more definitive place in higher education (Knowles et al., 2005).

Implications

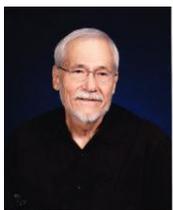
Adults constitute almost half of today's collegiate student body in higher education. The question of whether pedagogy or andragogy is the more suitable learning theory for adult education must be resolved. Why must higher education resolve this question? Higher education must resolve this issue because it has an obligation to the society and the students that it serves. This can be achieved by additional research conducted in the following areas: studying online education to determine to what extent andragogical principles are being utilized, completing a comparison analysis on pedagogy and andragogy to determine the learning outcomes of the two different approaches, surveying adult learners to ascertain which learning style they prefer in the college classroom, and studying course content to determine what can or cannot be taught andragogically. As this is accomplished the curriculum as stated before is dynamic. It is a living, breathing organism. Changes made to the curriculum increase its viability and extend its life-span.

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