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## **CONTEMPORARY PEDAGOGY FOR THE ADULT LEARNING**

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### **Abstract**

*The purpose of this article is to discuss contemporary educational pedagogy for the 21<sup>st</sup> century adult student (commonly called andragogy) with attention to current learning styles theory. As the roles and responsibilities of current faculty continue to develop it is important to also focus on how learning styles theory and adult learning theory can be used to enhance andragogy in universities and colleges. This article will also address research on andragogy and its practical application to teaching, as well as student strategies for success. As the role of faculty continues to evolve, higher education needs to be responsible and responsive in preparing to address the diverse, contemporary and future challenges of the 21<sup>st</sup> teacher and student.*

### **Keywords**

Learning Styles, Adult Learning Theory, Teaching Pedagogy for Adults, Andragogy, Evolving Role of 21<sup>st</sup> Century Faculty, 21<sup>st</sup> Century Higher Education

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## **1. Introduction**

Contemporary 21<sup>st</sup> century higher education is ever-evolving; to include the role of faculty in the academic success of all students. This is becoming increasingly more challenging as the adult student has specific learning needs and styles that must be addressed on a consistent basis (Celli & Young, 2014). A multifaceted setting and a faculty focus on adult learning styles and theory must be woven together and used as a foundation to understand the specific teaching strategies that will vastly improve the academic success rate of post-secondary students (Scott, 2010; Celli & Young, 2014).

## **2. Pedagogy vs. Andragogy**

Whereas pedagogy is a child-focused teaching approach, andragogy is a teaching approach geared for adults. Malcolm Knowles (1913-1997), considered to be the father of andragogy, details the differences quite clearly: in pedagogy, learning is the responsibility of the teacher who is apt to use external motivators and where the student plays a submissive role. Andragogy, however, places the responsibility for learning on the adult student who is internally motivated and needs to know why the information is important (Knowles, Holton, III & Swanson, 1998). This significant distinction becomes clear as student learning styles and faculty teaching strategies are discussed within this article.

## **3. Overview of Learning Styles**

There is a great deal of research surrounding learning styles and theories as they apply to adult students in the postsecondary setting. O'Neil (1990) states that a clear focus on the positive aspect of the learning process as well as truly understanding learning styles research provides higher education faculty the necessary tools to emphasize students' strengths and challenges, and has the aim of "positive" academic outcomes in every classroom.

Theorists have researched learning styles in many different ways. Some theorists simply state that learning style theory is auditory, visual, or tactile/kinesthetic. Hence, if faculty design andragogy around these areas, all students will achieve academic success. This mindset encourages multifaceted learning to address adult learners' preferred learning style, but also suggests that a faculty goal would be to enhance secondary learning styles. To this end, students would then be ready to enter a world where information, data, and work focus may not be geared only to a preferred style (Celli & Young, 2014). Other theorists have identified learning styles as

active experimentation, concrete experience, reflective observation, and abstract conceptualization (Kolb & Kolb, 2005). Although these designations may seem mutually exclusive, they are conceptually related. Active, concrete, reflective, and abstract are part of the learning processes of auditory, visual, tactile/kinesthetic learners (Celli & Young, 2014), and as such, should be integrated in all andragogy.

Learning should be a transformational experience, where prior skills and knowledge are used to gain new understanding of concepts and ideas (Mainemelis, Boyatis & Kolb, 2012). Further, building on the additional seminal work of Piaget (1952), there must be an integrative nature of teaching styles and an integrative nature in scholarship regarding individual learning styles. It is critical to assess student learning preferences on an ongoing basis to assure that all student can access and master necessary learning/skills (Piaget, 1952). Learning that has positive academic outcomes must begin as a holistic, integrative process; one that includes aspects of all learning styles (Kolb & Kolb, 2005).

#### **4. Building an Innovative Faculty Toolkit**

The contemporary research on learning styles is clear that it is necessary for all faculty to build a repertoire, or toolkit, that they are able to use and implement in all classroom settings. This toolkit should include strategies readily available when teaching to assure that all students can access the new skills and knowledge being taught. Scott (2010) reminds higher education faculty of the importance of preparing learning settings where all student are presented with the opportunity for academic success. Faculty must be well-versed in not only individual student learning needs for success, but be ever-mindful of the secondary learning style(s) that students possess that will prepare them for a world that expects multifaceted employees. Examples of this include group work where auditory and visual learners can interact both verbally and with graphics, to experiential learning for the tactile/kinesthetic learners (Celli & Young, 2014). Further, experiences that include re-verbalizing, questioning, comparing data, reaching conclusions can be paired with integrating visual/social clues for new information, utilizing environmental cues, and encouragement to parse the whole concept into individual skills (Clark, n.d). Andragogy that includes highlighting, underlining, and specifically pointing out critical information are strategies that are absolutely necessary for the visual student; who comprise the majority of learners (Celli-Sarasin, 1998; Cyr, 1997). Faculty who understand the academic needs of both visual and kinesthetic learners can also use these opportunities to infuse them in

the “auditory” environment by integrating strategies such as modeling and visuals to aid and enhance the discussion, thus providing a varied learning experience. It is this type of supplemental learning in the traditional lecture style at universities and colleges that adult learners have come to expect (Schmoker, 2011).

Faculty must provide classroom experiences for adult learners that are well-researched and well-planned. When possible, students should be encouraged to create and test hypotheses, engage in fact finding, collaborate with both faculty and fellow students, as well as “learning by doing”, regardless of the primary learning style (Freyer, 2017). Problem-based learning that includes higher level critical thinking skills and an evaluative component such as competency based learning, where students are asked to demonstrate knowledge and skills learned, should be implemented in every class (iNACOL, 2012). This variety of andragogic strategies, if implemented appropriately, using a well-documented research base to address student academic success, will assure that regardless of learning style, students’ will have appropriate access to new data and information in any given learning situation (Freyer, 2017). Further, it is important that faculty and others such as peers, provide students with varied learning styles with support needed as they are being challenged with presentation of material in a way in which does not match their preferred learning style. Lack of sufficient support leads to frustration and what research sometimes refers to burnout (Layth, F., Mohammed, M., Malik, S., Alrawi, D., 2017). Therefore, it is critical that all faculty that interact with students are mindful of this issue and in planning, work to integrate strategies that address this.

The challenge is for all faculty to consistently reflect how to accomplish this goal. Thus, faculty must focus on respecting all students in every educational setting, begin new learning with the foundation of the prior experience and knowledge, create a welcoming and safe space where risk taking is the norm as students learn new skills/knowledge, allow for think time and dialog as well as reflection and modeling of learning. Ultimately, the application of knowledge can be seen in a competency-based learning model whereby students have the chance to apply learning in real, practical situations (iNACOL, 2012; Kolb & Kolb, 2005). While it is incumbent upon faculty to know their students, the different learning styles, theories and how best to teach adult learners, it is also vital that the student is aware of how he or she learns as using personal best practices and strategies ensures student success.

## **5. Understanding Learning Strengths and Weaknesses**

For adult learners to participate meaningfully in their education they need an in-depth understanding of their strengths and weaknesses and to be able to apply appropriate individualized strategies to the educational process. to do this at times, especially for those who arrive at the post-secondary level ill-equipped to keep pace with rigorous demands and expectations (Caffarella, 2002). While knowledge of learning styles is important, it is also noteworthy that adult students are often motivated to learn out of a desire to increase their knowledge, improve skills, or to prepare for meaningful employment (Knowles, Holton, and Swanson, 1998). Additionally, it is important that faculty also have knowledge of the importance of understanding how time management interfaces with student learning styles. It is key that combining strategies that address student learning styles to ensure learning success and assisting students with time management, which crosses all learning styles, increases the chance of academic success. This can be done with setting clear and precise expectations about what, when, and to what level work is expected. It can also include assuring that the expectations are reasonable for each individual student and their level of expertise at each given time. Attention to time management to also assure academic success is a variable that must be attended to (Layth, F., Mohammed, M., Malik, S., Alrawi, D., 2017).

## **6. Becoming Strategic: Building a Repertoire of Personal Strategies**

Simply stated, a strategy is “a careful plan or method” (Merriam-Webster, 2016). A strategy involves knowing how to accomplish a task or solve a problem. It also presupposes that one will be calling up basic information from memory. Without the benefit of direct and specific instruction and guidance, some adult students tend not to automatically engage in learning (Holton, Baldwin, and Naquin, 2000). Adult learners do have the ability to strategize, but for some it is as if their brain does not access on demand. Additionally, adult learners tend to continue to employ strategies that are comfortable even though they may not be effective (Mastropieri & Scruggs, 2013). Furthermore, it is noteworthy that even adult learners can be nervous to get their assignments completed and do not take the time necessary to reflect on alternative learning strategies that may in fact be effective (Knowles, Holton, and Swanson, 1998).

Some adult students may need to precisely what is expected of them in a lesson or activity. For example, they may realize that they have been given a time-distance problem. The next step is to figure out how to solve it or to search out or figure out what appropriate strategy is

needed to complete the problem. Increasing the awareness of the small differences in pedagogy and in the use of varied strategies is important for every task at hand whenever possible given classroom constraints.

## **7. Personalizing Strategies**

Adult learners need to find the strategies that fit them individually and that work with their strengths and compensate for their personal need areas. Individualization is necessary because the category of adult learners is such a heterogeneous group of students that there are not generic strategies that will work for all students. It is not uncommon to hear an adult say, “That just doesn’t work for me.” One may need to “ballpark” very quickly what the answer to a problem may be in order to get started. That strategy is foreign to still others, who, to get a sense of what is needed, want to clarify the parts of the problem, piece by piece, and only then stand back and look at it as a whole. Different strategies need to be examined and encouraged, then tried out and honed to fit the individual. Sometimes, two strategies may need to be used in tandem, in conjunction with the other or one right after the other. Strategies are best developed during the process of completing real-time class assignments and with students reflecting on what personally makes sense to them. Adult learners often benefit from discussions on which strategies worked and did not and how the strategies made a difference for them in that context. It is also beneficial to think about how the learning strategies could be useful in other settings and with other tasks (Celli & Young, 2014). What follows is a brief selection of task-dependent strategies that can be modeled and encouraged when working with adult learners.

## **8. Fostering a Strategic Mindset for Adult Learning**

Dweck (2016) underscores that fostering a strategic or growth mindset is associated with increased achievement for adult learners and includes such things as encouraging them to do the following:

- Reflect on their own thinking and be able to articulate learning needs
- Be clear about academic expectations;
- Testing learning strategies that are not typical and test for success
- Ongoing monitoring of learning success with use of atypical learning strategies
- Reflect on when assistance is needed for further skill development

Students who do not acquire a strategic or growth mindset will struggle at the post-secondary level. To do so requires serious effort but is attainable and offers high reward for those who are able to persevere (Dweck, 2016). Peers, professors and mentors can all help students learn the mindset strategies that will allow them to achieve academic success.

## **9. Metacognition: Paying Attention to One's Own Thinking**

The term “cognition” refers to thinking and knowing. “Meta” here means “above” or “transcending.” Metacognition is being able to think about one's own thinking and being able to use this information to clearly understand one's learning needs (Mastropieri & Scruggs, 2013). It also includes knowing when one knows and knowing when one does not know. The practice of metacognition can assist adult learners with understanding confusion and frustration which often are associated with the overall learning process. For many adult learners, improving metacognition skills have been found to be increase learning success (Lai, 2011).

### **9.1 Self-Reflection and Self-Determination**

To develop a well-grounded self-knowledge a student needs to be able to distinguish when the factors creating challenges are internal, external, or both. The adult learner has to know and understand what modifications they need. This comes with self-reflection. It is important for adult learners to practice self-talk about exactly what they need, what they have accomplished, or may not have accomplished that may have contributed to the learning process. Again, this all comes through reflection. Once self-reflection has taken place learners turn to self-determination, which plays a role in pushing the find the support and strategies needed to complete the task.

### **9.2 Self-Questioning**

Self-questioning is another form of the students' talking to themselves, being reflective and metacognitive. Adult students learn to ask such questions as:

- Why is this assignment challenging to me?
- What processes am I implementing that are making this assignment challenging to me?
- How do I schedule my time?
- How is writing challenging to me?
- In what types of learning situations am I most challenged?

Once adult learners are able to ask these questions, the important question then is: How can I answer them and use the data from the answers to influence a positive learning process for

me? What could I do about (any and all of the above)? This type of strategy takes time to develop but once the student understands the concept and returns to it during times of frustration, the answers usually will flow.

### **9.3 Summarizing in Phrases**

The ability for students to implement the skill of summarizing information is critical (Reed & Vaughn, 2010). This may be a very challenging skill for many adult learners. Strategies such as partner writing, peer writing review, and use of scribes often help with this challenge (Reed & Vaughn, 2010). Using one's own words is a key factor, not words from the text. The process of sifting back through the paragraph to judge what is more or less essential, what could be left out, or what is truly needed, is the difficult part (Reed & Vaughn, 2010). The process of paraphrasing in writing is often very difficult for the adult learner. Varying wording in writing from readings takes time and practice. Students should think about and summarize details from text into writing and be sure they are providing necessary details of information, using their own word.

### **9.4 Using Context Clues**

This is where adult students can intentionally make use of their good conceptual abilities. When there is a solid, meaningful grasp of a concept, an idea, or word, the related information gets tied in with it to long-term memory. For example, using one of the following six common context clues helps to solidify an understanding of the information in one's memory and thus can also be used to help with recall for assessment of application purposes:

- Root word and affix
- Contrast
- Logic
- Definition
- Example or Illustration
- Grammar

In the process of figuring out the clue, adult learners come to see how the parts make sense, how and why they fit together. This is what holds the information together and stores it as an integrated concept in memory. When it is tied in within an organized whole, it can be retrieved more easily. While there are many strategies, it is important to take those strategies and

apply them in an organized and consistent fashion to gain the most benefit from adult learning opportunities.

## **10. Tying it All Together**

Effective strategizing is guided by continual self-monitoring and planning. Both self-monitoring and planning have been identified as particular areas of need for many students (Harvard, 2016). Additionally, formal thought, or the ability to think concretely as well as in the abstract, and tacit knowledge, the opposite of explicit knowledge, help to create a palette of mental processes that work together to increase human ability to think, process and work.

### **10.1 Self-Regulation**

Self-regulation or “the ability to monitor and control our own behavior, emotions, or thoughts, altering them in accordance with the demands of the situation” is a critical skill for adult learners to have in order to be successful academically. Students who are self-regulated are self-aware learners, goal-setters, planners and are able to clearly evaluate how well or poorly they are performing. These students understand that success is related to effort and persistence, and know when to seek help (Harvard, 2016). While some adult learners do not arrive in post-secondary education with these skills already developed, there is still hope. Academic experiences, especially less positive ones early on, can be a wake-up call on the need to be more intentional about the need to approach the learning process. Self-regulation skills are often acquired through the trials and tribulations of learning; however, adult learners who are open to direct feedback can benefit from additional coaching in these areas as well.

## **11. Research Limitations**

There are limitations to this current research. These limitations include the fact that the it based on data collection from small independent colleges. Therefore, the research findings may be different if it included research from faculty at additional small, medium, larger universities and colleges. These limitations also include the fact that since it was focused on small, independent schools, which are revenue-driven, funding for faculty professional development may be limited in this area. If funding was more accessible as it is in larger institutions form sources such as grants, then faculty training and development could be expanded. Faculty, therefore, would be better prepared to address learning needs of the adult learner.

## **12. Scope of Future Research**

Professors must understand the specific science associated with teaching adults, or andragogy, as well as the learning styles and theories that ensure a productive learning environment. Providing opportunities for each type of student to flourish within the class is important in addition to using a competency based learning model to showcase skills and knowledge acquired. Professors, peers and mentors can all play a vital role in fostering the requisite strategies and skills needed through direct and indirect instruction. The most successful andragogic practices will, in fact, consider the strategic learning needs of the individual student and seek to teach and foster them at every turn regardless of content area. This area of focus is not a priority in many institutions of higher education. The typical lecture style continues to be accepted (Celli & Young, 2014). Thus, this research should be expanded to include a larger sample size of faculty and research around pedagogy that addresses learning needs of all of adult learners. Further, this sample size should include faculty from universities with demographically diverse faculty as well as varied level of time as a faculty in higher education.

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