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Adult Learning Theory: Applications to Non-Traditional College Students

Introduction

Alexis graduated from high school but lacked the financial resources to go to college. Instead, she went to work in a local machine shop working on a punch press machine. During the recent recession, her employer went out of business and she lost her job. While she quickly mastered the repetitive skills involved in managing her press machine, this employment experience did not provide her with the critical thinking skills and particular analytical ability that would be required in the collegiate environment. A few weeks into her first semester, Alexis realized the learning skills that were effective in her former job may not be as effective in the academic environment. College was going to be a challenge and she was not sure even how to start to adapt.

While Alexis is not a real student, she is a composite of many of the adult learners that enter today's higher education community. These new adult learners bring learning styles and life experiences that may either be critical foundations for future success or deeply entrenched beliefs that hinder learning in the academic environment. As adult learners enroll in their entry level courses, college instructors will need to realize that these adult learners differ from the traditional college student. Although these differences present challenges for educators, they also provide opportunities for educators to embrace the life experiences and wisdom that these adult learners bring to the collegiate community.

While adult learners can be classified in many ways, this piece will focus on how best to understand and teach entry-level adult learners who are between the ages of 25 and 50, have a high school diploma or a GED, are financially independent, and have one semester or less of college-level coursework.

Three main groups of students lead the charge in the growing number of adult learners entering college developmental education courses: (a) workers who have lost their jobs because of the recession of 2008 and who require developmental coursework to refresh their entry level collegiate skills, (b) veterans returning from Afghanistan and Iraq who delayed their education to serve in the armed forces (Katapos, 2009), and, (c) adults who have just completed their GED and are moving onto higher education classes ("GED classes," 2009). By understanding what makes adult learners different from traditional students, developmental educators can provide specific tools that help adult learners integrate into the college or university environment and increase their chances for success.

Horn's (1996) ranking of students on a scale from minimally non-traditional to highly nontraditional recognizes the challenges facing adult learners, such as Alexis, who move into higher education. Older students (those more than 25 years) generally have at least four non-traditional factors: financial independence, full-time employment, dependents, and part-time enrollment. Therefore, many older students fall into Horn's highly nontraditional category, placing them at significant risk for not completing their degree (Lane, 2004).

Andragogy and Adult Learning Theory

Much adult learning theory comes from the organizational development (OD) field where the focus on learning theory is seen as a way of providing employees with the tools they needed to perform better in the workplace. In the 1950s and 1960s, OD practitioners created new learning models because traditional higher education pedagogical models did not translate well into the workplace training environment. OD practitioners coined the term *andragogy* to recognize the needs and features of this distinct learning population and to separate adult learning theory from traditional pedagogy (Knowles, 1974). Building upon theories from organizational development, Knowles identified four principles that characterize adult learners:

      a. They are self directed, take responsibility for their own actions, and resist having information arbitrarily imposed on them.

      b. They have an extensive depth of experience, which serves as a critical component in the foundation of their self identity.

    c. They are ready to learn. As most adult learners return to college voluntarily, they are likely to actively engage in the learning process.

    d. They are task motivated. Adult students returning to college attend for a specific goal and the primary component of their motivational drive tends to be internal (Knowles, 1984).

In addition to the four principles put forth by Knowles, adult learners may have an established life context that determines their learning. The adult learner is also likely to desire a greater sense of cooperation between the student and teacher as they proceed through the educational process (Zmeyov, 1998). Additionally, returning veterans may bring additional skills such as a higher level of maturity and a different understanding of world affairs and geopolitics than traditional students (Byman, 2007).

Adult Learning Strategy and Theory

Schraw and Moshman (1995) lay out three metacognitive frameworks that identify how people structure their own learning theories. These three frameworks are *tacit theory*, *informal theory*, and *formal theory*. For educators who have adult learners in their classes, understanding tacit theory and informal theory is useful for identifying how adult learners learn and for creating course material that can address deficiencies that arise from these metacognitive frameworks. Academic experts use the formal theory when they apply complex theoretical frameworks to generate new knowledge (Schraw and Moshman, 1995). As formal theory is rare and only found within the higher realms of academic expertise, it will not be discussed further in this article.

Tacit theory frames the acquisition of metacognitive skills as occurring without any specific learning framework. According to *tacit theory*, adult learners acquire their metacognitive skills from peers, teachers, and the local culture. Adult learners likely have these skills deeply ingrained into their conceptual framework, which may make it difficult for them to change, regardless of the degree of error resulting from a flawed tacitly-developed learning theory (Guzzetti, Snyder, Glass, & Gamas, 1993). These deeply embedded metacognitive skills can be particularly detrimental during the early phases of the adult learners' transition to the academic environment. For example, Alexis' technique of rote memorization and exacting repetition was not conducive to classes where she was expected to use critical thinking skills and arrive at her own conclusions. Another example of tacit theory is the adoption of role models. Adult learners who are successful in their home community

have likely patterned their behavior on successful members in their peer group. However, incorporating the characteristics of these community role models into the academic environment can create stress, particularly if the role model is indifferent or antagonistic towards the pursuit of higher education. For example, if adult learners come from a community that lacks respect for authority figures, they will have difficulty submitting to the authority of the instructor and can be disruptive in class.

One step up the formalization chain of individual metacognitive theory is *informal theory*, describing the learner as possessing some recognition of metacognition. Individuals who use *informal theory* still acquire their metacognitive skills over time from their peers and their environment, but they have at least a rudimentary conscious thought process regarding their metacognitive framework (Schraw & Moshman, 1995). For adult students, much of their informal metacognitive strategies develop in workplace environments, where metacognitive development is recognized by their peers as a sign of wisdom, which brings together intelligence, experience, and reflection (Prewitt, 2003). An example of this informal theory of metacognition is career advancement for many trade and blue collar employees. Individuals in these professions may use the informal theory of metacognition by recognizing and linking their behavior to the reward system of the workplace.

Theory to Practice

One of the challenges for nontraditional students is a high attrition rate. Studies indicate that one component leading to this high attrition rate is the lack of successful integration of the nontraditional student into the collegiate environment (Andres & Carpenter, 1997; Sandler, 1999; Weldman, 1985). Because integration into the academic environment is a challenge for adult students, developmental educators must understand the background of adult students and develop a curriculum that addresses their particular needs. By having an *awareness* of the different learning styles of adult learners, *framing* learning strategies in immediately useful ways, and using *competition and repetition*, the developmental educator can enhance the integration of the adult learner into the collegiate environment.

Awareness

Adult learners beginning their post secondary education are likely to have a gap in their academic development process. Depending on how long it has been between the time they graduated from high school or earned their GED and their first day of college or university, this

gap could be significant. Instead of continuing to acquire academic knowledge and skills, they have increased the development of *practical knowledge* in the workplace, which Sternberg and Caruso (1985) define as "procedural knowledge that is useful in one's everyday life" (p. 134).

While this practical knowledge is useful in navigating daily life, it likely proves inadequate in meeting the specific challenges of the academic environment. Nonetheless, these practical knowledge learning strategies have proven successful during the adult learners' professional careers and they are part of the students' psyche and self perception. By having an awareness that adult learners may be using tools that, while useful in their daily lives, are inappropriate for acquiring academic knowledge, the developmental educator can be mindful of the frustration adult learners may experience as they fail to incorporate material presented in the traditional academic fashion. For example, in the case of Alexis, she required practical knowledge that allowed her to learn how to do a repetitive task the same way every time. However, collegiate level coursework requires adult learners to explore different ways for examining and incorporating information. Alexis quickly learned that there was only one way to use her machine press. Deviations from this one correct way resulted in a deformed product that was not acceptable. Her workplace environment quickly provided her with the practical knowledge to succeed at her specific task. When students like Alexis are encouraged to explore different aspects of a problem, they may get frustrated because they are used to the one correct answer, even when there are often multiple correct answers, depending on the conditions.

Entry level coursework can provide activities for adult learners to compare academic and non-academic knowledge. For example, an assignment in a developmental writing class that has students compare the content and style of writing in a professional machine operator's manual with the content and style of writing in an academic textbook allows adult learners to use their practical knowledge in a positive analytical context. Specific questions that can encourage adult learners to compare their practical knowledge with the skills needed in their academic career can include analyzing citation usage in academic writing but not in professional memos and the role of first person in different writing forms. Other material that can be presented in this framework include introducing the role of bias and informational versus persuasive writing styles. These additional assignments can demonstrate that not all written material needs to be taken as the ultimate truth. While a machine's operational manual is expected to be correct for the particular machine, other forms of writing are not subject to the same exacting standards.

By learning that they can critically examine the written word and form their own opinions, adult learners will be empowered to take a more active role in the learning process.

Framing

As adult learners are likely to be more task and goal-oriented (Knowles, 1984), it is important to frame their reintroduction to collegiate learning in such a way that they can see the benefits as directly relating to their academic careers. Introducing theories without making a direct connection to the adult learners' current course load can result in frustration if they don't see the relevance of the new learning strategy. If strategies learned in developmental educational coursework prove useful in processing the material they learn in their other courses, adult learners are likely to be more accepting of the strategies.

Incorporating textbooks and material from other courses into the developmental education curriculum can be a strong tool for encouraging the adult learner to see an immediate benefit of developmental learning strategies. If students are enrolled in a developmental reading course, having them use a textbook from one of their other courses is a powerful cue for showing how the concepts learned in developmental reading translate into other courses.

Another useful technique for framing a learning strategy is to indicate that these learning tools are not exclusive and can be adapted to meet their individual needs and styles. For adult learners in a developmental reading class, letting them know that they may not find every technique useful for every project allows the adult learners to adapt the material in a way that is most useful for them. By learning that they can select which tools work and which tools do not, adult learners can better utilize their self-directed study style to achieve greater success.

Finally, a detailed syllabus that creates a direct step-by-step description of how the class will proceed should be attractive to goal-oriented adult learners. By identifying how each class develops from the previous class and builds into the next class, educators can show a clear linkage of tasks. One technique that has proven effective is to simplify complex tasks into smaller components. While the concept of writing an essay can be formidable, breaking the assignment down into discrete tasks makes the process more manageable. Using separate learning modules for teaching skills such as developing a thesis statement, identifying supporting points, crafting effective introductions and conclusions, and effectively proofreading can be particularly useful for adult learners who prefer to monitor measurable progress.

Competition and Repetition

Adult learners returning to the academic field will come with established metacognitive strategies. Many, if not all, of these strategies may not be conducive to collegiate learning and, in some cases, may be detrimental (Sternberg & Caruso, 1985). The longer adult learners have been away from the academic environment, the more deeply ingrained these strategies will be and the more difficult they will be to dislodge. To dislodge these ineffective strategies, it is critical to provide new strategies in such a way that they are in direct competition with the adult learners' existing strategies. For example, the technique behind reading a college textbook is very different from the adult learners' existing skills involved in non-academic reading. Many adult learners will be familiar with reading newspapers, technical or operational manuals, reports, or popular novels. However, the reading skills for these tasks may not translate to the skills needed for reading a textbook or other academic work. Therefore, the more complex strategies involved in textbook reading must directly identify the skills of non-academic reading, challenge these previous skills, and present more effective skills for reading a textbook. Asking questions about the purpose behind reading the textbook and being transparent as to how the learner will be assessed in the understanding of that textbook can be directly compared with the skills required for reading an operational or technical manual. In a technical manual, practical knowledge is clearly tested when the specific component or activity does not work. However, with textbook knowledge, understanding may not be as clearly assessed because students can still proceed with the course even if they continue to lack fundamental knowledge.

Because adult learners may not be aware they have existing learning strategies, using learning self assessment protocols, such as the Learning and Study Strategies Inventory (LASSI), can help adult learners realize they may have established, although unstated, learning preferences. By understanding their existing learning preferences, adult learners can compare the new study strategies taught in the developmental courses with their previous learning models. Since many adult learners will have models based on practical knowledge from workplace environments, the newer models should prove superior in the academic environment.

Traditional students will have existing metacognitive strategies; however, these strategies may lack development, which can make them more subject to modification. In contrast, adult learners may have developed metacognitive strategies that have worked in their practical lives, making them more resistant to change. Repetition is critical, especially if the repetition forces competition between new strategies and the adult

learners' existing strategies. When using repetition, it will be important to present the information in similar but not duplicate environments. For example, if students are working on a time management exercise in a study strategies class, the initial exercise may look at dedicating more time to subjects that are difficult. A second exercise that would reinforce the time management information would be to present a situation balancing family commitments with school commitments. Instead of looking at spending more time on difficult subjects, the students are presented with an assignment where they look at balancing their time between academic and non-academic events. In this way, adult learners can begin to see that the information presented in one situation can be modified and used in alternate situations, which strengthens the course material and enhances its competitive ability with already established metacognitive strategies.

Conclusion

Developmental educators can use several strategies to help adult learners integrate into their new collegiate environment. Adult learners tend to be more self-directed and task or goal-oriented than traditional students (Knowles, 1984), so it is important to *frame* learning strategies in a way that allows adult learners to see the purpose of the exercises; otherwise, adult learners may resist new strategies. Developmental educators will need to present new strategies and techniques in a way that *competes* with the already ingrained strategy. In partnership with the competition approach, the educator of adult students will need to incorporate *repetition,* with variety, so that the adult learners test new strategies to test its usefulness. Adult learners generally have had some level of success in their non-academic lives and they can replicate this success in their academic endeavors if they understand the benefits of new strategies rather than seeing new material as an introductory hoop leading to their true goals.

Because these particular students face challenges as they attempt to integrate into the traditional student body, developmental educators should embrace the adult learners' differences and see them as people who will actively embrace the concept of higher education. With the recent downturn in the economy, employers seek a more educated workforce. Thus, adult learners want to be in the classroom and it is incumbent on the developmental educator to help them with their transition into academia.

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