UNDERSTANDING ANDRAGOGY: HOW ADULTS LEARN

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Abstract

The typical students at the Purdue University – Anderson site would be classified as ‘non-traditional’ as evidenced by their average age of thirty-one and almost ninety-five percent are employed. These students are ‘adult learners’ and, as such, they have special needs which must be met to maximize learning. In the United States, Malcolm Knowles introduced the andragogy method, “the art and science of helping adults learn,” having the primary premise that virtually all adult learning is self-directed through one’s life-based roles, experiences and interactions.

The andragogy method is infinitely more superior when a more modern definition of college or adult education is used, especially in this electronic age. The learner must be the focus of the definition, which is “the preparation for and the acquisition of knowledge, skills and understanding to become an adaptable human being.” As adults mature their readiness to attain additional knowledge and skills increases primarily if the subject matter content (1) relates to their job/social role, (2) is task or problem centered, and (3) has a time perspective of immediate application.

This paper presents the basis of andragogy and alternative approaches those in educational institutions may use relative to andragogy to maximize learning by the non-traditional adult learners.

Introduction

A comparison between the two educational approaches of the more traditional Pedagogy method and the adult-learning Andragogy method is critical to fully understand the importance of utilizing the better procedure to maximize learning. Pedagogy is defined as “the art and science of teaching children” while andragogy means “the art and science of helping adults learn.” The key here is teaching, what the teacher does, versus learning, what the student attains.

The pedagogy method incorporates the following assumptions

- The learner is dependent where the teacher makes virtually all the decisions
- The learner brings little value to the learning experience so lecturing is the most common technique to transmit knowledge
- The learner is ready to learn when told he/she is ready
- The subject matter or content is presented and subject centered
- Motivation to learn is extrinsic
The andragogy method has the following assumptions as its bases:

- The adult learner is independent, should be in-charge and capable of taking responsibility for his/her own self-directed learning.
- The adult learner has many high quality experiences which should be used as valuable resources via experiential techniques, group discussions and team work.
- Adult learners learn when their life or work situations dictate that they need to know or learn something which can be useful in their circumstances.
- The subject matter for the adult learner should be life, problem or task centered.
- The majority of motivation is intrinsic – adults learn because they want to.

Malcolm Knowles advises that these sets of assumptions are not independent of each other but are the opposite ends of a continuum. Depending upon the circumstances, the pedagogy method may be best for adults while some children may be ready for the andragogy method especially in this computer age. However, Knowles further advises that in the vast majority of situations and groups of adults the andragogy methodology and its assumptions are correct and preferable.

**Adult learning standards**

In adult education classrooms across America, a standard or norm should be established and understood by all students early in the course or program: learning is not an act of transmitting information by lecture or presentation but is a process of active inquiry which is totally and fully the responsibility of the student. The classroom setting should be adjusted so it is conducive to student interaction and sharing rather than the traditional horizontal row-by-row alignment established for one-way transmission.

The professor or teacher should always start by establishing a high involvement climate conducive to learning. Initially, the identification of roles is critical where the students learn that the professor’s role is really that of a facilitator to help and assist them to fulfill their responsibilities as learners. Such a supportive, risk-free and open communication climate would include mutual respect and trust where listening, clarifying and summarizing are commonplace. Collaboration, rather than competition, is the norm where the students’ rich experiences are valued.

Another standard is to always start where the adult students already are. Malcolm Knowles’ approach is for professors to become process designers to assure the learner acquires the content and information and is able to apply it. The initial procedures to determine are (1) establishing the learning climate, (2) involving the students in deciding what is to be learned, and (3) helping the learners to diagnose what they need to learn and why? Next, the process designers have to translate the diagnostic results into learning objectives and assist the learners to develop a learning contract to accomplish the objectives. The designer must also determine how to best help each learner to carryout his/her plan and evaluate the results.

**An application**

The Purdue University – Anderson site, being predominately adult learners with an average class size of sixteen, whenever possible, uses learning contracts in Computer Technology, Electrical
Engineering Technology and Organizational Leadership and Supervision courses. The adult-learners in close collaboration develop these learning contracts early in the semester with the instructor. Each student considers the major content areas identified in the course syllabus, the course objectives and other topics presented by the instructor. Extensive discussion ensues to guarantee understanding of every element of this information.

Using Bloom’s taxonomy for the cognitive domain as a six-level rating scale ranging from (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, to (6) evaluation, each student rates the level where he/she should be by the end of the semester. The individual next evaluates his/her present level and conducts a gap analysis to determine the major need areas. The learning contract then identifies each major need area, and how the learner proposes to satisfy the needs and eliminate the gaps. Additionally, interim and final benchmark evaluations are established and how the professor-facilitator can best help the learner. This approach allows for maximum variation in content emphasis, experiential applications and, ultimately, evaluation of how well the learner learned.

An example of a student’s final learning contract in a Data Communications Development Course follows as Table 1.

<table>
<thead>
<tr>
<th>Part 1 Objectives:</th>
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<tr>
<td>To learn about small LAN systems; how the systems and servers work and how to maximize the number of PCs having access to the Internet via one telephone line</td>
</tr>
<tr>
<td>How to enable PCs to access Internet via a server using one telephone line</td>
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<tr>
<td>Part 1 Measures:</td>
</tr>
<tr>
<td>Written or oral report on how a Proxy Server works, what it looks like and costs. How many and what types of lines can be hooked up (POTS, ISDN, etc.)? Does the Proxy Server provide e-mail to each station or will multiple e-mail accounts have to be contracted with an Internet Service Provider? Also, a report how the LAN system was hooked up at church X.</td>
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<tr>
<th>Part 2 Objectives:</th>
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<tr>
<td>Learn how large LAN systems work, how they access the Internet and associated costs compared to small systems.</td>
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<tr>
<td>Part 2 Measures:</td>
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<tr>
<td>Written or oral report on Anderson University’s LAN system including what equipment (routes, etc.) is used to support Internet access; what kind of line do they use and from whom do they lease it? What steps have they taken to assure adequate bandwidth? Also, a tour may be scheduled showing both a large LAN system and a smaller LAN system.</td>
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</tbody>
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Table 1. A Data Communications Development Course Student Learning Contract
During the diagnostic stage and the development of learning contracts, the instructor is always available for consultation and assistance but the learner has the primary responsibility to perform these functions. Once the contracts are completed, a dialogue between the professor and student occurs to gain mutual acceptance and understanding. In this way each party knows exactly what is expected and the ultimate outcome of the course or learning experience.

Conclusion

The andragogy set of assumptions for adult learners is quite different from the pedagogy assumptions and the resultant methodologies, too. Those in higher education must recognize these differences and adjust accordingly especially since the number of adult learners has been regularly increasing. In every course at the Purdue University – Anderson site where the andragogy based learning contract approach has been used; the results have been excellent, as 100 percent of the learning contracts have been fulfilled. In fact, the majority of contracts have been exceeded and the student evaluations have significantly increased.

Bibliography


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