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Andragogy
Adult Learning Theory

Malcolm S. Knowles' theory of andragogy is a learning theory that is developed on the specific needs of adults. In contrast to pedagogy, or learning in childhood, Knowles emphasizes that adults are self-directed and expect to take responsibility for decisions. Adult learning programs must accommodate this fundamental aspect. The following chart summarizes the assumptions and processes of pedagogy and andragogy:

	Pedagogy	**Andragogy**
Self-Concept	Dependency	Increasing self-directedness
Experience	Of little worth	Learners are a rich resource for learning
Readiness	Biological development - social pressures	Developmental tasks of social roles
Time perspective	Postponed application	Immediacy of application
Orientation to learning	Subject centered	Problem centered
Learning Climate	Authority oriented Formal Competitive	Mutuality Respectful Collaborative Informal
Planning	By teacher	Mutual self-diagnosis
Formulation of objectives	By teacher	Mutual negotiation
Design	Logic of the subject matter Content Units	Sequenced in terms of readiness Problem Units
Activities	Transmittal techniques	Experiential techniques (inquiry)
Evaluation	By teacher	Mutual re-diagnosis of needs Mutual measurement of program

Andragogy makes the following assumptions about the design of learning:

- Adults need to know why they need to learn something
- Adults need to learn experientially
- Adults approach learning as problem-solving
- Adults learn best when the topic is of immediate value.

Andragogical Principles:

- Adults need to be involved in the planning and evaluation of their instruction.
- Experience (including mistakes) provides the basis for learning activities.
- Adults are most interested in learning subjects that have immediate relevance to their job or personal life.
- Adult learning is problem-centered rather than content-oriented.

Characteristics of Adult Learners:

1. The adult learner usually has an identifiable purpose.
2. The adult learner usually has had earlier experiences, both positive and negative, with organized education.
3. The adult learner wants immediate usefulness of his learning.
4. The adult learner's self-concept is one of self-direction.
5. The adult learner brings with him a reservoir of experiences.
6. The adult learner brings extensive doubts and fears to the educational process.
7. The adult learner is usually very strong to the resistance of change.
8. The adult learner's style is usually set.
9. The adult learner has "adult goals".
10. The adult learner's problems are different from children's problems.
11. The adult learner usually has an established family.
12. The adult learner's reaction time is often slow.
13. The adult learner's educational interest usually reflects vocational concerns.
14. The adult learner values himself as an adult more than he values a program.

In practical terms, andragogy means that instruction for adults needs to focus more on the process and less on the content being taught. Strategies such as case studies, role playing, simulations, and self-evaluation are most useful. Instructors adopt a role of facilitator or resource rather than lecturer or grader.

- There is a need to explain why specific things are being taught (e.g., certain commands, functions, operations, etc.)
- Instruction should be task-oriented instead of memorization -- learning activities should be in the context of common tasks to be performed.
- Instruction should take into account the wide range of different backgrounds of learners; learning materials and activities should allow for different levels/types of previous experience with computers.

- Since adults are self-directed, instruction should allow learners to discover things for themselves, providing guidance and help when mistakes are made.

Key Factors Found in Successful Adult Learning Programs:

- An environment where students feel safe and supported, where individual needs and uniqueness are honored, where abilities and life achievements are acknowledged and respected.
- An environment that fosters intellectual freedom and encourages experimentation and creativity.
- An environment where faculty treats adult students as peers--accepted and respected as intelligent experienced adults whose opinions are listened to, honored, appreciated. Such faculty members often comment that they learn as much from their students as the students learn from them.
- Self-directed learning, where students take responsibility for their own learning. They work with faculty to design individual learning programs which address what each person needs and wants to learn in order to function optimally in their profession.
- Pacing, or intellectual challenge. Optimal pacing is challenging people just beyond their present level of ability. If challenged too far beyond, people give up. If challenged too little, they become bored and learn little.
- Active involvement in learning, as opposed to passively listening to lectures. Where students and instructors interact and dialogue, where students try out new ideas in the workplace, where exercises and experiences are used to bolster facts and theory, adults grow more.
- Regular feedback mechanisms for students to tell faculty what works best for them and what they want and need to learn--and faculty who hear and make changes based on student input.

In contrast, in learning programs where students feel unsafe and threatened, where they are viewed as underlings, life achievements not honored, those students tend to regress developmentally, especially in self-esteem and self-confidence. In programs where students are required to take identical lockstep courses, whether relevant to professional goals or not, grow less. In other words, students grow more in student-centered as opposed to faculty-centered programs.

Motivation of Adult Learners:

The following have been found as motivators to adult learning:

- Social relationships: to make new friends, to meet a need for associations and friendships.
- External expectations: to comply with instructions from someone else; to fulfill the expectations or recommendations of someone with formal authority.

- Social welfare: to improve ability to serve mankind, prepare for service to the community, and improve ability to participate in community work.
- Personal advancement: to achieve higher status in a job, secure professional advancement, and stay abreast of competitors.
- Escape/Stimulation: to relieve boredom, provide a break in the routine of home or work, and provide a contrast to other exacting details of life.
- Cognitive interest: to learn for the sake of learning, seek knowledge for its own sake, and to satisfy an inquiring mind.

Barriers to Motivation

Unlike children and teenagers, adults have many responsibilities that they must balance against the demands of learning. Because of these responsibilities, adults have barriers against participating in learning. Some of these barriers include lack of time, money, confidence, or interest, lack of information about opportunities to learn, scheduling problems, "red tape," and problems with child care and transportation.

Curriculum Design

- Adult learners tend to be less interested in, and enthralled by, survey courses. They tend to prefer single concept, single-theory courses that focus heavily on the application of the concept to relevant problems. This tendency increases with age.
- Adults need to be able to integrate new ideas with what they already know if they are going to keep - and use - the new information.
- Information that conflicts sharply with what is already held to be true, and thus forces a re-evaluation of the old material, is integrated more slowly.
- Information that has little "conceptual overlap" with what is already known is acquired slowly.
- Adults tend to take errors personally and are more likely to let them affect self-esteem. Therefore, they tend to apply tried-and-true solutions and take fewer risks.
- The curriculum designer must know whether the concepts or ideas will be in concert or in conflict with the learner. Some instruction must be designed to effect a change in belief and value systems.
- Adults prefer self-directed and self-designed learning projects over group-learning experiences led by a professional, they select more than one medium for learning, and they desire to control pace and start/stop time.
- Nonhuman media such as books, programmed instruction and television have become popular with adults in recent years.
- Regardless of media, straightforward how-to is the preferred content orientation. Adults cite a need for application and how-to information as the primary motivation for beginning a learning project.
- Self-direction does not mean isolation. Studies of self-directed learning indicate that self-directed projects involve an average of 10 other people as resources, guides, encouragers and the like. But even for the self-professed, self-directed

learner, lectures and short seminars get positive ratings, especially when these events give the learner face-to-face, one-to-one access to an expert.

Teaching Delivery in the Classroom

- The learning environment must be physically and psychologically comfortable; long lectures, periods of interminable sitting and the absence of practice opportunities rate high on the irritation scale.
- Adults have something real to lose in a classroom situation. Self-esteem and ego are on the line when they are asked to risk trying a new behavior in front of peers and cohorts. Bad experiences in traditional education, feelings about authority and the preoccupation with events outside the classroom affect in-class experience.
- Adults have expectations, and it is critical to take time early on to clarify and articulate all expectations before getting into content. The instructor can assume responsibility only for his or her own expectations, not for those of students.
- Adults bring a great deal of life experience into the classroom, an invaluable asset to be acknowledged, tapped and used. Adults can learn well-and much - from dialogue with respected peers.
- Instructors who have a tendency to hold forth rather than facilitate can hold that tendency in check--or compensate for it--by concentrating on the use of open-ended questions to draw out relevant student knowledge and experience.
- New knowledge has to be integrated with previous knowledge; students must actively participate in the learning experience. The learner is dependent on the instructor for confirming feedback on skill practice; the instructor is dependent on the learner for feedback about curriculum and in-class performance.
- The key to the instructor role is control. The instructor must balance the presentation of new material, debate and discussion, sharing of relevant student experiences, and the clock. Ironically, it seems that instructors are best able to establish control when they risk giving it up. When they shelve egos and stifle the tendency to be threatened by challenge to plans and methods, they gain the kind of facilitative control needed to affect adult learning.
- The instructor has to protect minority opinion, keep disagreements civil and unheated, make connections between various opinions and ideas, and keep reminding the group of the variety of potential solutions to the problem. The instructor is less an advocate than orchestrator.
- Integration of new knowledge and skill requires transition time and focused effort on application.
- Learning and teaching theories function better as resources than as rules. An eclectic, rather than a single theory-based approach to developing strategies and procedures, is recommended for matching instruction to learning tasks.

References:

Knowles, M. S. et al (1984) *Andragogy in Action. Applying Modern Principles of Adult Education*, San Francisco: Jossey Bass.