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Adult Learning
Malcolm S. Knowles

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Wherefore Pedagogy?
All formal educational institutions in modern society were initially established exclusively for the education of children and youth. At the time they were established there was only one model of assumptions about learners and learning—the pedagogical model (derived from the Greek words paid, meaning “child,” and agegus, meaning “leader”; so “pedagogy” means literally “the art and science of teaching children”). This model assigned full responsibility for making all decisions about what should be learned, how it should be learned, when it should be learned, and if it had been learned, to the teacher. Students were given the role of being submissive recipients of the directions and transmitted content of the teacher. It assumed that they were dependent personalities, that they had little experience that could serve as a resource for learning, that they became ready to learn what
they were told they had to learn (to get promoted to the next level), that they were subject-centered in their orientation to learning, and that they were motivated by extrinsic pressures or rewards. The backbone methodology of pedagogy is transmission techniques.

As educational psychologists started researching educational phenomena around the turn of the century they were governed largely by these assumptions, too. But they were not really looking at learning; they were investigating reactions to teaching. And the more they found out about how teachers could control learners’ reactions, the more controlling teaching became. Pedagogy was king.

When adult education began to be organized systematically in the first quarter of this century, pedagogy was the only model teachers of adults had to go on, with the result that until recently adults were taught as if they were children. I believe that this fact accounts for many of the troubles adult educators encountered, such as a high drop-out rate (where attendance was voluntary), low motivation, and poor performance. When training began emerging as a specialty within the general adult education movement almost half a century later, this was the only model available to trainers, as well.

Then Came Andragogy

The first inkling that the pedagogical model may not be appropriate for adults appeared in a book by Edward C. Lindeman, The Meaning of Adult Education, in 1926.1 Based on his experience as both an adult learner and a teacher of adults, Lindeman proposed that adults were not just grown-up children, that they learned best when they were actively involved in determining what, how, and when they learned. But it was not until the 1950s, when we began getting empirical research on adults as learners, that the notion that there are differences between young and adults as learners began being taken seriously.

A seminal study by Houle2 spawned a crescendo of studies (e.g.,4,5 Peters,6 Penland,7 and others) of how adults learn naturally (e.g., when they are not being taught). These studies document the fact that adults do indeed engage in more productive forms of informal training than in organized programs and that they are in fact highly self-directed learners. Meantime, knowledge about adult learners was coming from other disciplines. Clinical psychologists were providing information on the conditions and strategies that promoted or hindered personal development change (which is what education should be about...too). Developmental psychologists were illuminating the development stage, that adults experience throughout the life span, which are a main stimulus of readiness to learn. Sociologists were exposing the effects that many institutional policies and practices have in constraining or facilitating learning (especially the inhibiting effects of rules and regulations, requirements, registration procedures, time schedules, and the like). Social psychologists were revealing the influences of forces in the larger environment, such as social attitudes and customs, reward systems, and socioeconomic and ethnic stratification.

Early in the 1960s European adult educators were feeling a need for a label for this growing body of knowledge about adult learners that would enable them to talk about it in parallel with the pedagogical model, and they coined the term (or actually reclaimed the term that had been coined by a German adult educator in 1835) andragogy. It is derived from the Greek word aner, meaning “adult” (literally, “man, not boy”). It was initially used to mean “the art and science of helping adults learn,” but, as will be shown later, the term has taken on a broader meaning. It is a term that is now widely used around the world as an alternative to pedagogy.

What Do We Know About Adults as Learners?

The research cited above leads to the following assumptions about adults as learners, on which the andragogical model is based:

1. **Adults have a need to know why they should learn something.** Tough found that adults would expend considerable time and energy exploring what the benefits would be of their learning something and what the costs would be of their not learning it before they would be willing to invest time and energy in learning it. We therefore now have a dictum in adult education that one of the first tasks of the adult educator is to develop a “need to know” in the learners—to make a case for the value in their life performance of their learning what we have to offer. At the minimum, this case should be made through testimony from the experience of the trainer or a successful practitioner; at the maximum, by providing real or simulated experiences through which the learners experience the benefits of knowing and the costs of not knowing. It is seldom convincing for them to be told by someone (like the boss) that it would be good for them.

To practice what I preach, let me try to make a case for your learning about “Treating Adult Learners as Adults.” Let me quote from an article I wrote for the Training and Development Journal of September 1976, “Separating the Amateurs from the Pros in Training”:

When I first got into training in 1935 the assumption was made that one didn’t need to have qualifications much different from any other administrative role to do a good job as a training director. The role was defined essentially as that of managing the logistics of organizing and operating activities for various groupings of individuals. If one had any experience in planning schedules, building budgets, getting out promotional materials, hiring people, and filling or selling out the programs, he was qualified. We were all amateurs.... But no longer. During the intervening years there has been a body of knowledge about how adults learn and a body of technology for facilitating that learning that is changing the role of trainer and requiring that he or she know how teachers know and probably none of his or her associates knows. The trainer must know andragogy—the art and science of helping adults learn—and how it differs from pedagogy—the art and science of teaching youth.... This is the mark of the pro.

I am assuming that all who are reading this chapter want to be pros.

2. **Adults have a deep need to be self-directing.** In fact, the psychological definition of “adult” is one who has acquired a self-concept of being in charge of his or her own life, of being responsible for making his or her own decisions and living with the consequences. At the point at which we arrive at this self-concept we develop a deep psychological need to be seen and treated by others as being capable of taking responsibility for ourselves. This fact creates a special problem for us in adult education and training in that although adults may be completely self-directing in most aspects of their lives (as full-time workers, spouses, parents, and voting citizens), when they enter a program labeled “education” or “training,” they hark back to their conditioning in school and college and put on their hats of dependency, fold their arms, sit back, and say, “Teach me.” The problem arises if we assume that this is really where they are coming from and start teaching them as if they were children. We then put them into an inner conflict between existing in this intellectual mainstream and equals dependent—and thereby psychologically need to be self-directing. And the way most people deal with psychological conflict is to seek to withdraw from the situation causing it. To resolve this prob-
lems adult educators have been developing strategies for helping adults to make a quick transition from seeing themselves as being dependent learners to becoming self-directed learners. My little paperback book, *Self-Directed Learning: A Guide for Learners and Teachers* describes some of these strategies.

3. Adults have a greater volume and different qualities of experience than youth. Except in certain pathological circumstances, the longer we live the more experience and more varied experience we accumulate. The greater reservoir of experience affects learning in several ways:

- Adults bring into a learning situation a background of experience that is itself a rich resource for many kinds of learning for themselves and others. Hence, in adult education, the greater emphasis on the use of experiential learning—techniques, such as discussion methods and problem-solving exercises, that tap into the accumulated knowledge and skills of the learners, or techniques, such as simulation exercises and field experiences, that provide learners with experiences from which they can learn by analyzing them.

- Adults have a broader base of experience to which to attach new ideas and skills and give them richer meaning. The more explicit these relationships (between the old and the new) are made—through discussion and reflection—the deeper and more permanent the learning will be (see Boud et al., 1985).

- It is predictable that a group of adults, especially if there is an age mix, will have a wider range of differences in background, interests, ability, and learning styles than is true of any group of youth. Adult groups are heterogeneous groups. Accordingly, increasing emphasis is being placed in adult education on individualized learning and instruction, through contract learning, self-paced multimedia modules, learning resource centers, and other means.

- But there is a potentially negative consequence of this fact of greater experience—it tends to cause people to develop habits of thought and biases, to make presuppositions, to be less open to new ideas. (How often have you heard somebody react to a new proposal, “It won’t work. We tried it five years ago and it didn’t work”?) Some techniques have been developed to try to counter this tendency—sensitivity training, open-mindedness scales, creativity exercises, and others.

But the difference in quality of experience adults bring with them is also significant. Few youths have had the experience of being full-time workers, spouses, parents, voting citizens, organizational leaders, and of performing other adult roles. Most adults have. Accordingly, adults have a different perspective on experience: it is their chief source of self-identity. To youth, experience is something that happens to them. But adults define themselves in terms of their unique experiences. An adult’s experience is who he or she is. So if adults’ experience is not respected and valued, is not made use of as a resource for learning, they experience this omission not as a rejection of their experience but as a rejection of them as persons. Evidence indicates that this phenomenon is especially characteristic of undereducated adults.

4. Adults become ready to learn when they experience in their life situation a need to know or be able to do in order to perform more effectively and satisfyingly. The pedagogical model makes the opposite assumption—that people become ready to learn what they are told by some authority figure (teacher, trainer, boss), that they have to learn because it's good for them or the authority figure demands it. Adults experience "being told" as infringing upon their adulthood— their need to be self-directing—and tend to react with resentment, defensiveness, and resistance. Adults learn best when they choose voluntarily to make a commitment to learn.

5. Adults enter into a learning experience with a task-centered (or problem-centered) or life-centered orientation to learning. Children and youth have been conditioned to a subject-centered orientation to learning; they see learning as a process of acquiring the subject matter necessary to pass tests. Once that is done, their mission is accomplished. This difference in orientation calls for different ways of organizing the content to be learned. In traditional education the content is organized into subject-matter courses—such as Composition I, in which the rules of grammar are memorized, Composition II, in which sentence and paragraph structures are memorized, and Composition III, in which rules of outlining, syntax, and the like are memorized. In adult education the content is organized around life tasks: Composition I becomes "Writing Better Business Letters," Composition II becomes "Writing for Pleasure and Profit," and Composition III becomes "Improving Your Professional Communications."

I have found that this principle is commonly violated in orientation programs, in which the sequence of topics might be (1) The History and Philosophy of XYZ Co., (2) The Market and Products of XYZ Co., (3) The Personnel Policies of XYZ Co., and so on, instead of starting with a Census of problems and concerns, along with problems and concerns of the organization and trainee. But I strongly urge the preparation of prerequisite programs and restructuring units around topics, take on the problems and life situations. The participants will see the program as much more relevant to their lives and will learn the content with the intention of using it.

6. Adults are motivated to learn by both extrinsic and intrinsic motivators. One of the most significant findings of the research into adult learning is that adults are...
Implications for Practice

The assumptions of pedagogy and andragogy have a number of implications for what we do as human resource developers. One basic implication is the importance of making a clear distinction between a content plan and a process design.

When planning an educational activity, the pedagogist thinks in terms of drafting a content plan, and he has to answer only four questions to come up with a plan: (1) What content needs to be covered (the assumption being that they will only learn what is transmitted, and therefore he has to cover it all in the classroom)? So he draws up a long laundry list of content terms. (2) How can this content be organized into manageable units (one-hour, three-hour, etc., units)? So he clusters the content items into manageable units. (3) How can these content units be transmitted in a logical sequence (rather than the sequence in which the learners are ready to learn it)? So he arranges the units in a sequence according to chronology (history, literature, political science) or from simple to complex (science, math). (4) What would be the most effective methods for transmitting this content? If unit 1 is heavily loaded with information, the method of choice will probably be lecture and assigned reading; if unit 2 involves skill performance, the method of choice will probably be demonstration by him and drill, drill, drill by them. By answering these four questions, he ends up with a content-transmission plan.

The andragog, on the other hand, when she (get the gender change?) undertakes to plan an educational activity, sees her task as being twofold: first, and primarily, to design and manage a process for facilitating the acquisition of content by the learners; and only secondarily to serve as a content resource (she perceives that there are many content resources in addition to her own—peers, supervisors, specialists, and a variety of materials in the learner’s environment, and that an important part of her responsibility is to keep up to date as to what these resources are and to link learners with them). So the andragog has to answer a very different set of questions to come up with a process design. (Notice that it is not a matter of the pedagog’s being concerned with content and the andragog’s not being concerned with it; rather, the pedagog is concerned with transmitting the content and the andragog is concerned with facilitating the acquisition of the content by the learners.)

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The questions raised by the andragog have to do with implementing the following elements of an andragogical process design:

1. Climate setting. A prerequisite for effective learning to take place is the establishment of a climate that is conducive to learning. Two broad aspects of climate must be considered: institutional climate and the climate of training situation.

Among the questions that might be raised regarding institutional climate are: Do the policy statements of the institution convey a deep commitment to the value of human resource development in the accomplishment of the mission of the institution? Does the budget of the institution provide adequate resources for the support of significant human resource development (HRD) efforts? Is the HRD staff involved in the decision-making process as regards personnel policies and programs? Are adequate physical facilities for HRD activities provided? Does the reward system of the institution give credit for the achievement of personal growth on the part of individuals and their supervisors?

As regards setting a climate in a training situation, these are the conditions that I think characterize a climate that is conducive to learning, and the questions that might be asked in creating a process design to achieve those conditions:

- A climate of mutual respect. I believe that people are more open to learning if they feel respected. If they feel that they are being talked down to, humiliated, or otherwise denigrated, their energy is diverted from learning to dealing with these feelings. I do several things to bring about such a climate into being: First, I provide name tents—5 by 8 cards with their names printed on them with bold felt pens—so that I (and they) can start calling on them by name. Then I put them into small groups of five or six persons (preferably sitting around tables) and ask them to share their "whats" (their work roles); their "whos" (one thing about themselves that will enable others to see them as unique humans with special knowledge, skill, or other resources they would be willing to share with others); and any questions, problems, or concerns they are hoping will be dealt with in this program. I ask one person in each group to volunteer to give a high-point summary of this information about each group. I feel that this hour is the most important hour in the week for sharing, for establishing a sense of community, for being social, and for being open.

- A climate of collaborativeness rather than competitiveness. The above sharing exercise causes the participants to start seeing themselves as mutual helpers rather than rivals. For many kinds of learning, the richest resources are within their peers, hence the importance of making these resources available.

- A climate of supportiveness rather than judgmentalness. I think I largely set this climate by being supportive in my own behavior, but the opening exercise also tends to establish peer-support relationships.

- A climate of mutual trust. In order to reduce the instinctive mistrust with which people typically react to authority figures, in presenting myself I emphasize who I am as a human being rather than as an expert, and I urge them to call me by my first name.

- A climate of fun. Learning should be one of the most joyful things we do, and so I do everything I can to make the experience enjoyable. I make a lot of use of spontaneous (not canned) humor.

- A human climate. Learning is a human activity; training is for dogs and horses. So I try to establish a climate in which people feel that they are being treated as
designing a plan for achieving them. This plan will include identifying the resources most relevant to each objective and the most effective strategies for utilizing these resources. Such a plan is likely to include a mix of total group experiences (including input by the trainer), subgroup (learning-teaching team) experiences, and individual learning projects. A key criterion for assessing the success of such a design is how deeply involved are the participants in the mutual process of designing and managing a pattern of learning experiences?

So the fifth question the andragog asks is “What procedures can I use for involving the learners with me in designing and managing a pattern of learning experiences?” (For suggested procedures see Knowles, 1998, pp. 235–247.)

5. Evaluating the extent to which the objectives have been achieved. In many situations institutional policies require some sort of “objective” (quantitative) measure of learning outcomes (Kirkpatrick, 20, Spreen, 21, Stufflebeam 22). But the recent trend in evaluation research has been to place increasing emphasis on “subjective” (qualitative) evaluation—finding out what is really happening inside the participants and how differently they are performing in life (Cronbach, 23, Guba and Lincoln, 24, Patton, 25,26,27,28). In any case, the andragogical model requires that the learners be actively involved in the process of evaluating their learning outcomes (Knowles 22).

The sixth question, therefore, that the andragog asks is “What procedures can I use to involve the learners responsibly in evaluating the accomplishment of their learning objectives?”

By answering these six sets of questions, the learning facilitator emerges with a process design—a set of procedures for facilitating the acquisition of content by the learners.

But Not Andragogy versus Pedagogy

When I first began conceptualizing the andragogical model I perceived it as being antithetical to the pedagogical model. In fact, in the book in which I first presented the andragogical model in detail, The Modern Practice of Adult Education, I used the subtitle “Andragogy versus Pedagogy.” During the next few years I began getting reports from elementary and secondary school teachers saying that they had experimented with applying the andragogical model in their practice and finding that children and youth also learn better in many situations when they are involved in sharing responsibility. And I got reports from teachers of adults that they had found situations in which they had to use the pedagogical model. So when I revised the book in 1980 I used the subtitle, “From Pedagogy to Andragogy.”

As I see it now, whereas for 13 centuries we have only one model of assumptions and strategies regarding education—the pedagogical model, now we have two models. So we have the responsibility now of checking out which set of assumptions is realistic in which situation and using the strategies of whichever model is appropriate for that situation. In general, the pedagogical assumptions are likely to be realistic in those situations in which the content is totally strange to the learners and in which precise psychomotor skills are involved, as in machine operation. But even in these situations, elements of the andragogical model, such as climate setting, might enhance the learning. And I use elements of the pedagogical model, such as reinforcement, in my andragogical practice. So my stance now is not either-or, but both—as appropriate to the situation.
Preparing for the Future

In the third quarter of this century we accumulated more research-based knowledge about adults as learners than was known in all of previous history. In the past decade body of knowledge has at least doubled. I am confident that the present body of knowledge will at least double in the next decade. My colleagues in the biological sciences assure me that their disciplines will contribute some of the major breakthroughs, especially as regards the physiological, chemical, and neurological (such as right-brain, left-brain) processes involved in learning. The technology of making resources for learning available is already in a state of revolution, especially with the development of computers and communications satellites. My own conviction is that by the end of this century most educational services will be being delivered electronically to learners at their convenience in terms of time, place, and pace.

What a challenge we in human resource development face if we are to avoid the obsolescence of our workforce. I can foresee this challenge requiring that we reconceptualize a corporation (or any social system) as a system of learning resources as well as production and service-delivering system and redefine the role of HRD away from that of managing the logistics of conducting training activities to that of managing a system of learning resources. We would then ask a very different set of questions from those we have traditionally asked in training and development. The first question would be, “What are all of the resources available in this system for the growth and development of people?” Then we would have to ask, “How well are these resources being utilized now, and how might they be more effectively utilized?” We might come up with a chart that looks something like Table 12-1.

If nothing more is done than what has been described so far, the quality of human resource development in a corporation would probably be improved. But learning would still be episodic, fragmented, and disconnected. It can be made more systematic, incremental, and continuous through the use of learning contracts or development plans (Knowledge13).

A contract simply specifies what an individual’s objectives are for a given learning project, what resources will be used in fulfilling the objectives, what evidence will be collected to demonstrate that the objectives have been fulfilled, and how that evidence will be validated. In one corporation the contract is negotiated between the individual and the HRD staff; in another, it is between the individual and his or her supervisor; in another, it is between the individual and a team consisting of the supervisor, a representative of the HRD department, and a peer. Progress toward fulfilling the contract is monitored, and the evidence is validated by these same parties. Several corporations with a management-by-objectives program have incorporated the contracting process into the MBO process.

Several things happen when a systems approach is adopted. A heavier responsibility is placed on the line supervisors and managers for the development of their personnel than traditionally has been the case. This integrates the HRD function more closely with the operating function, and line supervisors and managers derive added self-esteem and job satisfaction from their developmental role once they have become adept at it.

Employees find that their personal and professional development are more integrated with their work life. A much wider range of resources for learning are available to them, and employees are more directly involved in planning and achieving their own development—adding to their self-esteem and satisfaction.

For HRD professionals, the systems approach represents a major shift in role. They are less concerned with planning, scheduling, and conducting instructional activities, and are more concerned with managing a system. One of their major

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<th>Table 12-1. Managing a System of Learning Resources</th>
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<tbody>
<tr>
<td>Resources</td>
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<tr>
<td>Scheduled training activities (courses, engagements, seminars)</td>
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<tr>
<td>Line supervisors and managers (the most ubiquitous resources for day-in-and-day-out employee development)</td>
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<tr>
<td>Libraries, media centers (printed materials, audiovisual and multimedia programs)</td>
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<tr>
<td>Individual employees, specialists, and technicians (many people in organizations have knowledge and skills others would like to learn)</td>
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<tr>
<td>Community resources (courses, workshops, specialists, etc., in colleges and universities, community organizations, professional associations, commercial providers, etc.)</td>
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responsibilities is to serve as consultants to the line—a closer and more functional relationship, and one more central to the operation of the business.

How much more fulfilling a role!

References
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Additional Reading