

Human Energy

*The Critical Factor
for Individuals and Organizations*

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To Malcolm S. Knowles

Who awakened me when I was least expecting it.

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tion, separation, conflict, or denial. Education as a lifelong process of continuing discovery and growth could satisfy our need to relate in a positive and personal way to our own changing experience, and help us to solve our ever new and increasingly complex problems.

And it seems that social problems today are bigger and more serious than ever: crime, poverty, social and racial unrest, and drug addiction are still rampant despite many programs and projects aimed at relieving them. There seems to be a greater need today than ever before for the late Kurt Lewin's prescription for resolving social conflicts through reeducation. Lewin (1948) demonstrated that processes for the acquisition of normal and abnormal social behavior are fundamentally alike. He proved that inadequate visual images (incorrect stereotypes or illusions) are formed in exactly the same way as adequate visual images (reality). The importance of this clarification cannot be overestimated. If we accept the fact that our perception of reality may at any time be correct or incorrect but that it is always visualized by ourselves as correct, and if we also recognize that *it is our perceptions of reality that steer or direct our actions*, we can at last understand the basis of socially divergent behavior and begin to think of ways to develop corrective experiences to resolve the conflicts brought about by the divergence between social illusions and reality.

Furthermore, we are beginning to realize that it is not just the poor, the disadvantaged, and the uneducated that have a monopoly on social illusion and lowered perceptions of reality. All human groups, including those with financial power, political power, or social prestige, will develop distorted perceptions of reality unless they are nourished constantly with a supply of open and honest information no matter how unpleasant or unpopular that information may be. Receiving only the news you want to hear is tantamount to creating a world of illusion. Information is like air; if it is allowed to stagnate, impurities develop rapidly and soon it is unfit to breathe.

Lewin called the method of dealing with divergent perceptions of reality a process of *normative reeducation*. He described normative reeducation as a process that effects not only changes in cognitive structure (facts, concepts, beliefs, and expectations) but also changes in values (attractions, aversions, and feelings of acceptance and status). To be effective, reeducation must go much deeper than the level of verbal expression. It involves a circular transition from old values and ideas to new ones, together with the internalization of new (learned) behavior, which, in turn, reinforces and supports new values.

Lewin specified two conditions as absolute prerequisites for successful reeducation. First, individuals must become actively involved with others in discovering the inadequacies in their present situation and must work together to discover paths leading to improvement; and second, there must be an implicit guarantee of each individual's freedom to accept or reject the new values or cognitive structure. No individual or group can guarantee being correct all the time; therefore, freedom of dissent must be allowed in order to protect the freedom of all.

It is becoming increasingly apparent that our political system is also dependent on the continuing educational involvement of the voting public. In order to ensure that our political system continue to be responsive to the needs of the people, we must have a much greater level of grass-roots involvement in the political process than we have at present. In order for citizens to come together and explore social and political issues thoughtfully and without excessive rancor, grass-roots political life needs to be firmly based in the process of continuing adult education. In the future we may well witness hundreds of citizens' groups, representing a broad spectrum of different interests, studying issues, conducting research and gathering data, weighing the evidence, and presenting their findings. A widespread movement of this kind may go a long way toward freeing politicians from the well-nigh impossible task of developing all the questions (legislative proposals) and providing all the answers (legislative enactments). We probably have many too many laws already and don't really understand the full impact of the legislation that is now on the books. A moratorium on legislation coupled with a period of extensive public inquiry could indeed be most beneficial.

Continuing lifelong education also tends to break down the elitist structures that categorize society into groups of smart—those already "in the know"—and dumb—those who have given up trying to learn. Without this categorization, it may be possible for all of us to be continuing learners, and it could be pointed out that while learning is sometimes difficult for anyone, continuing to strive to learn is an absolute necessity for everyone. Thus all social questions call for answers and no one needs to be told that they just don't understand the situation.

A THEORY OF ADULT LEARNING

Dr. Malcolm Knowles has clarified the differences between adult and child learning in his book, *The Modern Practice of Adult Education* (1970). Knowles does not suggest any fundamental difference between the way adults and children internalize and utilize new information, but he does point to significant differences that stem from the conditions surrounding adult and child learning, and differences that emerge in the learning process as various degrees of maturation emerge. Knowles writes as follows:

Most of what is known about learning has been derived from studies of learning in children and animals. Most of what is known about teaching has been derived from experience with teaching children under conditions of compulsory attendance. And most theories about the learning/teaching transaction are based on the definition of education as a process of transmitting the culture. From these theories and assumptions there has emerged the technology of "Pedagogy"—a term derived from the Greek stem *paid-* (meaning "child") and *agogos* (meaning "leading"). So "Pedagogy" means, specifically, the art and science of teaching children.

One problem is that somewhere in history, the "children" part of the definition got lost. In many people's minds—and even in the dictionary—"Pedagogy" is defined as the art and science of teaching. Period. Even in books on adult education you can find references to "the Pedagogy of adult education," without any apparent discomfort over the contradiction in terms. Indeed, in my estimation, the main reason why adult education has not achieved the impact on our civilization of which it is capable is that most teachers of adults have only known how to teach adults as if they were children.

Knowles has used the term *andragogy* (the art and science of helping adults learn) to describe the adult learning process and has identified four basic premises, or learning characteristics, around which the differences between the andragogical and pedagogical approaches can be illuminated.

Self-Concept

The self-concept of a child is that of being a dependent person. As children move toward adulthood, they become increasingly aware of being capable of making decisions for themselves, and simultaneously experience a deep need for others to see them as being capable of self-direction. This change from a self-concept of dependency to one of autonomy is what we are referring to when we say a person has achieved psychological maturity or adulthood. Not surprisingly, adults tend to resent being put into situations that violate their self-concept of maturity, such as being treated with a lack of respect, being talked down to, being judged and otherwise treated like children. Because so many of our educational or training environments have been influenced by traditional pedagogical practices, adults tend to come into educational or training programs expecting to be treated like children and prepared to allow the teacher to take responsibility for their learning. When adults discover that they are capable of self-direction in learning, as they are in other activities of their lives, they often experience a remarkable increase in motivation and a strong desire to continue the learning process.

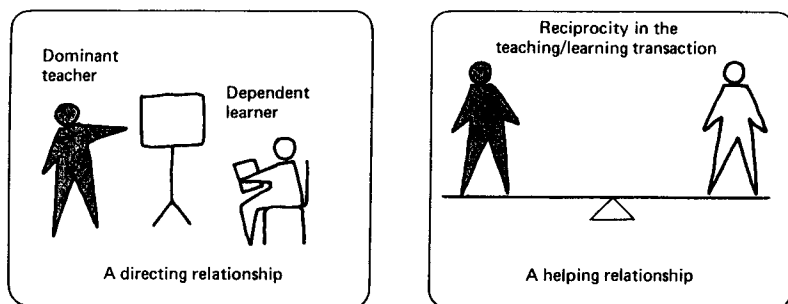


Figure 6.2

Thus the first major difference between andragogy and pedagogy exists in the relationship between teacher and learner and in the learner's concept of himself with regard to his capacity for self-direction (see Fig. 6.2).

Experience

In the course of living, adults accumulate vast quantities of experience of differing kinds. We are, in fact, the products of our experience. Our experience is what we have done; that is, the sum total of our life's impressions and our interaction with other persons and the world. Children, on the other hand, are relatively new to experience; many patterns of experience have simply not occurred frequently enough to have become familiar, safe, or generally predictable. Children are accustomed to depending on experienced adults to give them the basic facts of life and learning that are needed for physical and social survival. As they grow into maturity, however, their experience becomes a rich reservoir of knowledge and a primary resource for learning. Because everyone's experience differs, some more than others, comparing and sharing adult experience becomes a valuable asset in helping adults learn. In addition, if we do not utilize the experience of the adult learner we run a serious risk of rejecting that adult as a person because, as we have observed, *we are our experience.*

In the andragogical approach to education, the experience of adults is valued as a rich resource for learning. In the tradition of pedagogy the tendency has been to regard the experience of children as being of little worth in the educational process because it is to them that the culture must be transmitted. It is probably for this reason that the methodology of pedagogy has been, up to this point at least, largely oriented toward one-way communication techniques: lectures, assigned readings, and audiovisual presentations.

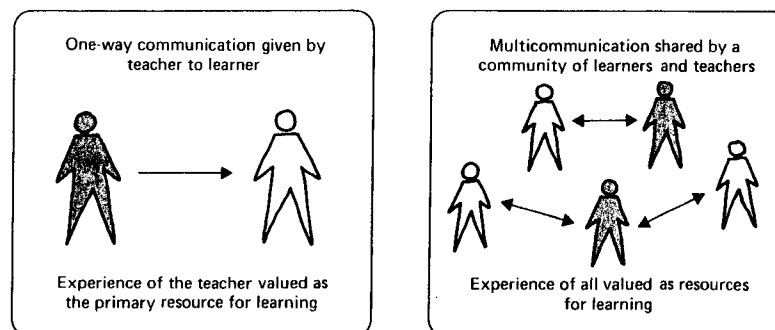


Figure 6.3

Andragogy, on the other hand, abounds with experiential, two-way, and multidirectional techniques such as group discussion, simulation, role playing, buzz groups, team designing, skill practice sessions, and so on. Through such techniques the experiences of all participants can be utilized. When learners begin to function as teachers and teachers simultaneously become learners, the resources of all can be utilized to facilitate the learning process: it is here that the second major difference between andragogy and pedagogy becomes apparent. The distinction is illustrated in Fig. 6.3.

Readiness to Learn

Educators are quite familiar with the concepts of *readiness to learn* and *teachable moment*. It is generally accepted that educational development occurs best through a sequencing of learning activities into developmental tasks so that the learner is presented with opportunities for learning certain topics or activities when he is ready to assimilate them, but not before. It is obvious, for example, that one must learn arithmetic before one can learn trigonometry, or that one must learn the meaning of basic words before proceeding to read history. The main task of pedagogical curriculum development is to sequence and interrelate subjects and skill-building activities to meet the requirements of competency for graduation. Adults, however, have largely completed the requirements of basic education by developing competency in reading, writing, arithmetic, and speech. Their developmental tasks are increasingly related to the social roles that form their immediate concerns: working, living, raising a family, and enjoying art, music, recreational activities, and so on. As adults move from early adulthood through middle age and into later maturity, they experience many different teachable moments, which are called forth by the needs of their social situation. Thus the third difference between

andragogy and pedagogy can be inferred from the process used in choosing the learning content. In traditional pedagogy, the teacher decides the content of what will be learned and also assumes responsibility for how and when the learning will take place. In andragogy, the grouping of learners is brought about in direct relation to individual interests and learning needs identified by the learners themselves. The learners decide what they need to learn based on their own perception of the demands of their social situation and the requirements of the problems they face. See Fig. 6.4 for a visual representation of this difference.

A Changed Time Perspective

Children are used to thinking of education in terms of preparing for the future rather than doing something in the present. They are involved in the process of storing up information for use on some far-off day, following graduation. Consequently, pedagogical practice orients us toward packaged subjects that we may unwrap as needed on our journey through life. Graduation seems to be a sort of ceremonial rite of passage from the learning world into the doing world, and it also seems to carry the strong implication that the learning world is being left behind. But if we agree with Confucius, that all living is learning, we can see that learning is not only preparation for living but the very essence of living itself. When I am actively thinking, doing, reflecting on my experience, discussing it with others, practicing and learning new skills for improvement, and using these skills, I am, in fact, most vitally alive. Learning and living are virtually synonymous.

In the andragogical approach to education, learning is centered on problems rather than subjects. Andragogy is an educational process for problem finding and problem solving in the present; it is oriented to the discovery of

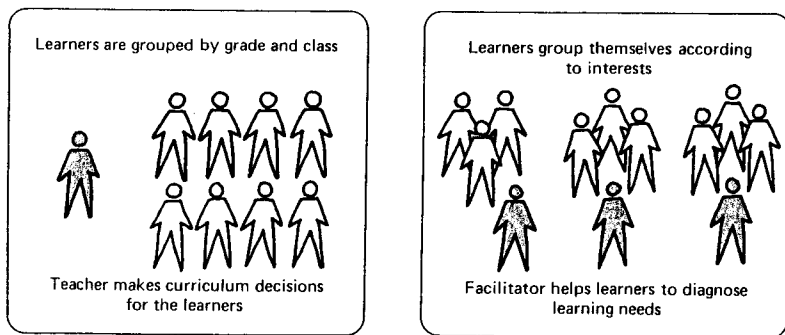


Figure 6.4

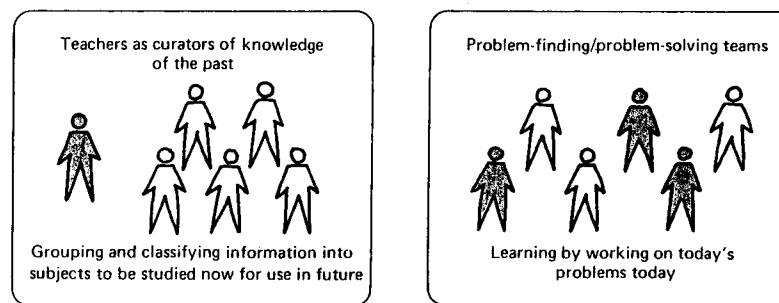


Figure 6.5

an improvable situation, a desired goal, a corrective experience, or a developmental possibility in relation to the reality of the present circumstance. To discover and evaluate where we have been, where we are now, and where we want to go is the heart of the andragogical approach to education, and such an approach enables us to plan for and take positive steps to action within a realistic framework of possibility. Thus the andragogical time perspective is one of immediate application (see Fig. 6.5).

Two things should be made clear at this point with regard to both andragogy and pedagogy. First, many recent educational developments have tended to make child learning more andragogical. For example, the use of experiential learning techniques, the enhancement of collaborative skill development through group methods, and the recognition of cultural and ethnic differences have all been steps toward valuing the learner's experience and recognizing the capacity for self-direction. Secondly, in suggesting that an-

dragogical learning concentrates on the here-and-now situation we do not mean to imply any disdain for the knowledge of the past. What we are suggesting is that adults are likely to be more strongly motivated to investigate a knowledge area in which they are experiencing a present problem than they are to pursue abstract theory for its own sake.

The above characteristics of adult learners have a number of implications for those who would strive to be effective teachers of adults. The first is that an adult educator is not a teacher in the traditional sense of the word. Knowles (1970) makes a penetrating comment in relation to this issue:

The important implication for adult education practice of the fact that learning is an internal process is that those methods and techniques which involve the individual most deeply in self-directed inquiry will produce the greatest learning. This principle of ego-involvement lies at the heart of the adult educator's art. In fact, the main thrust of modern adult-educational technology

Implications for Facilitators or Teachers of Adults

Facilitators recognize adults as self-directing and treat them accordingly. The facilitator is a learning reference for adult learners rather than a traditional instructor; facilitators are, therefore, encouraged to "tell it like it is" and stress "how I do it" rather than tell participants what they should do. The facilitator avoids talking down to adult learners, who are usually experienced decision makers and self-starters. The facilitator instead tries to meet the learners' needs.

As the adult is his experience, failure to utilize the experience of the adult learner is equivalent to rejecting him as a person.

Learning occurs through helping adults with the identification of gaps in their knowledge. No questions are "stupid"; all questions are "opportunities" for learning.

The primary emphasis in adult learning is on learners learning rather than on teachers teaching. Involvement in such things as problems to be solved, case histories, and critical incidents generally offer greater learning opportunity for adults than "talking to" them or using other one-way transmittal techniques.

Characteristics of Adult Learners	Implications for Adult Learners
Self-concept: The adult learner sees himself as capable of self-direction and desires others to see him the same way. In fact, one definition of maturity is the capacity to be self-directing.	A climate of openness and respect is helpful in identifying what the learners want and need to learn. Adults enjoy planning and carrying out their own learning exercises. Adults need to be involved in evaluating their own progress toward self-chosen goals.
Experience: Adults bring a lifetime of experience to the learning situation. Youths tend to regard experience as something that has happened to them, while to an adult, his experience is him. The adult defines who he is in terms of his experience.	Less use is made of transmittal techniques; more of experiential techniques. Discovery of how to learn from experience is key to self-actualization. Mistakes are opportunities for learning. To reject adult experience is to reject the adult.
Readiness to learn: Adult developmental tasks increasingly move toward social and occupational role competence and away from the more physical developmental tasks of childhood.	Adults need opportunities to identify the competency requirements of their occupational and social roles. Adult readiness to learn and teachable moments peak at those points where a learning opportunity is coordinated with a recognition of the need to know. Adults can best identify their own readiness to learn and teachable moments.
A problem-centered time perspective: Youth thinks of education as the accumulation of knowledge for use in the future. Adults tend to think of learning as a way to be more effective in problem solving today.	Adult education needs to be problem-centered rather than theoretically oriented. Formal curriculum development is less valuable than finding out what the learners need to learn. Adults need the opportunity to apply new learning quickly.

Fig. 6.6 Implications of andragogical learning theory, as developed by Malcolm S. Knowles

is in the direction of inventing techniques for involving adults in ever-deeper processes of self-diagnosis of their own needs for continued learning, in formulating their own objectives for learning, in sharing responsibility for designing and carrying out their learning activities, and in evaluating their progress toward their objectives. The truly artistic teacher of adults perceives the locus of responsibility for learning to be in the learner; he conscientiously suppresses his own compulsion to teach what he knows his students ought to learn in favor of helping his students learn for themselves what they want to learn.

A successful teacher of adults must constantly bear in mind that adults don't like to be talked down to or otherwise made to feel like children. Adult educators tend to be more successful when they level with the learners, when they talk frankly about what works for them and what doesn't work. As mistakes are often an excellent source of learning, adult educators should not be afraid to discuss their own mistakes openly if doing so serves a useful or even a vital purpose. It is not important for teachers of adults to appear as if they have all the answers, but it is helpful if they attempt to respond to all the questions and look to the learners for help in discovering some of the answers that they don't know. In short, the role of the teacher of adults is to openly share knowledge and experience insofar as it relates to the concerns and needs expressed by the learners. In addition, the teacher must never impose his or her ideas and values on others as the only solutions to a problem.

Educators need to provide some structure for the adult learning situation, since total laissez-faire is generally not conducive to effective group activity. They can play a facilitative role, acting as resource persons to help the learners form interest groups and diagnose their learning needs. In doing this they may provide some structure by suggesting different competencies needed to perform various functions or by suggesting several areas of interest into which learners may wish to group themselves to begin the diagnostic process. But the structure needs to be based more on recognition of mutual needs than on authority.

While adult educators try to make much use of experiential learning techniques, transmittal techniques such as lectures, readings, and audiovisual presentations may still be utilized to provide informational content. These techniques are best used, however, to provide a framework or context within which to build a discussion of specific problems or areas of concern identified or recognized as important by the learners.

Recognition of the characteristics of adult learners and the application of conscious effort to take these characteristics into account when designing and conducting adult learning activities will greatly increase the learner's experience of personal success. Success experience in turn increases the availability of energy needed to pursue additional success experience and to take those risks necessary to ensure continuing personal growth and development.

Figure 6.6 will perhaps serve as a handy reference guide for summarizing the ideas presented above.

AN ADULT LEARNING PROCESS

What precisely is an adult learning process? It is nothing more or less than the process of problem finding and problem solving described in Chapter 3, applied with a recognition of the characteristics of adult learners set forth above. In applying the adult learning process it is most useful (but not absolutely necessary) if participants have (or develop) some group dynamics or interpersonal relations skills. In fact, training in interpersonal relations is often an integral part of andragogical education. In addition, as most adults live and work in or have to deal with large organizations, it is also helpful to be aware of the energy forces inherent in the policies, procedures, and practices of large organizations. It may be useful to describe the problem-finding/problem-solving process and its purposes once again with some specific examples of different andragogical applications.

Process steps and purposes

Situational description

Climate setting. To establish an appropriate level of physical, psychological, and organizational comfort and to assist the participants in an active learning situation.

When I encounter a group of learners face to face, it is usually my policy to help them to get into the action as quickly as possible. My first concern is to ensure that the climate is as conducive as possible to learning—that means informality, comfort, and an appropriate amount of tension or excitement among participants. I want to know if people see potential for learning in this situation and to find out what their interests are in being there. I also want to find out what their hopes and expectations are. I like to make sure that everyone knows each other at least a little bit, but that people who know each other very well are separated, as sometimes dependency relationships seriously interfere with learning and growth. As a method for getting myself out of the way I usually invite people to find someone they don't know or would like to know better and to share with that person their expectations for the learning activity that they are presently attending. I like to then invite people to form themselves into groups of seven or eight and to discuss their expectations for about twenty or thirty minutes. I generally ask them to write down their comments on an easel set up before the group so that everyone is able to get a general idea of the issues and concerns.

Mutual planning. To begin to engage participants in the process

I then ask each group to have one person read that group's comments to the rest of the participants. In this way I get a chance to find out what's going on and

Process steps and purposes

of forming a learning contract that involves making a personal commitment and a commitment to each other.

Assessment of learning needs. To present a framework or structure for learning that will help learners identify their own needs for learning within a community where the needs of others must be met as well as their own. In this step the processes of climate setting and mutual planning are actively and consciously continued.

Situational description

I begin to actively consider how I may be most helpful in guiding the interaction of the participants.

When the expectation reports are finished I sometimes by way of explanation present a twenty-minute talk on the seven-step learning process called andragogy. After that I suggest that trying this learning process out may be a way to see if it works and if it is enjoyable. As a way to begin I generally suggest that participants identify from their experiences and beliefs what the ideal competencies might be to enable them to perform the tasks or fulfill the roles they wish to learn about. I might suggest two or three competencies and ask the participants if they can think of others. For example, if they were there to learn about how to conduct an effective organizational development program I would suggest that they would probably need a good deal of knowledge about motivation theory and about various management practices. I would ask them to add to this list, again on an easel that all the group could see. After an hour or two, and maybe a couple of trial cuts, we would together formulate a list of required competencies that would probably come close to hitting the mark (though I would still call this a tentative list of competencies because it would be important to keep it open-ended to allow for development based on emerging experience). After a period of

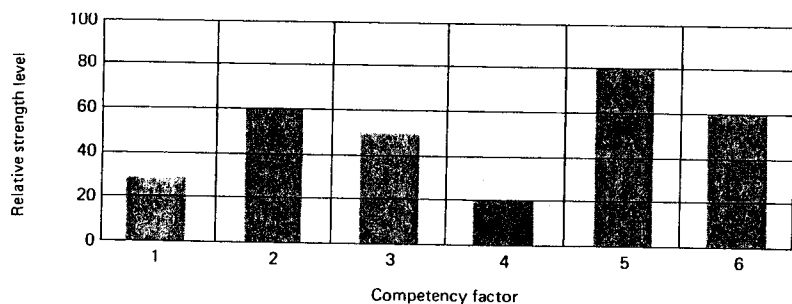


Figure 6.7

Process steps and purposes

Forming objectives. To enable participants to distill their perceptions of their individual needs for learning into purposeful activities.

Designing. To further aid participants in discovering what is needed to translate objectives into realistic programs or projects.

Implementing. To provide an opportunity for all participants to experiment with their ideas and plans through a concrete or specific application.

Situational description

refreshment and relaxation I would then ask participants to look carefully at the prepared list and to personally identify their own areas of relative strength. I would not bother with areas of weakness because they are usually indications of the absence of strength. Once people had completed their task of identifying relative strengths in relation to the ideal competencies required, they would have in front of them a personal competency model. This model would indicate gaps of various size (and also, if desired, of varying degrees of importance) and the largest gaps would indicate the areas of greatest developmental need (see Fig. 6.7).

From the model shown in Fig. 6.7 it is possible to identify the areas of developmental need and to assign priorities to individual learning objectives. In setting individual objectives it is desirable to help the participants frame statements of objectives in specific and measurable terms. For example, a general goal statement like "I want to become a better organizational development specialist" might be avoided and a more specific objective such as, "I will be able to demonstrate competency in conducting role-play exercises" may be found appropriate, since specific learning objectives need to be carefully distinguished from broad aims and goals.

In the design stage the learners must decide what resources they will need in order to accomplish their learning task; what sort of time schedules they should set up; any audiovisual or other media assistance necessary; and how they will monitor or evaluate learning progress in terms of specific accomplishments. If the learners are going to involve others in their learning presentation they will need to consider how they will create a learning climate, do mutual planning with their participants, assess needs of others, and so forth.

Now comes the actual experience for which all of the above was the preparation or the plan. Any gap between actual experience during implementation and the expectations contained in the plan becomes the basis for identifying new needs.

**Process steps
and purposes**

Situational description

This application may be made within the learning program itself or later. Without implementation there can be no learning from experience.

Evaluating. To help participants extract learning from the perceived gap between their needs, objectives, and design on the one hand and their actual experience emanating from their implementation on the other. To help participants reassess needs and plan new learning experiences.

While evaluation may determine how well we did in relation to our objectives, it is also highly useful as a descriptive reassessment of the needs for continued learning after a period of practical application.

Some of the most delightful and learningful experiences of my life were carried out in the above manner in graduate school courses conducted by Malcolm Knowles at Boston University. The freedom to engage in and direct my own learning enterprise and share with others in the process of learning and discovery was truly a "peak experience," to use Abraham Maslow's phrase. Since beginning to learn in this manner I have noticed a decided acceleration in both my own rate of learning and in my ability to make decisions with regard to appropriateness of direction and purpose.

The andragogical process facilitates learning from experience precisely because it purposefully directs learning toward its application in such a way that actual experience can be compared directly with intention. At that moment all four functions of consciousness—clarity of thought, emotional involvement, intuitive insight, and sensory awareness—may be brought into more or less full view of the learners. In addition, and of critical importance, the relative level of ambiguity in a situation (in terms of degrees of risk, potential psychological danger or threat, levels of interpersonal discomfort, and so forth) can be assessed prior to the application phase and moderated to an acceptable level. Success brings about a state of certainty and a tremendous feeling of release; failure, on the other hand, brings about increased certainty as to the need for an improved design based on additional informa-

tion gained from the application experiment. This cannot in a true sense be identified as failure, but rather is a necessary part of the learning process that must occur as the normal prelude to eventual success. From my many personal experiences with this process I can report with confidence that the stage of descriptive (nonjudgmental) evaluation frees energy and creates the motivational enthusiasm necessary to forge ahead even in unusually difficult situations. It is this very spirit of enthusiasm and confidence that has been greatly eroded in so many educational settings and is desperately needed to reinstill a sense of personal worth. Evaluation used only as a judgmental tool is much too punitive. Judgmental evaluation attempts to motivate through fear and tends to paralyze the muscles, stultify ideas, and generate feelings of self-doubt and self-deprecation. Such approaches only prevent learning from occurring.

The andragogical approach to continuing education can be seen as grounding theory in practice, planning in action, and actual outcomes in a context of continuing effort. It stimulates increasing confidence in the face of risk and constantly widens horizons of creative potential. This approach also tends to show the implicit lack of value in many "canned" or packaged learning programs. With an andragogical approach each learner inevitably becomes his or her own curriculum designer; in fact, the freedom to select both sources and resources for learning is the continuing guarantee of the development of individuality, uniqueness, and creativity. Each person's values and ideals determine to an increasingly great extent the direction in which he or she will choose to travel. Obviously this is not an educational process for those who prefer to depend always on the teacher or any other authority figure for guidance, direction, and permission to proceed.

Perhaps it is important to make a further comment here about authority and control. Some people exposed to an andragogical educational experience for the first time are uncomfortable with the relative reduction of formal structure and the increase of personal choices. As a result they may mistake the openness of the evaluation method for an invitation to slacken their efforts rather than an opportunity to become more deeply involved in learning and doing. Also, a learner who has grievances or is experiencing some personal conflict with the organization for whom he or she works (or who is in conflict with society as a whole) is likely to project some of these feelings of anger or hostility onto the leader of an andragogical education activity. If such a learner does not project these feelings by showing overt hostility toward the leader figure, he or she may instead act them out by creating conflict with other learners. The reduction of role rigidity and structural authority then serves the additional purpose of bringing hidden conflicts and animosities out into the open, where they can generally be dealt with in constructive and helpful ways. A very tight authoritarian structure, on the other hand, operates in a manner analogous to the behavior of carbonated water in a capped bottle on a warm summer day. When shaken vigorously the bottle gives no external sign of a problem; therefore, it is very easy to assume that

no problem exists. When the bottle blows up in your hand, however, it is too late to release any pent-up energy gradually.

Perhaps there is also another reason for some educators to prefer a tight, authoritarian structure over a more relaxed and open learning posture. If those who would be teachers of adults have not yet become comfortable in dealing with their own emotional responses to stressful situations, they may not feel able to handle the emotional responses of others. While there is always an outside risk of losing control of a situation as a result of some unforeseen event or reaction, this risk can be reduced almost to zero through reading the feedback responses of others in relation to the ambiguity/certainty relation described in Chapter 1. If there is too much ambiguity and tension, add more structure and control. If people seem to be feeling too directed and controlled, the indication is that more mutual planning and shared need assessment is called for.

When conflict does arise it is usually best to adopt Type B behaviors and stay with them unless such conflict is occurring because of too much ambiguity or vagueness in the situation or in your own leadership behavior. In these cases it is important to decide quickly what you want to do, state it very clearly and definitely, and act on it if others agree.

ANDRAGOGY AND MANAGEMENT

Because of the growing interest of many industrial corporations and government agencies in the andragogical education process and also the great potential it offers for improving both interpersonal relationships and task effectiveness, Malcolm Knowles has recently turned his attention to the role of the manager as an educator of adults. Knowles (1972)* says:

The "role of the manager" has been a favorite object of study of the behavioral scientists now for several decades. And their findings have done much to move management theory away from early conceptions of the managerial role as a simple, mechanical, organizer of work to a more complex conception of the multiple roles of the manager. For when the behavioral scientists studied what effective managers really do, they discovered that they perform a variety of roles—planner, organizer, supporter, adjudicator, coordinator, communicator, listener, operator, and teacher, to cite a few—and that each role requires its own unique set of competencies.

A strong thrust in recent developments in management theory has been the increasing emphasis placed on the last-named role, teacher. For, in the long run, the executive who makes the greatest contribution to his corporation is the one who is able to release and develop the potential of the human resources that are his company's principal asset.

* From Malcolm Knowles, "The Manager as Educator," *Journal of Continuing Education and Training*, Vol. 2, No. 2. Copyright Baywood Publishing Company, Inc., 1972.

Thus, according to modern management theory, every manager must be an educator, too.

But the fact is that adults differ in certain crucial ways from youth as learners. This is an insight that has emerged only recently from the growing body of research in adult education.

So it is not enough for managers to be educators. They must be adult educators.

There are many opportunities for the application of andragogical learning principles in business, industrial, and government settings. Andragogy may of course be used for training and development, but it may also be used for action research programs aimed at organizational problem finding and problem solving, for team building, and for performance appraisal. In fact, it may be used whenever a situation calls for recognition of the characteristics of adult learning behavior. A convenient management check list like the following may be useful for self-rating the degree to which your own management style complements that of an effective adult educator. You may wish to have a group of your subordinates rate you on these factors and then look with them at any congruencies or discrepancies that may exist.

Do I create a social climate in which subordinates feel respected?

Low 1 2 3 4 5 6 7 High

Do I treat mistakes as opportunities for learning and growth?

Low 1 2 3 4 5 6 7 High

Do I help my subordinates discover what they need to learn?

Low 1 2 3 4 5 6 7 High

Do I help my staff to extract learning from practical work situations and experiences?

Low 1 2 3 4 5 6 7 High

Do my staff members have responsibility for designing and carrying out their own learning experiences?

Low 1 2 3 4 5 6 7 High

Do my staff members engage in self-appraisal and personal planning for performance improvement?

Low 1 2 3 4 5 6 7 High

Do I permit or encourage innovation and experiments to change the accepted way of doing things if the plan proposed appears possible?

Low 1 2 3 4 5 6 7 High

Am I aware of the developmental tasks and readiness-to-learn issues that concern my staff?

Low 1 2 3 4 5 6 7 High

Do I try to implement a joint problem-finding and problem-solving strategy to involve my staff in dealing with day-to-day problems and longer-range issues?

Low 1 2 3 4 5 6 7 High

Malcolm Knowles (1972) says that managers need to create an educative environment for people to live and work in and intimates that doing so has an important simultaneous benefit: "Isn't it fortunate that an educative environment—one in which each individual is experiencing increasing self-fulfillment—is also a productive environment?"

It is apparent that individuals who are deeply involved in learning more about what they are doing will tend to be much more productive than the apathetic or disinterested.

THREE ANDRAGOGICAL APPLICATIONS

Three different learning approaches to utilizing the andragogical process are described below. They represent widely different examples of the application of this learning process in totally different settings. The first one describes an andragogical approach to teaching a college chemistry class; the second is a plan for an individualized learning program for senior or high-level middle managers; and the third is a program for the technical training of craftspeople in a large public utility.

The College Chemistry Class

In a college chemistry class forty-two students were required to learn a series of highly technical and complicated procedures in a sixteen-week semester. Instead of keeping these students in a win/lose competitive relationship with each other based on the assumption that grades must fit a bell-shaped distribution curve, this professor asked the class if they would like to join him in an adventure in collaborative education. The goal was for everyone in the class to receive an A by being able to demonstrate that they could perform every one of the required operations or procedures correctly by the end of the semester, in addition to having a thorough grasp of the theory presented. In order to achieve this goal they would have to collaborate with each other. After some discussion the class reached a unanimous agreement when they were convinced the professor was not trying to trick them.

The first two weeks were spent identifying what had to be learned and what the specific competency requirements would be for earning an A. To-

gether the class members and the professor decided that twenty-minute input sessions by him as the expert would be sufficient. Therefore the professor lectured for only twenty to thirty minutes on each major section of the course and spent brief periods demonstrating techniques and procedures. The remainder of the class time was devoted to group work. Seven groups of six students each formed into problem-finding/problem-solving teams. After each presentation the professor asked for seven volunteers who felt they could serve as resource persons in helping to facilitate the learning of the material presented in the lecture. These seven, who changed from week to week, became the team leaders of their groups. The professor in turn became a resource person to the team leaders, so that if a group was stuck it could get specialized help. During the semester groups that were unable to get all their members up to the required level of competency during class time agreed to meet after class so that their group did not become less effective than the others. The students enjoyed this type of learning environment and found that they actually learned more themselves when they were helping others learn. At the end of the semester all forty-two of the students received legitimate A grades. The performance on the exam was astonishing compared with the other chemistry classes. The professor was delighted with the results but was afraid he would get the reputation of being an easy marker; he was also apprehensive that he would have some difficulty with the dean because of his departure from the traditional approach to learning based on competitive win/lose norms.

Complex content can be handled much more effectively when a serious attempt is made to find out what is already known by the learners, thereby allowing them to concentrate on learning what they need to know. This approach also makes it easier to determine if the amount of material to be assimilated is appropriate for the time available. It seems much more practical to reduce the content or extend the learning time than it is to create conditions of failure where some of the brightest students feel barely competent and others cannot cope at all.

The Fifth-Level Managers

Promotion to the fifth level of management in most large corporations involves a series of changes that must be coped with effectively if the manager is to continue to grow and move upward to the sixth and seventh levels and beyond. It may be worthwhile to look at these changes in order to design a continuing development program for fifth-level or general managers.

It seems clear that promotion to the fifth level is a significant, if not *the* significant, turning point of a career. It is clearly the doorway leading out of the ranks of middle management into a position of corporate leadership. One question that emerges is how effectively the fifth-level manager rises to meet the leadership challenge. Granting the nature of hierarchical organizations, we could in general observe the fifth level to be more isolated and less involving

than the fourth. Second, it is more specialized; the incumbent finds himself in a one-of-a-kind position, where there is less lateral competition. Third, the incumbent has reached a level where the population has thinned out drastically. Will he or she ever get to sixth level or is this the end of the promotional line? If it is, is there not a profoundly seductive tendency to begin preparing for retirement or at least slowing down a little after the dizzying climb? Fourth, the level of compensation at the fifth level begins to satisfy the need for additional income. While individual circumstances vary, increased compensation at the fifth level tends to occur at or near the peak demand for preferential expenses: college educations, vacation homes, travel, and so forth. As life at the fifth level goes on, the potential of increased income as a motivating force tends to become less and less.

The fifth-level assignment by nature requires more dependence on the effectiveness of subordinates in meeting the needs of the business. At the same time it increases frustration because there is no longer (for the most part) direct access to line operating managers on a personal basis; instead, one must work through one's department heads. There is thus a great increase in the need for expertise in developing and fostering a climate of enthusiasm and excitement in others that keeps everyone in the organization moving toward significant goals and stretching for improvement.

Granting the above factors, it would not be surprising to find a good many incumbents in fifth-level assignments tending to play a less-than-venturesome role in any corporation. Maintenance of the status quo tends to become more rewarding than fostering development. Staying on your own turf is encouraged, so it's hard to find out what's going on in the other fellow's yard, even if it can have a profound effect on your own operation. A reactive posture of seeking to eliminate problems and staving off disasters can easily predominate over one of proactivity, which involves risk taking and an emphasis on developing the potential inherent in positive action.

If the above characteristics are at all representative of the fifth-level culture, what are the needs for a continuing development program for those who are already assumed to be developed? Even though we recognize that the need for growth, change, and development never ceases during our lifetime, powerful beliefs operate to prevent us from engaging in such activity when we are presumed to have already achieved success. One is that education ends with the receipt of a degree or a diploma. Another is that education only occurs in a formal or institutional setting. A third is that learning and doing are separate activities; that learning is an activity of the mind involving the acquisition of theoretical concepts in a classroom, while doing is behaving pragmatically in the real world of events—where theory is somehow seen as unrealistic and as a deterrent to swift and practical action.

In light of the above considerations, it was considered worthwhile in one company to undertake an informal continuing education program for the ongoing development of its fifth-level managers. The program was aimed at achieving the following goals:

- To assist each participant in formulating a plan for personally relevant continuing education
- To provide specific inputs of management and organizational theory
- To require each manager to put the concepts discussed into practice in an actual real-life situation in his regular assignment in order to learn both cognitively and through experience

Its objectives were as follows:

- Increased managerial competence, demonstrable both quantitatively and qualitatively in specific program applications
- Greater awareness and involvement by participants in actively supporting the primary goals and objectives of the company; in short, improved teamwork and interaction by participants with others at the fifth level and above
- Increased enthusiasm and interest stemming from understanding and using a new and effective strategy for resolving difficult and persistent management problems

The proposed continuing education program was to be designed by the participants within a general structural framework provided by the program director. A sixteen-day program was planned, spread evenly over a period of six to seven months. With the exception of the first session, which was to be conducted at the company offices and would consist of a one-day preplanning or introductory meeting, each session would consist of a two-and-one-half-day residential meeting at a convenient and comfortable (motel or hotel) location. Six two-and-one-half-day sessions were anticipated, although some program time beyond the fourth session was to be utilized in half-day units for individual participants as required.

Education, management, and organizational issues and concerns emerged naturally as the program unfolded. The program moved from an identification of needs to the formulation of specific individual and organizational objectives. As objectives became firm, participants designed their own projects and/or programs and implemented them in their own way. The results of each participant's activity were evaluated by the other participants and by the program director, leading to a new shared awareness of organizational and individual needs. Thus the program developed a cyclical process that utilized evaluation as feedback for new organizational design. In the course of the program, many individual and organizational needs were met and new ones emerged. It became quite clear during the program that unmet needs form the basis of organizational dysfunction. The strategy here was one that led toward the recognition of needs that seldom, if ever, are identified or met in most organizations; for example, managers became much more keenly aware

of the negative impact of the hierarchical organization structure on their own relationships with each other as well as with their superiors and subordinates. Successful implementation of this program resulted in a significant and recognizable improvement in management effectiveness in that company.

Any program of this type works best for those who enter into it willingly. Granting a solid career background of successful performance, there is always concern about continuing to be successful in the future. We believed a group of six to eight fifth-level executives would be the ideal number of participants, and as the program would not involve any of them for more than two working days each month it should not hamper their performance in their regular assignments. In fact, as much of the work in the program was directly related to each participant's regular assignment, two days of concentrated reflection and action each month in itself helped to improve performance materially. This kind of training or education does not wait until after the program ends seven months later for implementation. The participants began using and applying their new knowledge and abilities immediately.

The Craft Development Program

The situation leading to the formulation of a craft development program was as follows. The union had been complaining for a long time that management was doing a poor job of training craftspersons. Management, on the other hand, was spending significant sums of money on expensive specialized courses of instruction conducted in its own training schools. Part of the problem appeared to revolve around the process used to select trainees to fill the training slots available. Someone from the training department would call up and typically say, "I have two slots open for next Monday morning; who can you send?" As often as not the supervisor could not afford to send anyone, as his job was engineered to very tight performance standards; but wishing to be cooperative with the training staff and also trying to satisfy the union's complaint, he would dutifully oblige by sending his least competent performers. When these people returned from training they were seldom given the opportunity to utilize the learning they had received; instead they were put back on routine jobs. They had, after all, received the training, so the management statistics were satisfied and the union complaint could be rebutted. However, there was only minimal observable increase in worker competence in relation to the training dollars spent.

It was decided, after considerable consultation, to develop an on-the-job training need assessment and to use the training school only to meet learning needs that were recognized jointly by the craftspersons and their supervisors. Conducting an effective need assessment involved coping with a fairly complex set of circumstances. First, the craftsperson's job required competence in 130 different tasks of various degrees of technical difficulty. Only two craftspersons out of sixteen in the unit were fully competent in all of the technical

tasks, and they naturally held the highest ratings and received the highest income. Management estimated that it took about five years to develop top skills in this job assignment and freely acknowledged that many craftspersons never developed more than moderate skill and that the average craftsperson was only competent in about sixty to eighty of the tasks involved in the job. The department operated fairly effectively because the best craftspersons acted as troubleshooters on the difficult or more complex tasks and the rest performed the simpler or more routine tasks more or less continuously. Furthermore, evidence of boredom existed in the craftsperson ranks, and the union's relations with management were poor. The union felt management was letting the workers down, particularly in training, and management felt the union was doing everything in its power, short of precipitating a walk-out, to disrupt the organization. Management acknowledged that it would be ideal to improve the general level of craftsperson competence, but it claimed that the training schools, operated within the company at considerable cost, were doing the best that could be expected. A final problem lay in the fact that because the craft supervisor was responsible for rating the craftspersons' competence and job knowledge, craftspersons were very reluctant to let the supervisor find out their real level of competence lest this knowledge on the part of the supervisor be used against them.

A meeting was held with the union steward, one top- and one middle-level craftsperson, the supervisor, and a consultant trained in andragogical education. The meeting was called for the purpose of dealing with the union's claim that management was failing to train craftspersons. In the course of the meeting, the following plan was unveiled.

A five-page rating form was introduced listing all 130 tasks with two 0-5 rating scales, one to be filled out by the supervisor and one to be filled out by the craftsperson. Each task was printed on the form in the following manner:

Task No. 15 Can you perform transmission raise tests on trunks?

Craftsperson rating	0	1	2	3	4	5
	cannot perform	can perform at low level		can perform at medium level		can perform at high level
Supervisor rating	0	1	2	3	4	5

The key to the proposed training need assessment lay in the process through which it was to be conducted. The process was described at the meeting as follows.

Each craftsperson was to be given a rating form and would be asked to complete it for each of the 130 items. They were to be instructed not to show their own ratings to their supervisor *unless they wished to*. The supervisor would be required to complete the rating form on each of the sixteen craftspersons and to discuss those ratings with each craftsperson privately—although the supervisor would be obliged to admit publicly that such ratings

would not and probably could not be correct in every case. The supervisor was instructed to meet with each craftsperson individually and develop a six-month training plan for each craftsperson that would combine formal instruction in the training school with informal training on the job. The plan would be developed wholly on the basis of the supervisor's rating *unless* the craftsperson wished to disclose his or her personal self-ratings to the supervisor. In this case, if the craftsperson's and the supervisor's separate ratings did not agree on any particular item, a process of mutual negotiation was required to analyze the reasons for the discrepancy and to form a mutual plan for removing the discrepancy and increasing competence as well.

A disagreement on any item did not mean that either the supervisor or the craftsperson was right or wrong. It did mean, however, that the craftsperson was required to have an opportunity to prove the supervisor wrong; if the craftsperson was able to do so, the supervisor's rating would have to be changed. In very close cases, both parties would agree not to disagree but to move up or down one rating level in the interests of moving ahead with the planning. In addition, the supervisor agreed to play an active role in making sure that the craftsperson had ample opportunity for both on-the-job and formal training. The meeting ended with the union steward subscribing to the plan, and in a following meeting all the craftspersons agreed to try it as well.

After six months of individualized and personal attention to developing competence, the supervisor and craftsperson ratings were completed again. All craftspersons were willing to compare their ratings with those of their supervisors, and it was observed that extraordinary progress had been made by some and excellent progress by many.

The supervisor prepared a graph (which did not identify craftspersons by name) showing the changes in the department's level of competence in the 130 areas during the six-month period. While it was realized that some competencies take longer to develop than others, it became clear that the members of this department were learning and increasing their skills much more rapidly than members of other departments and that learning development was occurring at a faster rate than had been believed possible. The outstanding feature of the program was that it enabled the craftspersons to take on responsibility for planning their own development with their supervisor, obtaining the necessary support, and proceeding at their own pace. Because the craftspersons were happy with the program, the union was also and labor relations improved significantly.

THE ORIGINS OF ANDRAGOGY

Andragogy is an unfamiliar term to most people. People often ask how andragogy began? Where did the name come from? Has anyone heard of it outside the United States? These questions are typical of those asked by people first exposed to andragogical training or education programs.

The term *andragogy* (or andragology) derives from a combination of the classical Greek verb *agogos* ("leading") and the stem *aner* ("man"). Andragogy is now defined as the art and science of helping adults learn. The word was first used in 1833 by a German grammar-school teacher, Alexander Kapp, to describe Plato's educational theory. Kapp distinguished *andragogy* from *social pedagogy* (basic remedial education for the disadvantaged or handicapped), referring to andragogy as the normal and natural process of continuing education for adults.

The development of andragogy seems to have been much more rapid in Europe than in the United States. In the Netherlands there are at present seven or more major universities granting degrees in andragogy. A similar development has occurred in Germany, Poland, Hungary, and in particular Yugoslavia, where several universities are offering doctoral programs. Andragogy is becoming known in France, England, and in South America. Malcolm Knowles, formerly of Boston University and now Professor of Education at North Carolina State University, introduced andragogy to the United States and is internationally recognized for his creative developmental work in this new field (Van Enkevort, 1971).

While andragogy has been emerging as a new educational process for adults, closely related discoveries that utilize the same basic ideas have been and are being made in the fields of management and organizational development, and also in the fields of counseling, psychotherapy, and social psychology. Andragogy is a unifying educational process that can help adults discover and use the findings from these many specialized fields of study for practical application in situations to stimulate the growth and health of individuals, organizations, and communities. In fact, many European andragogues consider "social case work, counseling, resocialization and reeducative processes, social group work, adult education, personnel management, community organization, and community development, etc." all to be *parts* of applied andragogy (Van Enkevort, 1971). Andragogy is seen in this sense to be the *process* through which the differing contents of specialized fields or activities can be learned and applied in adult settings and situations.

Andragogical learning programs and projects are now beginning to be used extensively throughout the United States, particularly in business and industry and in training programs for social workers. Other applications are being made in community development and in penal institutions. In some cases andragogy has been introduced with considerable success into traditional pedagogical environments, and other applications have found their way into the armed services.

People have also asked how much individuals enjoy andragogical learning experiences. In my own experience reactions have been most positive and favorable, but the other day I received a list of reactions from another program with which I was in no way connected. This list came from a military setting and is printed verbatim without identification of names or places.

A Compilation of Participant Responses

- I feel much more confident as a counselor and problem solver.
- The workshop has provided the tools which would aid my development as a leader.
- I wish I had been exposed to (this workshop) at a much earlier stage, i.e. before commissioning.
- The (workshop) manual left some room for improvement. There's a lot of information in it for a one week workshop—but I will find the manual useful as a resource text in problem solving.
- I feel very privileged to be one of five officers to participate in the workshop.
- I came to the workshop looking primarily for adult education principles and how these principles can be used in my classes at OCS. Additionally, I wanted some skill, knowledge, and information that would assist me personally and professionally. I feel that those objectives were met.
- The workshop's emphasis on active listening and confrontation were especially helpful to me.
- The atmosphere was conducive to participation, and stating our desires at the first made it seem like we were being assisted instead of being taught.
- The two objectives that were covered best were in learning adult education and counseling skills. Impact in both cases was very positive.
- The techniques of counseling . . . are useful for anyone.
- My only criticism would be the workbook. It is difficult to understand.
- I think the course is very valid.
- This course gave me a whole new way to approach teaching.
- The use of video tape was not warranted by the teaching use it had . . . the time spent watching the TV was not worth the effort.
- The workshop began to have deep meaning when a problem known to us was the topic of the role play.
- The methods used in the seminar could be incorporated into the curriculum.
- I enjoyed the course and will recommend it to others.
- The climate of the seminar was open. . . . many things were shared by the group which in most groups would probably not have been said.
- I enjoyed the . . . video tape (positive and immediate feedback) and role playing to practice what had been taught.
- This has been one of the more valuable things I have done since coming to OCS.

If the above responses are typical, and I can assure you from my own experience that they are, it is reasonable to expect that adult learning approaches will be utilized more and more extensively by all types of organizations.

If the primary activity of management is problem finding and problem solving, then andragogy is a most useful and effective aid. If the verb *to manage* means only to plan (decide for others), direct (others), motivate (externally manipulate others), and control (force others into rigid and patterned responses), there is no need to consider whether or not managers need to be adult educators. However I have found very few managers to be blatantly authoritarian. What I have found is many managers who are genuinely perplexed by the complexities of maintaining effective interpersonal relationships while trying to accomplish difficult tasks in a limited time frame. Effective performance depends, therefore, on the manager's ability to bring problems to the surface where they can be recognized and dealt with appropriately. This drawing forth, or *educing*, of problems inherent in situations and organizational components is the bedrock task of an effective manager. The most effective systems of management, therefore, are most likely those built upon a solid framework of adult education theory.