

DOCUMENT RESUME

ED 290 195

CS 506 038

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TITLE Administrative Roles in Helping Faculty Adapt to Adult Learners.
PUB DATE Nov 87
NOTE 46p.; Paper presented at the Annual Meeting of the Speech Communication Association (73rd, Boston, MA, November 5-8, 1987).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Administrative Problems; *Administrator Role; *Adult Students; Aging Education; *Andragogy; Cognitive Style; College Faculty; Communication Research; Higher Education; *Nontraditional Students; Program Development; Speech Communication; Teacher Administrator Relationship; *Teacher Attitudes; Teacher Role; Teacher Student Relationship

ABSTRACT

Since the number of adult students engaging in higher education activities is growing rapidly and is expected to continue to climb, this paper is intended to help administrators develop a perspective from which to view adult learners on college campuses and craft programs to help faculty work more effectively with adult students. The first section of the paper discusses the ideal learning environment for adults, while the second section presents a profile of the adult student with respect to (1) social differences; (2) life experience; (3) motivations; (4) academic behaviors; (5) problems faced by returning adults; and (6) life cycles. Basic perspectives on andragogy and pedagogy are the focus of the paper's third section, which includes discussions of pedagogical and andragogical assumptions and their implications for program design. The fourth section deals with adult development, and the fifth is concerned with research findings on how adult/pre-adult students react to lecture versus other methods of instruction, faculty attitudes, and andragogical assumptions. The sixth section contains ideas for improving the learning environment for adults, and concentrates on developing structures to aid students and faculty and helping faculty to learn and experiment. The concluding section notes that the andragogical process shifts the focus from transmitting content to the process of helping students learn. This is followed by 76 references, and an appendix containing the text of an educational orientation questionnaire for use in determining attitudes of college faculty and administration. (SKC)

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ADMINISTRATIVE ROLES IN HELPING
FACULTY ADAPT TO ADULT LEARNERS

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Presented to

Speech Communication Association
Seventy-third Annual Conference

Boston, Massachusetts
November 5-8, 1987

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CONTENTS

Introduction.....	1
Learning Environment for Adults.....	1
Profile of the Adult Student.....	2
Social Differences.....	2
Life Experience.....	3
Motivations.....	3
Academic Behaviors.....	3
Problems Faced by Returning Adults.....	5
Life Cycles.....	5
Andragogy and Pedagogy: Basic Perspectives.....	6
Pedagogical Assumptions.....	9
Andragogical Assumptions.....	10
Implications for Program Design.....	10
Adult Development.....	11
Research Findings: Adult/Pre-Adult Students.....	12
Lecture vs Other Methods.....	12
Faculty Attitudes.....	13
Andragogical Assumptions.....	15
Improving Learning Environment for Adults.....	16
General Thoughts.....	17
Developing Structures to Aid Students.....	19
Developing Structures to Aid Faculty.....	20
Helping Faculty Learn	21
Helping Faculty Experiment.....	23
Conclusion.....	27
References.....	31
APPENDIX A: EDUCATIONAL ORIENTATION QUESTIONNAIRE	

INTRODUCTION

Until fairly recently, it was necessary to introduce a paper like this with a fairly substantial section outlining the need for those in higher education to be concerned with adults as learners. That is no longer the case. Anyone who now does not realize the significant impact of adults returning to college has simply been asleep at the wheel.

The number of adults engaging in some type of formal educational activity increased dramatically between 1969 and 1981 going from twelve million to more than twenty million (Kelly, 1986). The percentage of adult students in higher education has grown from less than 25% to about 43% in the last decade alone (Daloz, 1986). It now seems likely that by the turn of the century, approximately half of all students in higher education will be classed as "adult learners" (Frankel and Gerald, 1982).

The upshot of this demographic change in student population is that we are becoming educators of adults--whether or not we intended to--simply because they are showing up in our classrooms in increasing numbers (Cooper, 1982, p. 32).

How, then, can faculty adapt to teaching the adults we increasingly find in our classrooms? Are there differences in the way adults learn and the way younger students learn? Are there some methods of working with adults which seem to be more effective than others? Are there any good reasons for us to believe that faculty need to relate differently to adult students than they do to traditional students? Is there anything which can be done to help faculty become more effective in teaching adult learners? What role can an administrator play in helping faculty adapt to adult students?

The purpose of this paper is to address this general issue with the goal of helping administrators develop a perspective from which to view adult learners on college campuses. With this perspective, an administrator can craft a program of faculty development which might prove useful in helping faculty learn to work more effectively with adult students.

THE LEARNING ENVIRONMENT FOR ADULT LEARNERS

Much of this paper, as indeed much of the available literature on the adult learner, focuses on how to improve the learning environment for adult learners. In this regard, there is a natural tendency to want to focus on specific teaching techniques or methods that have been shown to be most effective when dealing with adult learners. Should teachers of adults, for example, shun the lecture method and rely primarily instead on a discussion format? Is it better when teaching adults to include

the students in the decision making about content to be covered or to entirely prestructure the course material? Two reasons preclude this sort of "how to" approach. First, current research relating specific teaching methods to effectiveness of student learning is inconsistent and contradictory. Second,

...there is much more to improving the learning environment for returning students than improving teaching methods. Such factors as the adult learners themselves, their motivations, their problems, their developmental progress through the life span, and their adjustment to the aging process are important for instructors and administrators to consider...when attempting to improve the learning environment (Apps, 1981, p. 13).

PROFILE OF THE ADULT STUDENT

There are several obvious differences between returning adult students and traditional students beyond simple chronological age. Traditional students are

...primarily students, returning students are not. The returning student is first and foremost a business person, a homemaker, a parent of children, a community volunteer, a professional person, and a host of other roles that are a part of the lives of adults in our society. The role of student has to take its place among all the other roles (Apps, 1981, p. 41).

While it is true that traditional students are not distracted by many of the problems encountered by returning students, so the returning students are not distracted by many of the problems encountered by the traditional students.

Young people growing up question whether they will be able to get a job, will they be able to marry and make that kind of adjustment, will they really be able to take adult responsibilities. These returning students have already demonstrated that they can take adult responsibilities. They have some ideas of the sorts of jobs they want, although they are less certain of their ability to prepare for them because of having been out for a time. The older students worry often whether they can really get back into the harness and learn again, but they're much more straightforward in their goals and less ambivalent about what it is they want to accomplish while they're in college. (Apps, 1981, p. 41).

Social Differences

Women outnumber men among returning adult students by a large margin, often said to be 2 to 1. Adult students are

likely to have a working class background and to be first generation college students. The majority are married (approaching two thirds) and/or have children, implying a heavy responsibility to that portion of their lives. Adult students are more often employed fulltime than are traditional students and are more likely to be enrolled parttime (Kelly, 1986).

Life Experiences

Adults obviously bring with them a greater quantity of experience and a different qualitative set of experiences than traditional students. They are "...more diverse in terms of class, social backgrounds, culture, and occupational experience...(Apps, 1981, p. 41). Many writers (e.g., Kelly, 1986 and Apps, 1981) point out that this greater quantity of life experience can be both an asset and a liability for the adult learner. It can be positive (as when relating abstract concepts to practical activity), but can also be negative when long-held preconceptions or prejudices hinder the learning process.

Motivations

The majority of adult learners are very career and goal-oriented (Kelly, 1986) although there may be some reason to believe that this practical orientation toward career enhancement may take different forms at different ages of the adult student and may not be a primary motivator for those who are in upper middle-age groups (Weathersby, 1977).

For most adult students,

...motivation to learn is high; it is the force that drove them back to college....they're much more purposeful. They know what they want and, therefore, they're much more highly motivated. They are willing to give an extra effort because they have a goal.... Many traditional students are in school because their families expect them to be there, they haven't thought of any alternative to being in school, their friends are all in college, and so on. Many of them do not have a clear goal as to why they are there. For the returning student, the goal for being in school is usually much more clear, and thus the motivation is much more goal specific (Apps, 1981, p. 43).

Academic Behaviors

Apps (1981) points out that the two student populations differ in their orientations to learning. The traditional student is "highly influenced by formal education" while the returning student's learning approach "is more often influenced by informal education." This difference is to be expected, of course, since traditional students are "continuing students" who have spent much of their lives in a structured learning

environment. Adult students, on the other hand, have continued to learn but in very informal, sometimes unstructured, ways--as citizens involved in civic affairs, as parents, on the job, and so on. There may even be a predisposition on the part of both adult students and traditional students to feel that informal learning has not been learning at all; that unless it occurs in a classroom with a designated teacher present, it is not worthy of the name "learning."

Many have pointed out that traditional students, being the "professional students" that they are, are more clearly in command of the seemingly endless details of campus administrivia (registration procedures, general campus routine, etc.). The traditional students know how to work the system, they know how to use the library, they have contacts for examination files and course notes, they are part of a network which allows them information on which instructors to take and which to avoid, etc. Such 'insider' information is rarely available to the adult student, at least not for a very long while if ever.

A difference in study skills and need for remediation often surfaces when adult students are compared to traditional students. Adult students sometimes find they need help in time management skills and in learning how to concentrate.

Most returning students come from work situations, whether it be the home, a business, or a factory, where interruption is usual and often. It is rare for most of these people to have an hour or two of uninterrupted time in their lives. The phone is ringing, children are crying for attention, a peer wants to talk, and so on. Being able to organize time for study and then being able to concentrate and not waste the time are problems for many returning students (Apps, 1981, p. 45).

Many adults have trouble reading when they return because they expect to read everything on all reading lists and to read everything the same way (Apps, 1981, p. 45). Writing papers is often a traumatic experience for returning adults who have grown unaccustomed to the activity over time. On the positive side, it has been noted that adult students are more likely to say "I think" rather than to string together an endless list of references as the traditional student is likely to do (Apps, 1981, p. 46). Many returning adults have deficient quantitative skills. Apps estimates that most adult students, however, are able to overcome these deficiencies in a "relatively short period of time" (1981, p. 47).

The degree of seriousness of purpose differentiates the adult students from the traditional students in terms of academic behavior. Teachers of these students often point out that the adult learner is "not likely to mess around much; they want to get on with it" and that "they take things more seriously; in fact, they take things too seriously sometimes....They want to

get down to business...and they want their money's worth." They don't like to have class time wasted (Apps, 1981, p. 47).

The academic relationship of student to teacher is sometimes another difference between traditional and adult students, particularly if the teacher is very much younger than the student. The returning student may have climbed the social ladder in the community higher than the faculty member into whose hands the student is now placed. The relationship between the adult and the teacher may have to be defined differently between the settings of on-campus and off-campus. This is rarely the case with traditional students.

Problems Faced by Returning Students

Apps (1981) described four major categories of problems for many returning students: (1) unrealistic goals, (2) negative self-image, (3) social-familial problems, and (4) a sometimes excessively practical orientation.

Some returning students have a sense of being able to finish a degree program in an unrealistically short period of time. Others want to take excessive class loads to finish in as short a time as possible.

After years out of an academic setting, many returning students are anxious about being able to compete in that environment again. Frankel (1982) noted that the adult student not only has to face competing with younger students who are accustomed to the turf, but also with a "former self which has been educated to some extent and has forgotten much" (p. 1).

Returning students sometimes face large problems having to do with spouses and children and changing life styles. Many have to reduce their incomes drastically; marriages often cannot withstand the additional and new stresses; parents of both genders can come to feel considerable guilt about not spending enough time with the children.

While the adult student's typical emphasis on practicality can be viewed in positive terms, some returning students "...are in search of easy answers, answers that appear to be practical and allow them to move forward with their studies (Apps, 1981, p. 51).

Life Cycles

Critical life events (divorce, death of spouse, loss of a child, entry into higher levels of employment, loss of employment, etc.) tend to be strong motivators for seeking answers through educational avenues (Kelly, 1986).

Adult students' reasons for enrolling in college are individual, but every one of them is here because they are expecting a formal schooling experience to effect some important change in their lives (Cooper, 1982, p. 36).

Given these differences between traditional and nontraditional adult students and the fact of their increasing numbers on college campuses, it is not surprising that much attention has been paid to the adult learner in recent years. Much of that attention has been in the form of attempting to fashion some explanations of how to deal with these people. The study of the adult learner has come to be called Andragogy.

ANDRAGOGY AND PEDAGOGY: BASIC PERSPECTIVES

Despite the relatively recent flurry of interest in adults as learners, the concern for teaching adults has a respectfully long history in the U.S. Early pioneers in the field of adult education included Eduard C. Lindeman who, in 1926, wrote The Meaning of Adult Education and Dorothy Hewitt and Kirtley Mather, Adult Education: A Dynamic for Democracy (1937). Building on concepts and ideas developed by these and other early writers, Malcolm Knowles began formulating his notions about adults as learners in the 1950s. By 1968, Knowles had begun to characterize Pedagogy as the "art and science of teaching children" and had begun using the term Andragogy (borrowed from European educators) as a

...parallel to pedagogy, to provide a label for the growing body of knowledge and technology in regard to adult learning....[Andragogy] was being defined as 'the art and science of helping adults learn' (Knowles, 1984b, p. 6).

Andragogy is based on several presumed differences in the way adults learn and the way children learn: (a) as one matures, the self-concept moves from dependency to self-direction; (b) maturity builds a cumulative reservoir of experience that becomes an increasing resource for learning; (c) as one matures, readiness to learn is increasingly oriented toward one's social roles; and (d) as one matures, one's orientation toward learning becomes less subject-centered and increasingly problem-centered (Knowles, 1970, p. 39).

The concept of andragogy found fertile ground in adult education circles and quickly became popular. As the movement gained momentum, it also gained detractors. Davenport and Davenport (1985) chronicled what they called the "Andragogy Debate." Some (Houle, 1972; London, 1973; Elias, 1979) rejected the view that the acknowledged differences between adults and children demanded or warranted different theories about learning and emphasized the "unity of education, as opposed to a

dichotomous perspective" (Davenport and Davenport, p. 153). This perspective tended to see andragogy not as a theory, but a set of techniques which simply put a finer edge on our understanding of the general process of education. Others (McKenzie, 1977; Carlson, 1980) argued on behalf of andragogy as an important vehicle through which to develop an independent theory of adult education and learning. Knowles acknowledged that he had erred in titling his 1970 work, The Modern Practice of Adult Education: Andragogy Versus Pedagogy, and changed the subtitle of the 1979 revision to "From Pedagogy to Andragogy."

Still others have argued that if age is an important variable in human learning, perhaps we should devise a separate theoretical perspective for the very much older student and call it "Geragogy" (Lebel, 1978) or "Eldergogy" (Yeo, 1982). Knudson (1979) preferred "Humanagogy" and would have combined all we know about learning at different ages under one title. Others thought this all might get out of hand and

...asked if existential differences applied to other groups (e.g., racial, sexual, ethnic). For example, if Caucasians differed existentially from Negroes, would that justify Caucasiology versus Negrogogy? Would sex educators be classified under heterogogy, homogogy, or biagogy? (Davenport and Davenport, 1985, p. 156)

Whether andragogy is a theory, a set of techniques or assumptions, or simply a convenient way to distinguish a perspective, the andragogical model should be one with which teachers of communication might be expected to resound intuitively. It is based on valuing

...the learner's life experiences and need to be self-directed, draws the learner into a commitment to learn by responding to the learner's needs, and involves the learner in directing content and process (Knowles, 1984b, p. x).

In a familiar kind of way, conceiving the differences between pedagogy and androgogy is to some degree analogous to the difference between viewing the process of human communication as a one-way message in a sender-to-receiver event and viewing the process as a dynamic transaction between persons. "The pedagogical model assumes that the teacher is in complete control of the learning situation, while the andragogical model views the teacher as a manager or facilitator of learning" (Sisco, 1987, p. 18).

Andragogy is the classroom heir to the thinking which spawned concepts such as Carl Rogers' Client-Centered therapy. It does seem less a theory than a way of framing thoughts about the learning/teaching transaction. A colleague of mine who teaches adult education said recently that andragogy "will have served its purpose when we can stop using the term" (Day, 1987).

Those who hope to find in andragogy a concrete set of techniques and prescriptions for the fail-safe, most effective classroom methods for teaching adults will be disappointed. In the same way that no one best technique for teaching younger students can be derived from the literature on pedagogy, no one best technique for teaching adults can be derived from the literature on andragogy. Rather, there is a direction and a perspective.

In the long run, it does not appear fruitful to compare andragogical concepts to pedagogical concepts as opposing entities, as one versus the other. To do so leads one in the direction of believing that there must be some age at which one ought to teach in a pedagogical fashion and another age at which one ought to switch into an andragogical gear. Such thinking may lead to the assumption that there is one best method (or a few best methods) for teaching youngsters and another best method (or a few best methods) for teaching adults. That does not seem to be the case. Knowles has said:

...I am not saying that pedagogy is for children and andragogy is for adults, since some pedagogical assumptions are realistic for adults in some situations and some andragogical assumptions are realistic for children in some situations. And I am certainly not saying that pedagogy is bad and andragogy is good; each is appropriate given the relevant assumptions (Knowles, 1979, p. 52).

I feel more comfortable thinking of [andragogy] as a system of concepts that, in fact, incorporates pedagogy rather than opposing it... (Knowles, 1984b, p. 8).

Cross (1981) has noted:

Whether andragogy can serve as the foundation for a unifying theory of adult education remains to be seen. At the very least, it identifies some characteristics of adult learners that deserve attention. It has been far more successful than most theory in getting the attention of practitioners, and it has been moderately successful in sparking debate; it has not been especially successful, however, in stimulating research to test the assumptions. Most important, perhaps, the visibility of andragogy has heightened awareness of the need for answers to three major questions: (1) Is it useful to distinguish the learning needs of adults from those of children? If so, are we talking about dichotomous differences or continuous differences? Or both? (2) What are we really seeking: Theories of learning? Theories of teaching? Both? (3) Do we have or can we develop, an initial framework on which successive generations of scholars can build? Does andragogy lead to researchable questions that will advance knowledge in

adult education? (pp. 227-228)

It does seem useful, however, to contrast the two sets of concepts in terms of their basic assumptions. These assumptions, in turn, give rise to role definitions of "teacher" and "student" and to speculations of what ought to occur during the process of teaching/learning.

Pedagogical Assumptions

Most of us have grown up within a pedagogical framework in our own formal education.

In fact, it is the only way of thinking about education that most of us know, for it has dominated all of education--even adult education until recently--since schools started being organized in the seventh century (Knowles, 1984b, p.8).

According to Knowles, the basic assumptions made about learning and learners inherent in the pedagogical model are:

1. The learner is a dependent person. This model assigns to the teacher all responsibility for deciding what should be learned, how it should be learned, when it should be learned, and deciding whether it has been learned. The student's role is simply to follow submissively in the teacher's direction.
2. The foundation of the pedagogical method lies in the transmission of information. It is assumed that the student's experience is of little value to the learning process and that what is of value is the experience of the teacher and the information which is chosen to be transmitted.
3. Readiness to learn is seen largely as a function of chronological development.
4. Students are presumed to have a subject-centered orientation to learning. That is, they see learning as a process of acquiring subject matter content. Therefore, the content is organized into content units and is sequenced according to the logic of the subject matter.
5. Motivation to learn is seen as coming from external pressures (grades, parents/teachers, negative consequences, etc.).

Andragogical Assumptions

The basic assumptions made about learners and learning in the andragogical model are:

1. The learner is self-directing and has a need to be perceived and treated by others as being responsible for her/his own life.
2. Adult learners enter into the educational activity with both a greater volume of experience and a different quality of experience than do youthful learners. The richer the quality and volume of experience, the more that experience comes to define one's self-identity and sense of personhood.
3. Student readiness to learn is dependent upon a felt need to learn in order to perform more effectively in some aspect of his/her life. Readiness is often associated with the developmental tasks of moving from one stage of development to another, although any significant change in one's life circumstances might trigger the need to learn (divorce, job change, death of a friend or relative, etc.).
4. Adults have a problem-centered orientation to learning as a result of their readiness to learn being dependent upon a felt need.
5. Motivation to learn includes some external inducements (better job, more salary, etc.), but deepens to include a greater range of internal motivators (self-esteem, self-confidence, better quality of life, etc.).

Implications for Program Design

The essential difference between the two perspectives is that pedagogical methods are content oriented and andragogical methods are process oriented.

The Content model (pedagogy) addresses four basic questions:

1. What content needs to be covered?
2. How can this content be organized into manageable time units?
3. What is the most logical sequence in which to present these units?
4. What is (are) the most efficient means of transmitting this content?

The Process model (an pedagogy) addresses seven design elements:

1. The importance of climate setting, both physical and psychological climates.
 - a. Physical climate. Any physical setting which promotes or suggests one-way transmission is more pedagogical than andragogical (e.g., a lecture room with rows of chairs and a lectern).
 - b. Psychological Climate. Characteristics include:
 - 1.) A climate of mutual respect
 - 2.) A climate of collaborativeness
 - 3.) A climate of mutual trust
 - 4.) A climate of supportiveness
 - 5.) A climate of openness and authenticity
 - 6.) A climate of pleasure
 - 7.) A climate of humanness
2. Involving learners in mutual planning
3. Involving participants in diagnosing their own needs.
4. Involving learners in formulating their learning objectives.
5. Involving learners in designing learning plans.
6. Helping learners carry out their learning plans.
7. Involving learners in evaluating their learning.

ADULT DEVELOPMENT

At the heart of the current concern with adults as learners is the fairly recent interest in describing the major life "tasks" which form the basis for the study of adult developmental patterns.

Quite obviously, the literature on developmental psychology is vast. In the last 25 years, that literature has grown considerably with regard to adult lifespan development and descriptive accounts of adult life cycles.

A description of that literature is very much beyond the scope of this paper and will not be reviewed here in any depth. Suffice it to say that the major contribution of adult developmental theorists to the study of adult learning lies in deepening the argument that human beings do not stop developing and changing once they have reached adulthood. Many different conceptual schemes have been presented to explain and describe this development. Jung was one of the first to attempt to divide adulthood into stages. For Jung, adulthood could be understood as consisting of two parts: early adulthood and late

adulthood with the approximate age of 40 as the transition period with each segment having its own characteristics. Others have divided and subdivided adulthood many different ways and have described many different phases or stages through which adults pass and during which certain life tasks are accomplished. (See, for example, Erikson, 1963; Bromley, 1966; Parry, 1968; Havighurst, 1972; Sheehy, 1976; Levinson, 1978; and Kegan, 1982.)

What seems important about developmental theory for the present discussion is not so much the specific details of a given theoretical scheme as much as the recognition of movement, of change, of development throughout the life cycle. If life is, indeed, more complex than is suggested by the mechanistic metaphor of a watch running down (Daloz, 1986), then education and educators have much to learn about how most effectively to deal with these life changes. It is the function of teaching to facilitate in significant ways this life development--however it is conceptualized. It is the function of teachers to be there for adult students as mentors, not as simple dispensers of information.

It is reasonable to expect that if adults continue to develop throughout life and thus are at different points in their lives than are younger students, then at least some of the differences between them as learners should be significant enough to warrant different teaching methods and approaches to the two populations. If so, it is also reasonable to expect that research should be able to isolate those differences and inform our instructional practice. What, then, does the research tell us about alternative instructional approaches to the adult student?

RESEARCH FINDINGS ON DIFFERENCES BETWEEN ADULTS AND YOUNGER LEARNERS

Unfortunately, the research is not very helpful yet. Backus (1984) reported a wide variety of studies which have attempted to sort out the value of pedagogical teaching strategies compared to andragogical teaching strategies with reference to student achievement and concluded that "...the research evidence is unconvincing for any particular strategy when applied at the university level..." (p. 13). Backus also noted that "very few studies have created experimental situations to test the validity of the andragogical premises set out by adult education theorists" (p. 12).

An overview of some current research relating to andragogical and pedagogical approaches confirms this conclusion.

Lecture vs Other Methods

Oddi (1983) reviewed studies of adults concerned with the effectiveness of the lecture method as compared with other

methods in regard to the acquisition of knowledge and to attitudes of student satisfaction. On both dependent factors, results were mixed. When comparing lecture with discussion methods, no significant differences emerged in two studies (Slaten, 1973; Whitehead, 1974) while in a third study the lecture method produced "marginally significantly better" results in cognitive gain than did the case/discussion method (Rothman, 1980). When lecture was compared to self-directed study, the findings were again mixed. One (MacNeil, 1967) indicated that lecture/discussion was more effective than the self-directed method, while another (Godorov, 1979) found no differences. Three other studies found no differences in cognitive gain when lecture alone was compared to self-directed learning (Redditt, 1973; LaLance, 1975; Witherell, 1979). On the other hand, three studies found the self-directed method to be superior to the lecture method (Himmel, 1972; Magnus, 1973; Baldwin, 1979).

With regard to student satisfaction indices, three studies showed students held more positive attitudes for self-directed methods than for lecture methods (Himmel, 1972; Kazerani, 1977; Baldwin, 1979). Two found no differences (MacNeil, 1967; Spring, 1979) and one found negative attitudes expressed for the self-directed method (Witherell, 1979).

Michler and Zippert (1987) found that "adjusting teaching methods to coincide with the learning preferences" of adult students resulted in significantly greater gains in achievement as measured by CLEP scores over those who were taught by the traditional lecture method for a course in social sciences.

Check (1984) found that the adult learner "prefers an eclectic theoretical approach to teaching and learning" and that "their favored mode of learning was through the lecture and discussion approach." This study did not find support for the often stated proposition that "adults prefer a great deal of freedom in choice of content...." Additionally, "the adult learner accepts the practice of testing. However, a large majority of the adults wanted a test that included both objective and subjective items."

Buchanan and Sherman (1981) found that adults may exhibit characteristics usually attributed to adult learners in theory (e.g., independent, self-directed, etc.) in areas where they have developed skills (i.e., in their chosen professions), yet may behave and conform much like a traditional student in areas where they have skill gaps.

Faculty Attitudes

Galerstein and Chandler (1982) investigated the attitudes of faculty at the University of Texas-Dallas concerning the adult learners in their classrooms and found that on the whole, the faculty did not change their teaching methods to accommodate the needs of those learners. Further, a large percentage of the

faculty thought there was no distinction between the quality of the adult learners and the traditional students. Neither did they take student goals into account in their plans for the class nor did they alter their teaching methods for the nontraditional students who were integrated into their classes. No actual observations were made to confirm or disconfirm these faculty views.

Beder and Darkenwald (1982) attempted to discover if faculty do tend to teach adults differently than pre-adults. They surveyed teachers from elementary through college level and found that the teachers' perceptions of their instructional behavior were dependent upon their perceptions of the students' learning-related characteristics as outlined by theory and upon their beliefs that different age groups should be taught differently. The differences they found were greater for the extreme age ranges implying a continuum of differences rather than a sharp dichotomy for the age groupings of elementary school students, high school students, traditional college students, and nontraditional adult college students. They reported eight differences of teachers of adults when compared to teachers of pre-adults. Teachers of adults in this study reported:

1. Greater use of group discussion
2. Less time spent on classroom discipline
3. More varying of classroom teaching techniques
4. Less time spent on giving directions
5. More relating of class material to life experiences
6. Less tight structuring of instructional activities
7. More adjustments made in instructional content in response to student feedback
8. Less emotional support provided to individual students

Extending this inquiry, Darkenwald (1982) performed additional analyses on these data and found two orthogonal factors emerging which were labeled "Responsiveness" and "Control." These factors appeared to be similar to the "Teacher-Centered" (Pedagogical) and "Learner-Centered" (Andragogical) concepts offered in the literature as well as to factors identified earlier by other researchers as stable factors in differentiating teacher behavior--"Traditional" (or Task-oriented) and "Progressive" (or Person-oriented) teacher behaviors (Kerlinger and Pedhazur, 1968).

Gorham (1985) also found that teachers claimed to alter their teaching behaviors to accommodate learners based on the particular age group they were teaching. In going beyond this self-reported perceptual data, however, she could find no evidence of actual behavioral changes or differences of teaching behavior when actual observations (using the Flanders interaction analysis system) were added to the research design. Gorham also found that teachers with more formal education in adult educational methods "...tended to be in the less responsive group of teachers..." (p. 207) and that the only teachers in her study "...who altered the environment in their adult classes were

women..." (p. 207). It is worth noting that Gorham suggested that "...the most cogent prescription might be to define responsive teaching techniques as the approved practice for educators at all levels--including pre-adult education--rather than on developing a separate theory applicable only to adults" (p. 207).

Andragogical Assumptions

Lindsey (1984) offered a broad review of relevant research in gauging teacher effectiveness in adult education and concluded that the literature reveals

...disappointing inconsistent, and often contradictory results from seeing single, isolated...teaching behaviors that correlate highly with student achievement (p. 4).

Lindsey also noted that research in adult education "is typified by [qualitative] descriptive case studies...and [quantitative] survey studies" (p. 4). Tellingly, Lindsey pointed out, as have many others¹, that effort after effort to derive a list of the essential skills, desirable personality characteristics, and the fundamental knowledge needed for teachers of adults has resulted in a broad characterization which does not

differ markedly from fundamental characteristics for effective instructors of children and adolescents....This should be expected, however, since these categories have been condensed--frequently through the application of factor analysis--into necessarily broad concepts (p. 3).

Knox (1980, p. 94) gave such a list as referred to by Lindsey. Knox listed five desirable personality factors for adult educators which are mentioned repeatedly throughout the literature although sometimes with different names: Self-Confidence, Informality, Enthusiasm, Responsiveness, and Creativity.

Conti (1985) found that a Teacher-Centered approach was more effective with adult students in a GED program than a Learner-Centered approach, but found the reverse to be true for an Adult Basic Education/English as a Second Language program. Conti speculated that these results might possibly be due to the difference in classroom task. That is, in a more highly structured, goal-oriented environment (such as the GED class) the Teacher-Centered (or pedagogical) approach may be more relevant and effective regardless of student age.

¹ See, for example, Arreola (1983); Darling-Hammond, Wise, and Pease (1983); Cohen (1981); Schaloch (1979); McDonald and Elias (1976); Shavelson and Dempsey-Atwood (1976); Kulik and McKeachie (1975).

Rosenblum and Darkenwald (1983) found no differences between experimental and control groups when testing for the effects of adult learner participation in collaborative planning of a course on either achievement or satisfaction variables.

Fox (1984) found no significant relationship between learning style of respondent as measured by the Learning Style Inventory (LSI) and scores on evaluative statements or preferences for lecture or small group methods.

Holmes (1980) found a positive relationship between educators identified as highly andragogical and their interpersonal behaviors. Andragogical orientation was measured by Hadley's Educational Orientation Questionnaire [EOQ] (1975) and their interpersonal behaviors were measured by the Fundamental Interpersonal Relations Orientation scale (FIRO-B). Highly andragogical instructors loaded high on FIRO-B's "Expressed Affection" factor. However, no relationship was found between interpersonal behavior and those instructors identified as pedagogical.

IMPROVING THE LEARNING ENVIRONMENT FOR ADULT STUDENTS

Communication educators should not be too surprised to learn that the research reported here does not give us much direction in terms of specific "how-to" tips or "the ten most effective techniques to use" when dealing with adult students. It shouldn't surprise us because the process of human interaction is one of the most complex situations we humans encounter. Practically every variable related to the quality of being human is called into play every time we interact with each other and the interaction we call by the name of "Teaching" is certainly no exception. To learn that we have not yet sorted out all the variables involved in teaching adults should not surprise us any more than to learn that we have not yet sorted out all the important variables which constitute effective communication in general.

The situation is muddled even more because exemplary teachers of adult learners have been identified and observed without revealing any one specific classroom technique which can be shown to be more effective than another. That is, some teachers who rely almost exclusively upon lecturing have been identified as excellent teachers of adults while yet others, identified as equally effective, rely entirely or mainly upon group discussion or some other particular classroom approach. (See Heath, 1980 and Daloz, 1986 for an expansion on this theme.) The specific techniques used appear to be less important than an overall orientation based on many, if not all, of the assumptions articulated in the andragogical model.

The teaching/learning situation is but one specific communicative context in which we ask how teachers can become

more effective as facilitators of that particular transaction in the same way we ask how we can become more effective as facilitators of communication in any other context. Much work lies yet ahead.

Lacking specific direction, then, for effective classroom techniques from the empirical literature, what direction can be derived from the theoretical and descriptive literature to enhance the learning environment for the adult learner? Here are a few things we can think about and can do now.

General Thoughts

Andragogy represents an ideal to work toward in the effort to maximize the potential for learning for each individual student. It is not likely that any of us can be fully learner-centered, but there are ways in which we can strive to make our instructional settings more andragogical when appropriate. Remember that the concepts of pedagogy and andragogy are not necessarily antithetical for a given group of learners. It is not "Pedagogy vs. Andragogy." Rather, some situational factors need to be accounted for in determining the appropriateness of the approach in any given setting. For example, given a high level of uncertainty for many new returning adult students, it may be appropriate to use some pedagogical approaches at first (high degree of structure, content orientation, etc.) and then move into a more andragogical mode as the anxiety levels settle down and the adult can be more effectively drawn into taking responsibility for her/his own learning.

The first thing to remember is that

...to effectively teach adults, we must respect their maturity, broader experiences, and higher degrees of motivation. It means knowing why they are taking your course, adjusting at times to their personal situations and nurturing those who are new at being a college student (Cooper, 1982).

A second point to remember is that the type of teacher characterized as "Responsive" (i.e., an emphasis on the person as a learner rather than on content, flexibility in classroom tasks and methods, encouragement of participatory learning, "democratic" atmosphere, etc.) may be the most effective type of teacher for any population--regardless of age (see Darkenwald, 1982 for a discussion of this concept).

...the most cogent prescription might be to define responsive teaching techniques as the approved practice for educators at all levels, focusing on lifelong learning--including pre-adult education--rather than on developing a separate theory applicable only to adults (Gorham, 1985).

A third point to remember is: Learners first/Content second. Increase the amount of shared responsibility with students by finding ways to actively involve them in the process of planning to learn (setting goals for themselves), learning (implementing their learning plans), and evaluating their own learning.

The following characteristics of adult students as compared to traditional students seem important to consider in devising an instructional approach.²

Characteristics of Adult Learners Implying Strengths

- Broad diversity of backgrounds and rich experiences
- More accustomed to self-directed behavior
- Approach learning with strong sense of responsibility and motivation
- Need to feel time is well-spent and that material is relevant and practical

Characteristics of Adult Learners Implying Weaknesses

- Uneasiness and possible anxiety from long absence from classroom
- More competing demands on time leading to preoccupation with outside responsibilities (jobs, families, civic duties, etc.)
- Possible unrealistic sense of timeframes for goal achievement
- Unfamiliarity and possible frustration with educational administtrivia (registration procedures, etc.)
- Some basic skill levels may be low (quantitative, writing, study skills)

Given an andragogical orientation, then, administrators can help create a more effective learning environment for adult students in two major ways: (1) By developing administrative structures which help adult students overcome some of the common difficulties facing them in returning to the college environment; and (2) By facilitating faculty efforts to become more effective teachers of adults in structuring a learning environment for faculty to (a) Learn more about adult students and (b) Aid faculty in developing more appropriate classroom approaches to this population.

² Some of the specific characteristics listed here were adapted from Cooper (1982), although the categorization of them as "Strengths" or "Weaknesses" was not implied by Cooper's discussion.

Developing Administrative Structures to Aid Students

The traditional college or university administrative and service structure has evolved over the years in terms of meeting the needs and demands of its traditional students. Only in very recent history have many institutions begun trying to accommodate the adult student. As faculty, we have not had to think much about (and certainly not worry much about) the administrative support services designed to help the traditionally aged learner. If students have a problem, there usually exists somewhere on campus an office providing a service to help. Faculty responsibility at the departmental level has tended to be just knowing about the services available and referring students to that office. The newer adult students have brought different problems with them and many times existing student services simply do not do the job for them. At least for the time being, many of us may have to help fill in the gaps for our adult students at the departmental level or at least to help coordinate existing services to the benefit of our adult students.

Recognizing the time problems of many adult learners, it may be advisable to reschedule some classes into nontraditional timeframes (evenings, weekends, two-three hour blocks, etc.) or locations (for example, at an industrial plant or an office complex where a concentration of students might work) (Miller, 1987).

To help counter some of the problems described as common to many adult learners (anxieties about returning to college, lack of a student network, unrealistic expectations, etc.), it might be helpful to develop some sort of peer counselor program in the department. This approach could help newly enrolled adults develop some immediate connections with other adults in the department and facilitate the development of a support network which otherwise might be missing. Providing a general orientation to the study of communication; facilitating important interaction with other adults who have similar situations; developing a system for organizing student feedback; and even tutoring could be positive results of such a program.

To aid students in overcoming some of the more common problems associated with low skill levels, a department might organize the appropriate student services personnel to provide your adult students with specific services such as reading skills classes, quantitative skills classes, and study skills classes. It is not safe to assume that because these services already exist on your campus, the adults in your program either know about them or feel comfortable in availing themselves of the services without some encouragement. Some adult students may feel uneasy or even ashamed about seeking out these services. Simply granting them "permission" to feel good about using these services may well make the difference between success and failure for some of your adult students. Some have found an "intake orientation session" useful in helping adult students diagnose themselves and their skill levels. See Frankel (1981) for a

description of one such "Study Habits Assessments" workshop.

Developing Administrative Structures to Aid Faculty

One suggestion for an administrator is to do nothing. This would be appropriate if all your faculty are already excellent in their approaches to adult students. Of course, one would want some evidence that (1) the faculty are indeed already responding to the needs of the adult learners and (2) that there is no need or benefit to be derived from additional effort expended in that direction.

Assuming, however, that we can all continue to grow professionally--including in our teaching effectiveness, an administrator would do well to focus faculty on the need for special attention to be paid to adult students and to facilitate faculty efforts in that direction. On the whole, there is a need to encourage and facilitate faculty to undertake the study of adult learners and to experiment with classroom techniques.

Since there is probably no good reason to assume that the administrator in question here is any more (or less) capable of effectively teaching adults than her/his faculty, it might be wise for the administrator to participate in any faculty development effort which is devised.

Of course, it must be kept in mind that administrators should not expect to do anything to faculty, but rather should expect to work with faculty on this task. Overall, learning how to work more effectively with adult learners hinges upon the quality of the time faculty spend thinking about and discussing:

- The nature of the teaching/learning transaction itself
- The variables presumed to be associated with adults as learners relative to younger students as learners (i.e., comparing and contrasting the principles of pedagogy and andragogy)
- Techniques which faculty members have found useful in altering their teaching approaches to move in the direction of andragogical ideals. This can be especially useful when departmental faculty share those ideas with each other whether formally or informally.

The effort to assist faculty to think about these topics could be organized into a formal faculty development program or could be facilitated less formally by departmental discussions, reading lists, etc. The impact upon faculty may be greater, however, if an administrator stimulates interest in the topic by structuring a faculty development program for those who would like to pursue the topic. In fact, most faculty are inherently interested in becoming more effective teachers. For those who are not interested, voluntary participation in a faculty development

effort is not likely anyway.

If a formal faculty development program is thought desirable, it might be useful to organize the effort at an institutional or divisional level. Since the study of adults as learners is not based on specific disciplinary content, many different disciplines could be represented without harming the development effort. Perhaps the Adult Education Division or Department on your campus can be involved as facilitators in this effort. Lacking that, there are some packaged faculty development programs available which might be useful (e.g., Cooper, 1982).

Helping Faculty Learn more about Adults as Learners

Whether the faculty development program is organized formally or informally, some or all of the following thoughts might be found useful.

Reinforce with the faculty a thought that all of us know, but sometimes tend to forget--teaching is not something which is done to students, but rather is done with students.

Provide an opportunity for the faculty to assess themselves as "Content-Oriented" (i.e., pedagogical) or "Student-Oriented" (i.e., andragogical) by using an instrument such as Hadley's Educational Orientation Questionnaire [EOQ] (1975) as a beginning point in thinking about one's own teaching and its relation to adult students. (NOTE: a copy of the EOQ is included in this paper as APPENDIX A.)

Many of the references listed in this paper would be good places to start in developing a list of basic readings on adult learners. Almost any of the major works in the area will provide a good beginning point for someone unfamiliar with the literature, but a few might be pointed out as especially good. For a basic introduction to andragogy, see Knowles (1980), Cross (1981), Knowles (1984a), Davenport and Davenport (1985), and Kelly (1986). For a view of how these principles can find their way into actual practice, see Apps (1981), Knowles (1984b), Brookfield (1985), and Brookfield (1986). My personal favorite as both a general introduction to helping adults learn as well as specific discussions concerning the implications of developmental theory is Daloz (1986). Daloz's book, Effective Teaching and Mentoring, is not only highly readable but is remarkably sensitive to the essential humanity involved in the teaching/learning enterprise.

Administrators can help faculty move in the directions implied by andragogical principles by emphasizing that adults are more than just older than traditional students. They tend to arrive in our classrooms with different characteristics which need to be accounted for in order most effectively to work with them. The following points need to be made:

Adult learners tend to be more self-directed than pre-adults. This implies the learner's capability and responsibility for helping to decide what should be learned, how it should be learned, and whether it was learned. That is, students should be allowed to share at least some of the responsibility for the teaching/learning process by involving them in mutual planning, self-diagnosis, formulating their learning objectives, their learning plans, and evaluating to some degree their own learning.

Adult learners bring with them a quantity and quality of experience which can be a rich resource for both the instructor and the student. This implies the necessity for faculty to get to know not only the experience brought to the class by the students, but also the meaning of that experience for the student in order to help him/her use it to advantage in learning the particular content of the course.

Adult learners tend to be more ready to learn than traditional students as a result of developmental issues or changes in their lives which have occurred. This implies less need for instructors to "invent" motivational devices than to discover what potent motivators already exist for their adult learners. Readiness to learn for adults is more likely to be based on perceived problems in their lives as opposed to traditional students who are more willing to be a "sponge" ready to soak up whatever information is offered.

Adult learners tend to be more problem-focused as a result of their readiness to learn being dependent upon a felt need. Learning tends to be defined in terms of being able to apply the information in some meaningful way within the context of the learner's life or cognitive structure. Younger learners tend to perceive learning as just knowing the information. This implies the necessity for an instructor to help the learner build connections between the motivations which already exist and the content being dealt with. This also challenges the teacher to attempt to arrange the content in ways which correspond to the learner's logic, rather than to the logic of the content itself.

Adult learners tend to want to discover the applications for the content under consideration, particularly as those applications might apply to the issues which brought them to the classroom in the first place. This can lead to incorporating some learning experiences into the classroom setting which go quite beyond that restrictive environment, such as internships or practical experiences on-site in area businesses and industry.

The importance of psychological and physical climate setting cannot be overlooked. In fact, Knowles (1984b) feels psychological climate may be the most important factor of all to consider in developing an andragogical approach to learning.

Although not dealt with in this paper, there are some aspects of the aging process which may be important to the learning environment. Apps (1981, pp. 83 ff) notes that while the ability to learn does not seem to be highly affected by the aging process, the "...ability to function does change with age." Apps presents a good overview of some physiological aspects with which teachers may need to deal.

Aiding Faculty to Experiment with Classroom Approaches

It does seem important to establish a cognitive foundation for a faculty development effort as a springboard for faculty discussion and understanding of adult learners. However, developing only written materials or presenting information about adult learners, no matter how well-done or structured, is not likely to do the complete job in helping faculty adapt to teaching adults in their classrooms. Some structure will need to be developed which puts some of this theoretical orientation to work. After all, faculty placed in this role are simply adult learners themselves and will need to see a practical application for all this material.

A more effective way to improve teaching performance is to help teachers identify aspects of their teaching role for which they have questions to be answered, problems to be solved, and opportunities to be pursued. The staff development activity then includes exploration of relevant knowledge and experience elsewhere and practice applying questions and solutions to tasks important in their own teaching....a one-shot staff development effort is likely to have little impact on performance. Improvement results from teacher persistence in a sequence of learning activities. Such persistence is more likely if teachers are committed to the importance and feasibility of staff development activities and if they are self-directed in their learning (Knox, 1980, p. 74).

Encourage faculty to improve their effectiveness by focusing on

...manageable aspects [of the teaching/learning environment] with an amount of time and effort they consider reasonable. Their persistence in efforts to improve their performance reflects learning something they can apply in their specific circumstances (Knox, 1980, p.73).

Helping faculty deal more effectively with adult students by experimenting with alternative classroom approaches may be as much a logistical matter as anything else. The idea is to help faculty develop a structure in which to share ideas and techniques they've tried and to hear other ideas from colleagues. While the benefits of this sort of sharing over a cup of coffee in the lunchroom is much touted (and perhaps to be desired), the truth is it doesn't happen as much as we might wish it did. Therefore, devising a way to formalize this sharing activity while not detracting from its spontaneity too much becomes a test for the ingenuity of the administrator. One idea which comes quickly to mind is to add a bit of time to a regular faculty meeting and devote that time to discussing new things faculty have tried--e.g., development of internships or project sites at a local business or industry where adult students can carry out class projects in a real setting. It may be more fruitful, though, to remove this activity from the sometimes not very collegial atmosphere of departmental business meetings.

In an attempt to offer some guidelines for classroom behavior, Cooper (1992) offers the following suggestions for faculty to try:

Learning Characteristics of Adults

Uneasiness and possible anxiety
about being back in the classroom:

Resistance to change due to set
ways of doing things

Unfamiliarity and possible
frustration with educational
administrivia

Adapting Content and Techniques to Meet Adults' Needs

Create an easy, informal,
friendly atmosphere. Ask
students what they feel
they can contribute to
class in terms of the
content or concepts to be
covered

Provide opportunities for
students to analyze situations
which can lead to inner
motivation to change rather
than outside pressure or
telling them to change.
Ask for "I do it this
way" contributions

De-emphasize these aspects
in the classroom when possible.
Streamline roll-taking,
record-keeping, and other
routine tasks unrelated to
learning.

Learning Characteristics of Adults

Preoccupation with outside responsibilities

Approach learning with a strong sense of responsibility

Bring a broad background of experience to the classroom

Need to feel that time is well spent and that material is relevant and practical

Adapting Content and Techniques to Meet Adults' Needs

Relate content to real-life problems. Use real-life situations and experiences in problem-solving; For example, ask students to choose topics to investigate which may be put to relatively immediate use in the learner's life.

Keep interest alive by making classes challenging and stimulating. Give students an opportunity to evaluate the class and their learning throughout and to make suggestions during the course. Be prepared to accept negative evaluations and to make changes during the course.

Use personal experiences of students in planning and teaching. Create opportunities for students to learn from each other.

Keep content and approach as practical as possible. Organize and prepare material well so class time is not wasted. Bring in practitioners if possible to reinforce the practical connections to course material.

The following suggestions can be used as starting points for faculty to consider in adjusting their instructional approach to accommodate the adult learner (adapted from Apps, 1981):

Learn to know your students. This means more than just knowing names. Get to know something about them--their interests, expectations, reasons for returning to school, etc. Learn to be a little more patient with them; slow down a bit and be better counselors for the adults. Learn how to accept them as adults. Find out as much as possible about them, then re-examine your course trying to determine where the course might be helpful and where it might present difficulties for them.

Use students' experiences as class content. "If there is one fundamental difference between teaching traditional college-age students and returning students, it is the need to take into account the older student's work and life experience as the beginning place for learning" (Apps, p. 147). Returning students often have practical information about course topics gained through work or life activities. Learn how to learn from the students.

When possible, tie theory to practice. Teachers need to maintain their connections to the "outside world." Sabbaticals spent in field settings might help accomplish this. Other possible suggestions include inviting community practitioners into the class; have students do field studies instead of library research papers; develop internships or other assignments in area businesses, industries, agencies or other settings; analyze actual organizational systems instead of hypothetical ones; etc.

Provide a climate conducive to learning. Foster a feeling of support for learning. Adopt an attitude of students first, subject matter second by starting with the students' interests, their problems, their experiences, and tie them into the subject matter.

Offer a variety of formats and techniques. Offer alternatives to the 50-minute class period held three times per week. Evening classes, weekend blocks, etc. might work better for the students without being detrimental to the subject matter. Vary the in-class teaching techniques by cutting down on the time that only the teacher talks. In addition to a standard lecture format, use discussions, question-answer periods, A-V, etc.

Provide and receive frequent feedback. Frequent and early feedback is important for returning adults. Traditional students know they can do the work; adult students may need the reassurance. In addition to formal feedback (grades on exams, term papers, class projects, etc.), it is important to provide informal feedback ("You're doing a good job"). For student to instructor feedback, provide opportunities such as formal end of course evaluations as well as encouraging informal evaluations throughout, perhaps by forming a "steering committee" to forward student comments and concerns during the course.

Help students find resources. A problem for many returning students is having enough time to spend in the library to access reserve readings, additional readings, etc. Students can be encouraged to bring material they find helpful to a central location.

Useful materials might also be found in community locations (job sites, agencies, etc.). Encourage students to use fellow students as resources and sources of information.

Be available to students for out of class contacts. It is important for the returning students to have plenty of access to faculty.

Recognize that adult learners are often poor test takers. Research indicates that adults tend to stress accuracy rather than speed, thus tend to not work fast even if an exam is timed. Reaction time slows with age and, even though the adult may not have lost any capacity to respond to test questions, reaction times may be slowed. Because of greater experience, adults may read into test questions nuances which were not intended.

It almost seems less important what faculty do and discuss regarding techniques they have tried with their adult students than whether they do something and then have an opportunity to discuss and process their experiences. Faculty might even become truly interested in teaching again and regain some of that fire we usually have as new teachers but which so often diminishes over time under the crush of committees, research projects, and routine.

CONCLUSION

For most teachers of communication, the andragogical orientation should feel comfortable in its analogy to the study of human interaction from a process orientation. Much of the discussion about andragogy seems to point to the necessity of becoming better analyzers of and adapters to our audiences of learners and to pay better attention to crafting the interaction to achieve a more positive effect.

Any faculty development program which might be undertaken to improve faculty effectiveness in teaching adult students is likely to pay dividends not only for the adults, but for the traditional students as well. It is difficult for me to see how any teacher who moves in the directions implied by the andragogical model would not also become more effective with traditional college students as well. The end result of andragogy is to focus on the learner and his/her learning needs, on the process of the learning/teaching transaction, and on the learner as a growing person in relation to particular subject matter. In effect, it simply moves the primary focus from transmitting the content to the process of helping students learn.

I began this paper believing my task straightforward and clear: List and itemize what we think we know about adult developmental theory, distill the most common needs of adults in an educational setting and superimpose a useful schematic of things a communication teacher ought to know and to do in order to adapt to teaching the adults we increasingly find in our campus classrooms.

I wanted to find a well-developed body of research which indicated some specific techniques, some specific "things" we could do which would make us more effective teachers of adults-- I should have known better. The issues involved in determining what is most effective in teaching adults are simply subsets of the general issues involved in determining what is most effective in communicating with other human beings. And we haven't quite got that all figured out yet.

Somewhere along the way, I came to believe that the important question of how to adapt to adult learners has to do with the central issue of how teachers choose to define their relationships and duties with their students.

What I found instead of a well-developed body of research pointing toward effective means of teaching adults was a great volume of literature which seemed to be speaking to the needs of adult students, but which, in fact, seemed to me to be speaking in a more basic way to the broader question of what constitutes effective teaching--period. I found an underlying theme in many of the discussions which implied the necessity of understanding the functional relationship of a teacher to his/her students as that of a mentor, a facilitator of learning, rather than a dispenser of information. I found discussion after discussion seemingly concluding that if one cares about one's students as learners, the techniques will be invented to fit the situation, to accommodate their needs--whether of younger or older students. I found more art than science.

I'm inclined to agree with Daloz (1986) when he says

Education ...is not a bunch of tricks or even a bundle of knowledge. Education is something we neither "give" nor "do" to our students. Rather it is a way we stand in relation to them (p. 40)

and when he suggests that

The question for us as teachers is how we influence our students, not whether. It is a question about a relationship: Where are our students going, and who are we for them in their journey? (p. 3)

Using the extraordinary journey told in Dante's Divine Comedy as an extended metaphor for the teaching/learning transaction, Daloz leads his readers to see the essential elements of teaching through the image of a mentor. Explaining

the importance of the journey being conceived as a joint venture between teacher and learner with frequent references to both the Divine Comedy and The Odyssey, Daloz unfolds the "...richness of the mentor-protege relationship as it moves from a beginning rescue to a downward journey toward transformation and through to a growing equality as the pair separates." What makes this image of a mentor "...such a powerful and enduring model?" asks Daloz. "What does it have to offer us as teachers and advisers? Virgil begins by engendering trust, issuing a challenge, providing encouragement, and offering a vision for the journey" (pp. 29-30). The reader is reminded as well that the mentor is always and only an emissary of the light, a channel for truth" and not the source of wisdom, only its embodiment (p. 30). Mentors in the great literary epics appear early in the journey

...when the pilgrim is most afraid and uncertain....
 When we feel out of control, as Dante did, we need to believe that others are in it. We need something solid to hold to until we regain our balance. Returning to school after years away can be a deeply unsettling experience for many adults. Competent though they may be in their work or homes, they find themselves suddenly at the mercy of teachers sometimes younger than they and in danger of ridicule from fellow students who could be their children.... Teachers of adults do well to recognize the anxiety experienced by many beginning adult students. It is often masked as bravado or scorn. But underneath often lies a deep uncertainty--about the ability to succeed 'late in life,' about losing face before other students or teachers half their age, about working in sometimes starkly unfamiliar realms. Knowing it for what it is, we can act to relieve it gently rather than attempting to overcome or deny it (pp. 30-31).

To be sure, there are differences between traditional students and nontraditional students which need to be dealt with and understood and I have tried to do that in this paper. But in the end, I believe that teaching which is informed by these differences and which is guided by behavior consciously designed to account for these differences will likely not be any more effective or less effective than the individual's teaching in general unless it is also guided by a very clear sense of the importance of the role of teacher as facilitator. What may really matter in the end is one's personal vision of what teaching is or is not--the answer one gives oneself when asking, "What business am I in?" To the extent that the answer is "I'm in the business of providing answers and information to students"--to that extent one will not be as effective as one could be. To the extent that one answers, "I'm in the business of helping students learn" will one adapt to students' needs rather than to the specific body of information and content defined by the parameters of a given course. And that teacher, whether dealing with younger students or older, is likely to move naturally toward andragogical principles without ever needing a name for them.

The teaching-learning transaction is so much more than the mere passing of information from one place to another....Information is often a part of the process, to be sure. But often the gathering of information is only the beginning, as the adult student examines the information, attempts to relate the information to his or her own experiences, and then works at developing a new meaning, a new insight, a new look at life....To view learning as collecting [or transmitting] information is to view the teaching-learning transaction in only the most superficial way. Adult learners deserve much more than that (Apps, 1981, pp. 246-247).

So do all our students.

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APPENDIX A

Educational Orientation Questionnaire

DEVELOPMENT OF AN INSTRUMENT TO DETERMINE ADULT
EDUCATORS' ORIENTATION, ANDRAGOGICAL OR
PEDAGOGICAL

Herschel N. Hadley, Ed.D.

Boston University School of Education, 1975

Major Professor, Malcolm S. Knowles, Professor of Education

ABSTRACT

The purpose of this study was to develop an instrument, the Educational Orientation Questionnaire, with which adult educators' orientations could be assessed with respect to constructs of andragogy and pedagogy. The Educational Orientation Questionnaire incorporates six attitudinal dimensions of an adult educator's role: Purposes of Education, Nature of Learners, Characteristics of Learning Experience, Management of Learning Experience, Evaluation, Relationships of Educator to Learners and among Learners.

Constructs of andragogy and of pedagogy were examined and the methods by which these constructs were operationalized as questionnaire items were presented. A second instrument, Educational Orientation Scales, which contains six bipolar scales was designed and used to measure the predictive validity of the Educational Orientation Questionnaire. The means of ratings by three persons, chosen by the respondent, on each of the six scales were used to measure predictive validity of the Questionnaire.

The sample included adult educators from public and private educational institutions, from business and industry, from religious institutions, and from government agencies. The largest proportion of respondents were teachers with program-directors the next classification in terms of numbers participating. The subjects or specialities taught by respondents included eighteen categories. There were 409 respondents whose data were useable in one or more of the analyses.

For purposes of predictive validity, respondents were asked to submit ratings of themselves by three other persons. To develop the personal commitment by respondents that would risk such exposure was a constraint which required personal explanation by the researcher. This precluded, in most cases, gathering data by mail.

Reliability of the instrument was measured by test-retest reliability and coefficient alpha. Test-retest reliability measured 0.89 and coefficient alpha was 0.94.

The use-validity measure of the Educational Orientation Questionnaire was

its effectiveness in discriminating among adult educators. Analyses of variance demonstrated that the Educational Orientation Questionnaire detected differences in orientation (significant at the 0.05 level or less) with respect to variables of : Sex, Subject Matter or Specialty, Level of Position, and Type of Organization. Level of Formal Education Achieved showed differences in orientation significant at the 0.09 level which warrants further investigation. Differences in Age of adult educators were not associated with significant differences in orientation.

Content validity was judged satisfactory. Predictive validity of the instrument based on total scores was satisfactory with coefficients ranging from 0.24 to 0.49. However, predictive validity coefficients based on summary scores of items grouped by multiple regression ranged from 0.50 to 0.60 which were well above the usual for such coefficients.

Factor analyses of the Educational Orientation Questionnaire determined eight identifiable factors: Pedagogical Orientation, Andragogical Orientation, Competitive Motivation, Pedagogical Teaching, Social Distance, Student Undependability, Standardization, and Self-Directed Change. As anticipated, Pedagogical Orientation and Andragogical Orientation were dominant factors of the instrument. The Competitive Motivation factor displayed relatively large factor loadings and was invariant in all factor analyses.

Item analysis suggested improving the instrument by replacing items to reinforce existing factors rather than reducing the number of items.

Recommendations for additional research include: to develop alternative forms of the Educational Orientation Questionnaire for repeated use, to translate the Questionnaire into other languages for comparative cultural studies, to investigate relationships of the instrument with other instruments, and to correlate data from the Questionnaire with data from research on behavioral styles of adult educators.

Copies of the dissertation are available from University Microfilms, Ann Arbor, Michigan 48106 Order # 75-12. '8

EDUCATIONAL ORIENTATION QUESTIONNAIRE

Name _____ Address _____ Zip Code _____

Below are statements about education, teaching, and learning. These have been chosen to express several different viewpoints.

Please note: In completing this questionnaire keep in mind that the word "student" means adult student, and the word "teacher" means yourself - the person filling out the questionnaire. In other words, your answers indicate your educational orientation in working with adults.

For each statement, please put an "X" in one of the five boxes in front of that statement. Choose the box that indicates your attitude or position best - how much you agree or disagree with that statement. The five positions from which to choose are:

- SA - I strongly agree with this statement
- A - I agree with this statement.
- U - I'm too uncertain about this statement to agree or disagree.
- D - I disagree with this statement.
- SD - I strongly disagree with this statement.

- | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----|---|
| SA | A | U | D | SD | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. | Education should focus on what is sure, reliable, and lasting. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. | Teaching effectiveness should be measured by students' increase in examination of their own feelings, attitudes, and behaviors. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. | Students need a strong teacher who can direct their learning. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. | It's hard to keep people from learning. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. | Learning is an intellectual process of understanding ideas (concepts) and acquiring skills. |
| SA | A | U | D | SD | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. | Effective learning occurs most often when students actively participate in deciding what is to be learned and how. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7. | Giving examinations regularly motivates students to learn. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. | Organization of the content and sequence of learning activities should grow out of students' needs, with their participation. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. | It should be the teacher's responsibility to evaluate students' achievements and assign grades. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. | The best sources of ideas for improving teaching and education are the students. |
| SA | A | U | D | SD | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. | Competition among students encourages keen learning. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 12. | A teacher by his behavior should show each student that his abilities and experiences are respected and valued. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 13. | A teacher should help students accept values of our society. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 14. | To see education as transmittal of knowledge is obsolete. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 15. | Students tend to be much alike. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 16. | It is a teacher's responsibility to motivate students to learn what they ought to learn. |

SA A U D SD

- () () () () () 17. Clear explanation by the teacher is essential for effective learning.
- () () () () () 18. A teacher's primary responsibility is helping students choose and develop their own directions for learning.
- () () () () () 19. A good teacher makes the decisions about what should be taught, when, and how.
- () () () () () 20. A teacher seldom needs to know the average students as separate individuals.
- () () () () () 21. A teacher should not change his expressed decisions without unusually good reasons.

SA A U D SD

- () () () () () 22. Emphasizing efficiency in teaching often blocks development of an effective learning climate.
- () () () () () 23. An adult education program should be evaluated by the same standards as other accredited programs of education.
- () () () () () 24. Evaluating his achievement should be primarily a responsibility of the student since he has the necessary data.
- () () () () () 25. Competition among students develops conceit, selfishness, and envy.
- () () () () () 26. A teacher should discuss his blunders and learnings with students.

SA A U D SD

- () () () () () 27. A teacher should be sure his questions steer students toward truth.
- () () () () () 28. Educational objectives should define changes in behavior which the student desires and the teacher helps him undertake.
- () () () () () 29. Most students are able to keep their emotions under good control
- () () () () () 30. Students are quite competent to choose and carry out their own projects for learning.
- () () () () () 31. A teacher should help students free themselves of fixed habits and patterns of thought that block their growth.

SA A U D SD

- () () () () () 32. The major qualifications of a teacher are grasp of subject matter and ability to explain (demonstrate) it clearly and interestingly.
- () () () () () 33. It is better for students to create their own learning activities and materials than for the teacher to provide them.
- () () () () () 34. A teacher should require assignments and grade them.
- () () () () () 35. Use of a topical outline course plan often blocks a teacher's perception of students' needs.
- () () () () () 36. An adult education program should be evaluated only in terms of its own objectives.

SA A U D SD

- () () () () () 37. Competition among students develops courage, determination, and industry.
- () () () () () 38. A teacher should provide opportunities for warm relationships with students and among students.

SA A U D SD

- () () () () () 39. Education should lead people to goals that result in orderly, reasonable lives.
- () () () () () 40. Education should increase students' critical evaluation of our society and courage to try new, creative, satisfying behavior.
- () () () () () 41. Often students don't know what is best for them.
- () () () () () 42. When a teacher makes a mistake, he is likely to lose students' respect.
- () () () () () 43. Maturity depends more on continuing growth in self-understanding than on growth in knowledge.

SA A U D SD

- () () () () () 44. Students frequently "get off the subject" either intentionally or unintentionally.
- () () () () () 45. Education programs which tell what should be learned and how rarely help students learn.
- () () () () () 46. Letting students determine learning objectives wastes too much time in irrelevant discussion.
- () () () () () 47. The primary concern of a teacher should be the immediate needs of the student.
- () () () () () 48. Grades should reflect a student's grasp of the subject or skill taught.

SA A U D SD

- () () () () () 49. Assignments by a teacher tend to restrict students' significant learnings.
- () () () () () 50. Tests prepared by students are usually just as effective as those prepared by a teacher.
- () () () () () 51. The goals a student sets for himself are the basis of effective learning not the teacher's goals.
- () () () () () 52. A teacher's mission is to help each student learn what he decides will aid him in achieving his personal goals.
- () () () () () 53. If a teacher isn't careful, students take advantage.

SA A U D SD

- () () () () () 54. Considering the possible effects on students, a teacher should usually play it safe rather than take chances.
- () () () () () 55. Without a cooperative climate encouraging students to risk and experiment, significant learning is unlikely.
- () () () () () 56. A teacher who does not plan the work for a class carefully is taking advantage of the students' ignorance.
- () () () () () 57. To use students' experiences and resources for learning requires group activities rather than such methods as lectures.
- () () () () () 58. It is a good rule in teaching to keep relationships with students impersonal.

SA A U D SD

- () () () () () 59. Planning units of work should be done by students and teacher together.
- () () () () () 60. Good teaching is systematic - set up a clear plan and schedule and stick to it.

EDUCATIONAL ORIENTATION QUESTIONNAIRE (EOQ)

Scoring Sheet

PEDAGOGICAL ITEMS
 SA = 1, A = 2,
 U = 3, D = 4,
 SD = 5

ANDRAGOGICAL ITEMS
 SA = 5, A = 4,
 U = 3, D = 2,
 SD = 1

STANDARDIZED TOTAL SCORE

- | | |
|-----------|-----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |
| 11. _____ | 12. _____ |
| 13. _____ | 14. _____ |
| 15. _____ | 18. _____ |
| 16. _____ | 22. _____ |
| 17. _____ | 24. _____ |
| 19. _____ | 25. _____ |
| 20. _____ | 26. _____ |
| 21. _____ | 28. _____ |
| 23. _____ | 30. _____ |
| 27. _____ | 31. _____ |
| 29. _____ | 33. _____ |
| 32. _____ | 35. _____ |
| 34. _____ | 36. _____ |
| 37. _____ | 38. _____ |
| 39. _____ | 40. _____ |
| 41. _____ | 43. _____ |
| 42. _____ | 45. _____ |
| 44. _____ | 47. _____ |
| 46. _____ | 49. _____ |
| 48. _____ | 50. _____ |
| 53. _____ | 51. _____ |
| 54. _____ | 52. _____ |
| 56. _____ | 55. _____ |
| 58. _____ | 57. _____ |
| 60. _____ | 59. _____ |

Total Raw Score = _____

Subtract 210.8

Algebraic (+ or -)
 Remainder _____

Divide Algebraic Remainder by 26
 (or more accurately by 25.924)

_____ ÷ 26 (or 25.924)

Algebraic
 Remainder

= _____ Standardized Score

Percent of Adult Educators with
 EOQ Scores Less than or Greater
 than Your Score (Standardized)

Your Score	% of Scores Less	Your Score	% of Scores Greater
- 1.0	15.87	+ 1.0	15.87
- 1.5	6.68	+ 1.5	6.68
- 2.0	2.28	+ 2.0	2.28
- 2.5	0.62	+ 2.5	0.62
- 3.0	0.13	+ 3.0	0.13

For example: If your standardized score is +1.5, then, in the theoretical population of all adult educators, 6.68 percent will have a score more andragogically oriented (Larger) than yours or, alternatively, 93.32 percent will have a score more pedagogically oriented (Less) than yours.

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_____ + _____ = _____ Total Raw Score