This booklet addresses two of the competencies needed by part-time faculty who teach adults. The competencies are adult learning and the need for quality in preparation to assure quality in instruction. The booklet begins with a discussion of just who the adult learners are. The next topic is adult motivation to learn, at the beginning, during, and at the end of the learning process. In that connection, the booklet addresses preparation that is related to instructor knowledge of learner orientations, learning styles, instructional methods, and learning situations. Finally, the differences between andragogy and pedagogy are considered. Faculty responsibility is stressed. A bibliography and an index are provided. (YLB)
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ADULT LEARNING HANDBOOK

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Continuing Education
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Over the past few years the continuing education of adults has been the fastest growing realm of education. Presently over 40 million American adults participate in some form of education every year. If the trends in the birth rate and the population explosion continue their downward spirals, adult education will probably be the only element of the educational process experiencing continued growth. Add to this “adultization” of America, the knowledge explosion brought on by the technology age, and the need for providing quality educational experiences for adults multiplies again.

Since most teachers of adults are adjunct faculty (those who teach on a part-time basis), the training they possess may be related more to their teaching fields than to knowledge of adult learners or curriculum or lesson planning. However, administrators have long looked to the part-time faculty to meet the diverse needs of the “adult” population enrolled in their institutions.

Typically the part-time faculty will themselves be diverse, mobile, and responsible; but, again, though they will know their subject matter well, they will not necessarily possess skills in instructional competency. Part-time faculty need special training to aid them in developing a knowledge of and skill related to

- **Effective communication** with learners in the classroom

- **Effective working relationships** with these learners
- Possessing a positive attitude toward adult learners

- Developing a climate that will encourage learners to participate in the classroom

- Establishing a basis for mutual respect with learners

- Adjusting the pace of instruction to the learners' rate of learning

- Adjusting teaching style to accommodate individual and group characteristics

- Differentiating between teaching children and teaching adults

- Devising instructional strategies that will develop the learners' confidence

- Maintaining the learners' interest in classroom activities

- Adjusting the program to respond to the changing needs of learners

- Using more than classrooms--using other settings that provide stimulating learning environments

- Recognizing each learner's potential for growth

- Placing learners at their own learning level
• Summarizing and reviewing the main points of each lesson and/or demonstration before the class is dismissed

• Participating in frequent "self-evaluations" relative to their own teaching effectiveness

• Providing continuous feedback to the learners on their progress

• Selecting the components of a subject area that are essential to the learners in that class

• Determining the principles of learning that apply to adult learners

• Demonstrating a belief in innovation and experimentation by trying new approaches in the classroom

This list of knowledge and skills\(^1\) was taken from a list prepared by the Center for Resource Development in Adult Education, University of Missouri-Kansas City. Initially the list of competencies began with 605 statements that was gradually reduced to a final twenty-four by over 700 adult educators and administrators.

This booklet will address two of the competencies just listed:

1. The adult learner

   We will address

   adult motivation to learn, and...

   the differences in Andragogy and Pedagogy.
2. The need for quality preparation to assure quality instruction

We will address instructor knowledge of learner orientations, learning styles, instructional methods, and...
learning situations.

The importance of professionalism and quality should be evident in any teaching situation, but even more so with adults.

- **Adults are** the present **movers** of society.
- **Adults are** the present **leaders** directing governments.
- **Adults are** the present **managers** of business and industry, making decisions that will impact our future economic and technological welfare.
- **Adults are** the present **changers** of careers and job orientations as never before in employment history -- from three to five times in a lifetime, careers will change, and with each change additional training and education are needed.

So, the education of adults takes on many complexities, and you as an instructor of adults must be prepared for the task you have assumed for yourself.
K. Patricia Cross, professor at the Harvard University Graduate School of Education, expressed it this way

"...lifelong learning is not a privilege or a right; it is simply a necessity for anyone, young or old, who must live with the escalating pace of change -- in the family, on the job, in the community, and in the worldwide society." (2)

Burton Kreitlow, professor of Continuing and Vocational Education at the University of Wisconsin, was even more straightforward in his evaluation of the impact of the adult educator -

As an adult educator you

"...have a responsibility for social reconstruction"...you fulfill this role most effectively..."not by mansing the barricades but instead by educating the oppressed to recognize their condition and to acquire the skills essential to changing the system." (3)

As a facilitator of adult learning YOU have a tremendous impact on these adults. With some of these adult learners you hold their future decisions and what they do with the rest of their adult lives in the palm of your hand.
One of the most profound changes in education in this century is an attitude that no longer views education as preparation for life, but rather sees it as a way of meeting present demands. As a result, 48 percent of the enrollment in higher education are adults. Sixteen percent of the adult population between 25 and 34 years of age are enrolled in some kind of educational institution.

Who are these people? The definition of an adult is often derived from a personal image of “adulthood”. That image can be chronological, social, legal or work related. From the chronological view, “adult” is anyone after a certain age. Socially, “adult” is conferred for mature qualities such as sanity, responsibility and rationality. Legally, “adults” are defined by creating exceptions for “non-adults” such as juveniles. Finally, the ability to work and be productive, accepting life-sustaining obligations, can also be defined as “adult”.

Whatever adulthood is (and the answers are still not complete), we do know that it is not an unchanging plateau. Adulthood is characterized by change, development, and growth that is as real and dramatic as any of these changes associated with the early stages of growth. This often creates a CRISIS.

The Chinese have a unique way of expressing the word “crisis”. The upper character represents danger, the lower character stands for hidden opportunity. An instructor holds the same options with each learner in the classroom. In each learning situation, especially...
possibility of Dangerous Negative Results or Positive New Opportunities. Where change is involved, through the classroom, we must be sure the end result is “positive new opportunities”. For an educational institution the knowledge of new, adult instructional philosophies and an understanding of the needs and demands of changing adults becomes the cornerstone of programs built to serve that adult population. But what motivates an adult to return to the formal classroom? (We make the distinction between the “formal classroom” -- regardless of the topic of instruction -- and an “informal” learning situation, because everyone is learning something new everyday. Learning is not limited to the classroom.)
Motivational concepts and motivation training are widely promoted by training entrepreneurs, but motivating people to develop a desire to learn is not simply a matter of words. Robert Mager, noted training instructor and author whose writings center on instructional goals and performance objectives, has said, (4)

"Exhortation is used more and accomplishes less than almost any behavior changing tool known to man"

Mager continued by saying,

"The three types of events which, for our purpose, influence attitude toward learning are conditions, consequences, and modeling. So far, so good. But the nature of the conditions, the way in which consequences are organized, and the way in which modeling is done make a difference"

Then he said,

"While it's true that we learn by practicing, by doing, and by being rewarded for progress, it is also true that most of what we learn is learned by imitation. Most of what we learn comes from watching others do things that we then become able to do - or encouraged to do. When we see others do something, there is a tendency for us to imitate their actions. People see, people do."
Words -- arguing, cajoling, exhorting are not very good ways to motivate people to develop a healthy attitude toward learning.

In motivating adults in the direction of learning there are three critical periods of maximum impact on the learner. (5)

1. The Beginning - as the learner enters the learning process

2. During - as the learner becomes involved in the learning process

3. The End - as the learner is completing this particular learning process

The following chart graphically outlines the fact that these three periods are not separate and independent of each other.
Within each of these critical periods of learning there are two major factors that impact motivation:

1. The Beginning - as the learner enters the learning process

   **Attitudes**—The learners' attitudes toward the learning environment, the instructor, the subject matter, and themselves

   **Needs**—The perceived needs of the learner as seen by the learner

2. During - as the learner becomes involved in the learning process

   **Stimulation**—Stimulations affecting the learner during the learning process

   **Affect**—The affective (emotional) impact on the learner during the learning process

3. The End - as the learner is completing this particular learning process

   **Competence**—The exit competencies of the learner resulting from the learning process

   **Reinforcement**—The support provided by the instructor toward the end of the learning process

What motivates an adult to return to the classroom is a desire to learn. That learning may be job related,
or it could be to satisfy an inquiring mind, or to build self esteem; it could be recreational, or it could be as significant as individual survival.

We live in a technological age. The knowledge explosion is something no other generation has ever had to deal with to the extent of today's adult generation. However, this leaves many adults, who have not been in the formal classroom for several years, without a sufficient knowledge of today's technology. Further education means better jobs or promotions within the jobs they presently enjoy.

Other adults want to satisfy an "inquiring mind" so they return to the classroom. They want to be able to "communicate" on the same level as their professional contemporaries or neighbors. They know knowledge is changing, and they want to change with it.

Maslow's Hierarchy of Needs establishes a very basic motivation for lifelong learning -- survival. Lifelong learning means more than winetasting and bridge, and sometimes it is more vital than computer training or real estate certification -- it is survival. Millions of adults, many of whom could be in your classroom, are discriminated against and hungry because they can neither read nor write, or their English speaking ability is below usable levels. Most adults are returning to the classroom because of critical issues facing them as adults.

Self esteem, recreation, personal growth, survival -- these are motivating stimulations for adults who enroll in formal learning situations. These adults come from varied backgrounds, with varied needs to be met. Thus, as no two individuals will view the same situation
from exactly the same perspective, so no two adult learners will view the classroom and the learning atmosphere from exactly the same perspective.

Whatever the reason, adults elect to participate in learning situations of their own choice. Adults are not usually in the classroom because of legal demands. They are there because they want to be there. As a result adults will remain in the classroom only as long as their wants or needs are being met. In addition, adult learners will learn only what they want to learn. Material the instructor thinks is important must be presented in such a way that it is interesting and persuasive.

Education is not just the transmission of knowledge from the teacher to the student. Learning is more active than this. If adults feel the class is not pertinent to their personal needs or interests they will walk away from the classroom.

Whether adult learners are in the classroom seeking knowledge to remain current in today’s information world or seeking knowledge to “retool/retrain” themselves for a new career, they are curious and have
an intense desire to succeed, but often, time is as vital as the need to know. If they feel their time is being used unwisely, it is not worth the effort or time expended for them to remain in the classroom.

Ron and Susan Zemke wrote “30 Things We Know For Sure About Adult Learning” in which they emphasized that

“...adults have something real to lose in a classroom situation. Self-esteem and ego are on the line when they are asked to risk trying a new behavior in front of peers and cohorts...” (6)

Therefore, adult learners must leave every class session feeling good about themselves and their learning experience. However, feelings are not necessarily proof of good course design or instruction. The possibility of this false sense of security can be avoided with careful preparation. This preparation begins by understanding that all learning takes place under different conditions. As an instructor you must never be mesmerized into believing that the only place learning occurs is in the classroom. In fact, the opposite is true, most learning occurs outside the classroom; thus, learning and teaching are not necessarily synonymous. The conclusion - - ...since most learning takes place outside the classroom, you must prepare to make certain that learning will be the outcome of your teaching in the classroom.
To facilitate this learning process:

FIRST, understand that as all learning takes place under different conditions, so all learners are also different.

There are goal-oriented learners - Learner "A"--

Those who are interested in meeting the objectives, either their own or those for the class.

There are learning oriented learners - Learner "B"--

Those who are interested in learning for the sake of learning.

There are activity oriented learners - Learner "C"--

Those who are more interested in the activities than the goal or stated purpose of the course.

These orientations toward learning can overlap. So individually, or as a class, learners may have more than one orientation toward learning. (7)

LEARNERS' ORIENATIONS

LEARNER A
Goal Orientation

LEARNER B
Learning Orientation

LEARNER C
Activity Orientation
SECOND, there are different learning styles. The behavior of your students' learning patterns can be identified as Visual, Auditory, or Kinesthetic-Tactile.

The student who is a Visual learner will usually be relatively quiet in the classroom and will learn best by demonstration -- seeing the learned concept. This student may have difficulty learning other languages.

The student who is an Auditory learner will, in most instances, be the talker in the classroom. This student remembers spoken material above printed material.

The Kinesthetic-Tactile learner likes to touch things and people and learns best by doing.

THIRD, teaching methods will vary according to the learning situation. That learning situation will involve student characteristics, instructor characteristics, course content and the availability of instructional resources. (8)
FOURTH, take charge of the learning situation (9)

- Set the climate for learning
- Establish a structure that promotes mutual planning
- Diagnose the learning needs of the students in this particular class
- Formulate learning objectives to help the students of this class
- Design learning experiences that will most effectively impact this class
- Manage the planned learning experiences to the benefit of the students of this class

There are many other prerequisites to good teaching, but these will suffice to reveal that thinking through the learning process and being prepared are absolutely essential. If some of your students feel good about their learning experience, that is a good reinforcement, but those good feelings alone do not insure that all students are leaving the classroom with more knowledge, skill, or understanding than when they entered.
The instructional process is as vital as the content of the curriculum presented by the instructor. Adults in the classroom must be approached in a different manner than children. People change biologically, psychologically, and physiologically. In recognizing these changes Malcolm Knowles advanced the theory of Andragogy. The educational philosophy of "andragogy" had long been recognized by German educators, but the philosophy had never been formally advanced in America.

Andragogy is the art of teaching adults.

Pedagogy is the art of teaching children.

The differences in the pedagogical and the andragogical approach to learning situations can be described through the following comparisons.
**ANDRAGOGY**

*In Andragogy the...*

*Learner* is **self-directed** and must have a voice in everything that is being taught and how it is being taught.

*Learner* enters into the educational process with a **greater** volume of life's experiences. Since all learning is filtered through prior learning and life experiences, the multiple roles and responsibilities of adulthood provide a broad range of experience, knowledge and skill through which the educational process can take place.

*Learner* comes ready to **address a need** to know or to do something. The adult enters the educational process with a predetermined assessment of what is to be accomplished.

**PEDAGOGY**

*In Pedagogy the...*

*Learner* **must be led** through the instructional process. The instructor determines what is to be learned and how.

*Learner* is **relatively inexperienced** with life, and what experiences are part of the child's life are of limited value in assisting in determining the instructional process.

*Learner* does **not know** what **needs** to be known. The child is willing to accept society's judgment as to what is the right, or best, educational experience for them at that particular stage of their development.
Learner has a task centered -- problem centered orientation to learning. Learning is a tool that will provide the additional knowledge or skill that is needed to succeed -- though future knowledge will be based on this new knowledge learning for "tomorrow" is not necessarily the sole or primary foundation for learning.

Learner is motivated by self satisfaction -- a better quality of life. Learning is not just a promotion, but a better relationship with themselves.

Learner learns because "...this is the thing to do as you prepare for a life's career." Learning is not as "today" oriented as it is "tomorrow" directed. Knowledge is still the foundation upon which future knowledge will be based.

Learner is motivated by externals -- grades, parents, teachers -- all hold promotion over the student as the goal of education.

This says there are differences between children and adults as learners.

Children in a classroom will all be approximately the same age,
at approximately the same stages of social and psychological development,
and
capable of participating in limited learning tasks because of limited life experiences.

However, on the other hand,

adult learners in a classroom will vary greatly in age,

be vastly different in their psychosocial and physical skills,

and

be able to relate to multiple life experiences,

thus broadening the realm of available learning situations.

These adults have traveled, raised families, served in the armed forces, coped with the pleasures and problems of children and marital partners, illness and death. They have balanced budgets and confronted creditors. And, when these adults enter the classroom they bring all of these experiences with them, whether positive or negative. Thus, as a facilitator of adult learning, you must remember, adults are not just grown-up children and therefore should not be approached as such in the classroom. However, "...there is an ever present tendency for instructors to teach as they were taught," to use the same
instructional strategies and techniques that they experienced as students. Although this is certainly understandable, it is not very effective, for most educational experiences occurred before they became adults.” (11)

THUS

“The education of adults once directed by volunteers is increasingly the responsibility of specialists”, (12) so in working with adults you, as a facilitator of learning, must become a specialist and:

Believe that learning, and not lecturing/teaching, is the heart of education. Thus learning is best processed with an instructor who is a facilitator of learning and not just a lecturer/teacher.
Believe **learning** takes place best in an atmosphere that is relaxed and informal as opposed to an atmosphere that is formal and competitive.

Believe **learning** is student centered, and not text centered. You believe in the students and who the students are, and what they know, and what they are willing to learn.

Believe **learning** is a two-way dialogue - "Question me" - I do not have all the answers. A lesson plan, or curriculum, or class schedule that is so rigid that it cannot be altered to provide opportunities for student interaction is too rigid. The student's needs come first if learning is to take place.
Believe learning is the involvement of life experiences, both those of the facilitator and the student. Remember, life experiences are one of the primary differences between pedagogy and andragogy -- the young student has few experiences to share in the learning process, but the adult student has many, and these life experiences should be utilized to their fullest.

Believe learning is generated through a feeling of mutual trust, being open and honest...and that you will not allow differences -- cultural, ethnic, or economic, to diminish your teaching skills. Instead, you will use these differences to create an atmosphere of openness to all.
Believe learning is information or skills centered and not “gimmick” driven. Good teaching is not easy, but mediocre teaching can be enhanced with the use of the proper aids. Blackboards, video-monitors, charts, even distributed course syllabi are all teaching aids. However, tools aid the instructor in the presentation of lesson materials and they are useful to the learning process, but they must never be thought of as “the learning process.”

YOU,

the instructor -- the facilitator --

will want to be capable of reaching the student wherever that student may be relative to the particular course. To accomplish this goal

YOU MUST

- **Know Your Students** -- their mission, objective, problems, opportunities and needs...

- **Look Ahead** -- plan, anticipate the needs and requirements of each student at each class session...

- **Know Your Resources** -- tailor the resources available to the needs of your students...
- **Be Proactive** -- go into each class session exhibiting enthusiasm, knowing you are prepared and ready to meet the student’s needs, whatever those needs might be..

- **Be Goal Oriented** -- managers are, and **YOU** are the manager of this educational process...

- **Be Activity Oriented** -- it is important for people to use what they learn--educate by doing.

**YOU MUST NOT**

- **Focus On Deficiencies** -- the “can’t do” attitude is left outside the classroom door. The negatives are already known, and the positives are being sought...

- **Be Reactive** -- planning will enable you to stay ahead and be the leader, but it is not the path you have chosen for the class, but the path dictated by the needs of the students...

- **Be Activity Driven** -- focus on responsibility, accountability, and only the activity needed to obtain the educational objective...

Now, having laid this foundation, we acknowledge **there are exceptions**. For example, a child will have much more motivation and self direction in learning to play a computer arcade game than will most adults, but the adult will have much more motivation and self direction in learning a computer programming language than will most children.
IN SUMMARY

So, who are these adults in today's classroom? The writers -- poets, novelists, dramatists -- seem always to have known. They have long recognized that the full unfolding of the life cycle, from birth to death, encompassed adulthood. But, not so with the behavioral scientist and educator who were primarily content to limit the studies of the life cycle to childhood and adolescence as though to say "all of the changes of life have now taken place and the rest of life is but a mundane routine:" the implication -- "you cannot teach an old dog new tricks"

In the years to come it will be even more important for the educator to recognize and understand the "adult learner" than it has in the past. K. Patricia Cross, writing for Innovation Abstracts, published by the National Institute for Staff and Organizational Development, said, (13)

"I don't know what the world will look like in 15 years. No one does. Perhaps the one thing that we can predict with some certainty is that the world will continue to change and that education is the best way we know to prepare people to change."
1. Grabowski, Preparing Educators of Adults, pp. 45-46.

2. Cross, Adults As Learners, p. ix.


4. Mager, Developing Attitude Toward Learning, pp. 41 and 69.

5. Wlodkowski, Enhancing Adult Motivation To Learn, pp. 60-62.


8. Kalamas, Plan Instruction for Adults. Module N-4, p. 36.


12. Grabowski, *Preparing Educators of Adults*, p. 3.

BIBLIOGRAPHY


Kalarnas, David J. *Prepare to Work with Adult Learners. Module N-1.* The National Center for Research in Vocational Education. Columbus, Ohio: Ohio State University, 1985.


Zemke, Ron and Susan. "30 Things We Know For Sure About Adult Education," *Train*, XVIII, Number 6 (June 1981), 44-52.
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ERI C
Visual

Zemke, Ron & Susan

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