ABSTRACT

This module, one in a series of performance-based teacher education learning packages, focuses on a specific skill that vocational educators need to create appropriate learning environments and to plan and manage instruction that is well-suited to the learning and psychological needs of today's adults. The purpose of the module is to prepare instructors to work with adult learners. Introductory material provides terminal and enabling objectives, a list of resources, and general information. The main portion of the module includes three learning experiences based on the enabling objectives: (1) demonstrate knowledge of adult learner characteristics and the process of adult development; (2) demonstrate knowledge of learning preferences; and (3) develop a plan for gaining additional knowledge and skills. Each learning experience presents activities with information sheets, samples, worksheets, checklists, and self-checks with model answers. Optional activities are provided. Completion of these three learning experiences should lead to achievement of the terminal objective through the fourth and final learning experience that requires (1) an actual teaching situation in which the trainee can prepare to work with adult learners, and (2) a teacher performance assessment by a resource person. An assessment form is included. (YLB)
Prepare to Work With Adult Learners
FOREWORD

This module is one of a series of over 130 performance-based teacher education (PBTE) learning packages focusing upon specific professional competencies of occupational instructors (teachers, trainers). The competencies upon which these modules are based were identified and verified through research as being important to successful teaching. The modules are suitable for the preparation of instructors in all occupational areas.

Each module provides learning experiences that integrate theory and application; each culminates with criterion-referenced assessment of the instructor’s performance of the specified competency. The materials are designed for use by teachers-in-training working individually or in groups under the direction and with the assistance of teacher educators or others qualified to act as resource persons. Resource persons should be skilled in the teacher competencies being developed and should be thoroughly oriented to PBTE concepts and procedures before using these materials.

The design of the materials provides considerable flexibility for planning and conducting performance-based training programs for preservice and inservice instructors, as well as business-industry-labor training, to meet a wide variety of individual needs and interests. The materials are intended for use by local education agencies, postsecondary institutions, state departments of education, universities and colleges, and others responsible for professional development of instructors.

The PBTE modules in Category N—Teaching Adults—are designed to enable adult instructors to create appropriate learning environments and to plan and manage instruction that is well suited to the learning and psychological needs of today’s adults. The modules are based upon 50 competencies identified and verified as unique and important to the instruction of adults.

Many individuals have contributed to the research, development, field review, and revision of these training materials. Appreciation is extended to the following individuals who, as members of the DACUM analysis panel, assisted National Center staff in the identification of the competency statements upon which this category of modules is based: Doe Hentschel, State University of New York at Brockport; David Holmes, Consortium of the California State University; Joanne Jorz, JWK International Corporation, Virginia; Jean Lowe, Fairfax County Public Schools, Virginia; Jim Menasce, BOC/Lansing—General Motors, Michigan; Norma Milanovich, University of New Mexico; Cuba Miller, Sequoia Adult School, California; Donald Mocke, University of Missouri; and Michael A. Spewock, Indiana University of Pennsylvania.

Appreciation is also extended to the following individuals for their critical field reviews of the six modules in the N category during the development process: Edward K. Allen, Donna Baumbach, Ronald J. Bula, Madelynn R. Callahan, Deborah Clavin, Joe Cooney, Yvonne Ferguson, Howard Harris, Ronald Hilton, David Holmes, Donna E. Johnson, Edward V. Jones, Russell Kratz, Jean Lowe, Frances Malanga, Donald L. Martin, Sandy McGeachan, Norma Milanovich, Audra Miller-Beach, Donald Mocke, Christa Oxford, William Reese, Rick Schau, Steven E. Sorg, Michael A. Spewock, Neal Wiggin, and James L. Wright.

Recognition for major individual roles in the development of these materials is extended to the following National Center staff: Harry N. Drier, Associate Director, Development Division; and Robert E. Norton, Program Director, for leadership and direction of the project; Lois G. Harrington, Program Associate, for training of module writers, assistance in the conceptualization and development of the materials, and maintenance of quality control; David J. Kalmas, Graduate Research Associate, for development of illustration specifications; Susan Dziura, for initial art work; and Shellee Tremaine and Cheryl Salyers, for their word processing. Special recognition is also extended to the staff at AAVIM for their invaluable contributions to the quality of the final printed products, particularly to Sylvia Conine for typesetting, to Marilyn MacMillan for module layout, design, and final art work; and to George W. Smith, Jr. for supervision of the module production process.
Prepare to Work
With Adult Learners
INTRODUCTION

The lyrics of one popular song of the sixties include a line that seems as appropriate now as it did then, "The times, they are a-changin'". They are indeed changing. A shifting national birthrate, medical advances, technological advances, and a host of other factors are changing the fabric of our society.

Our current population is considerably different from the one that existed in the first half of this century. Among other things, this population is older, more educated, and possesses a very different set of expectations about the quality of work and life that it will enjoy. Changes in our population are reflected in changes in our workforce—just as the people who compose our population have changed, so the workforce itself has changed. Its composition, structure, and values have been notably altered.

For example, the workforce contains a much higher percentage of female workers. And increasingly, greater numbers of women and other minorities are reaching positions of authority that were once deemed inaccessible. Workers also expect much more humane treatment from employers. Indeed, many workers are demanding a participatory role in the management of their organizations. These and many other fundamental changes have created new challenges for our society. In order to meet these challenges and continue to grow in our changing society, people are discovering that it is increasingly necessary to engage in continuing, purposeful learning—lifelong learning.

In engaging in lifelong learning, people generally use one of three strategies to acquire knowledge and the skills required to use that knowledge effectively: (1) formal education; (2) formal training; and (3) independent learning, at least partially outside the confines of any formal system. In this module and the others in Category N, we will examine ways that you, as an instructor, can facilitate the learning of adults who are using any (or all) of these strategies in their learning efforts.

As you complete this module, keep in mind that the essence of lifelong learning lies in the concept that learning is a continuing need. People have and will continue to have a growing number of learning needs that must be effectively and efficiently met. Your challenge as an educator or trainer is to meet these needs as best you can.

Since our concerns in this module center upon the learning needs of the adult portion of the population, let us clarify what we mean when we say "adult learner." Although there are many definitions vying for general acceptance, one that will serve our purposes well is the following:

An adult learner is a person, generally past the age of 16, who has previously left the formal schooling system and who now has reentered that system for further education/training. Such a person typically has responsibilities in several adult life roles (e.g., employee, spouse, parent).
The learning needs of adults, because they relate to coping with and growing in a rapidly changing environment, are numerous and diverse. The following are some of the most important needs of today's adult learners.

- **The need for training**—Some adults who are now unemployed need training to help them acquire, at a minimum, entry-level job skills and/or basic skills in order to gain access to employment.
- **The need for retraining**—Some adults (e.g., those displaced by technological advances) may need a brand-new set of skills in a different occupational area in order to reenter the world of work.
- **The need to maintain**—Some adults are faced with the threat of job loss due to skill obsolescence. In order to maintain their present positions or make horizontal moves within their organizations, they may need to acquire additional skills.
- **The need to upgrade**—Some people need additional education or training in order to obtain promotions or to become more effective performers after they have been promoted.
- **The need for professional development**—Many professionals are concerned with keeping up-to-date—many fields of knowledge rapidly become obsolete. Generally, half of what a person has learned during professional training is obsolete within four or five years.
- **The need to meet professional certification/licensing requirements**—Many professions require practitioners to participate in educational activities in order to keep abreast of developments in their field. This trend is continuing and spreading to many professions not traditionally affected.
- **The need to prepare for avocational interests**—Whether it is repairing the family auto or learning French for a trip to France, many adults have found that these kinds of skills are valuable in terms of improving the quality of their leisure time.
- **The need to prepare for career changes**—Many adults pursue further or continued education/training in order to acquire the certificate or diploma necessary to make major career changes.
- **The need to deal with retirement**—Many older Americans have found that in order to meet postretirement needs, they must continue to learn. This learning allows for more profitable use of time, the pursuit of interests shunted aside earlier in life, and interaction with human beings, to name just a few.

This list is by no means all-inclusive. There are many other reasons, both economic and psychological, that adults are returning to the classroom. This module is specifically designed (1) to provide you with some basic information about adult learners and how they differ from their younger counterparts in terms of development, learning capabilities, and learning needs; and (2) to help you identify and meet your professional development needs as an instructor of adults.
ABOUT THIS MODULE

Objectives

Enabling Objectives:
1. After completing the required reading, demonstrate knowledge of the characteristics of adult learners and the process of adult development (Learning Experience I).

2. After completing the required reading, demonstrate knowledge of learning preferences through analysis of one of your own past learning experiences (Learning Experience II).

3. After completing the required reading and an initial assessment of your readiness to teach adults, develop a plan for gaining the additional knowledge and skills you need to serve these learners (Learning Experience III).

Learning Experience II

Optional


Learning Experience III

No outside resources

Learning Experience IV

Required

An actual teaching situation in which you can prepare to work with adult learners.

A resource person to assess your competency in preparing to work with adult learners.

General Information

For information about the general organization of each performance-based teacher education (PBTE) module, general procedures for its use, and terminology that is common to all the modules, see About Using the National Center’s PBTE Modules on the inside back cover. For more in-depth information on how to use the modules in teacher/trainer education programs, you may wish to refer to three related documents:

The Student Guide to Using Performance-Based Teacher Education Materials is designed to help orient preservice and inservice teachers and occupational trainers to PBTE in general and to the PBTE materials.

The Resource Person Guide to Using Performance-Based Teacher Education Materials can help prospective resource persons to guide and assist preservice and inservice teachers and occupational trainers in the development of professional teaching competencies through use of the PBTE modules. It also includes lists of all the module competencies, as well as a listing of the supplementary resources and the addresses where they can be obtained.

The Guide to the Implementation of Performance-Based Teacher Education is designed to help those who will administer the PBTE program. It contains answers to implementation questions, possible solutions to problems, and alternative courses of action.
Learning Experience 1

OVERVIEW

Enabling Objective

After completing the required reading, demonstrate knowledge of the characteristics of adult learners and the process of adult development.

Activity

You will be reading the information sheet, The Adult Learner, pp. 9–17.

Optional Activity

You may wish to read one or more recent publications focusing on the characteristics and instructional needs of adult learners.

Optional Activity

You may wish to read one or more recent publications focusing on adult development.

Optional Activity

You may wish to put into practice in a peer-group activity what you have learned about adult development.

Optional Activity

You may wish to write a paper on adult development, using your own development as a basis, in order to reinforce your understanding.
You will be evaluating your competency in relating adult development theory to your development as evaluated by your resource completion of the Adult Development Paper Checklist, p. 19.

You will be determining your understanding of the characteristics of adult learning and the process of adult development by completing the Adult Development Paper Checklist, p. 19.

You will be evaluating your competency by comparing your completed Self Check with the Model Answers, p. 20-24.
Adults share some characteristics with young people; however, they are also different in many ways. For information on (1) how adults differ from youth as learners and (2) the role that the human developmental process plays in terms of learning, read the following information sheet.

THE ADULT LEARNER

All your interactions with other people are affected by the assumptions you make about their motives, desires, needs, beliefs—about their human nature. Likewise, the assumptions you make about learners and learning determine, in part, how you behave in an instructional situation. It is, therefore, important to examine your assumptions about learners and learning.

One way to do this is to think about your own assumptions in terms of a model—a representation of reality that allows you to see where you fit in relation to a range of possible assumptions. A model currently enjoying widespread attention is the pedagogy-andragogy model, which consists of sets of assumptions about teaching youth (pedagogy) and teaching adults (andragogy).

The set of assumptions associated with an extreme pedagogical position is based on the premise that there is a specific, well-defined body of knowledge and skills that should be transmitted to learners. A person that holds this extreme position assumes, for example, that certain knowledge and skills, and their application, are static—changing little over time.

The teacher of youth is assumed to possess the knowledge and skills in question and to be responsible for passing on this learning. The student is viewed as a vessel or container—receiving, without question, what the teacher transmits.

The set of assumptions linked to an extreme andragogical position is based on the premise that the knowledge and skills that serve a learner well today will not be those that will be most appropriate ten years from now. This position is supported by the idea that a body of knowledge is a dynamic, living entity, evolving—sometimes very quickly—over time. A person who holds this extreme position views all knowledge and skills and their application as constantly changing.

The instructor of adults is assumed to be responsible only for providing assistance to learners. The learners decide what is important to learn and when and how they are going to learn it. Learners are viewed as being completely self-directing.

Reality, of course, lies somewhere between these two extremes. In some cases, the knowledge and skills required in the workplace do change over time. Consider information processing methods. A short time ago, there was no need for an office worker to be skilled in the operation of sophisticated word-processing systems. Today, however, workers may be at a serious disadvantage if they do not possess these skills.

On the other hand, workers will also be at a disadvantage if they do not possess basic reading, writing, and mathematical skills. These are required skills that don't change very much over time.

If you picture the two extreme positions as lying at either end of a continuum, the assumptions you hold will probably fall somewhere in between. Sample 1 provides examples of some assumptions made regarding learner tendencies—childhood vs. adulthood—and further illustrates the pedagogy-andragogy model. It should help you in examining your own assumptions.

By being aware of the assumptions you hold, you can more easily modify them to fit the learners for whom you are responsible. The ability to modify your views and assumptions is important. One key to effective instruction is to operate from assumptions appropriate to specific learners and learning situations. Just as your assumptions fall somewhere between the two extremes, so will the characteristics of any given learner.
LEARNER TENDENCIES: CHILDHOOD VERSUS ADULTHOOD

<table>
<thead>
<tr>
<th>Childhood</th>
<th>Adulthood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children depend upon adults for material support, psychological support, and life management. They are other-directed.</td>
<td>Adults depend upon themselves for material support and life management. Although they must still meet many psychological needs through others, they are largely self-directed.</td>
</tr>
<tr>
<td>Children perceive one of their major roles in life to be that of learner.</td>
<td>Adults perceive themselves to be doers—using previous learning to achieve success as workers, parents, etc.</td>
</tr>
<tr>
<td>Children, to a large degree, learn what they are told to learn.</td>
<td>Adults learn best when they perceive the outcomes of the learning process as valuable—contributing to their own development, work success, etc.</td>
</tr>
<tr>
<td>Children view the established learning content as important because adults tell them it is important.</td>
<td>Adults often have very different ideas about what it is important to learn.</td>
</tr>
<tr>
<td>Children, as a group, within educational settings, are much alike. They’re approximately the same age, come from similar socio-economic backgrounds, etc.</td>
<td>Adults are very different from each other; Adult learning groups are likely to be composed of persons of many different ages, backgrounds, educational levels, etc.</td>
</tr>
<tr>
<td>Children actually perceive time differently than older people do. Our perception of time changes as we age—time seems to pass more quickly as we get older.</td>
<td>Adults, in addition to perceiving time itself differently than children do, also are more concerned about the effective use of time.</td>
</tr>
<tr>
<td>Children have a limited experience base.</td>
<td>Adults have a broad, rich experience base to which to relate new learning.</td>
</tr>
<tr>
<td>Children generally learn quickly.</td>
<td>Adults, for the most part, learn more slowly than children, but they learn just as well. They also have the added advantage of superior judgment (wisdom, if you will).</td>
</tr>
<tr>
<td>Children are open to new information and will readily adjust their views.</td>
<td>Adults are much more likely to reject or explain away new information that contradicts their beliefs.</td>
</tr>
<tr>
<td>Children’s readiness to learn is linked to both academic development and biological development.</td>
<td>Adults’ readiness to learn is more directly linked to need—needs related to fulfilling their roles as workers, spouses, parents, etc., and to coping with life changes (divorce, death of a loved one, retirement, etc.).</td>
</tr>
<tr>
<td>Children learn (at least in part) because learning will be of use in the future.</td>
<td>Adults are more concerned about the immediate applicability of learning.</td>
</tr>
<tr>
<td>Children often externally motivated (by the promise of good grades, praise from teachers and parents, etc.).</td>
<td>Adults are more often internally motivated (by the potential for feelings of worth, self-esteem, achievement, etc.).</td>
</tr>
<tr>
<td>Children have less well-formed sets of expectations in terms of formal learning experiences. Their “filter” of past experiences is smaller than that of adults.</td>
<td>Adults have well-formed expectations, which, unfortunately, are sometimes negative because they are based upon unpleasant past formal learning experiences.</td>
</tr>
</tbody>
</table>
As you review sample 1, keep in mind that these tendencies (dimensions) are not meant to describe specific individuals, but rather to create an awareness of the complexity of the learner. An individual student may fall anywhere between the two extremes on each dimension at any given time. It is also likely that, over time, that point will change. To best facilitate learning, you must understand and allow for these individual differences.

In working with adults, it is particularly important to consider the needs of specific individuals, rather than of adults as a group. After all, if one attempts to generalize about a group of people aged 18 to 75+, clearly there will be problems. Nonetheless, some generalizations can be made, and these are useful as long as they are treated as general tendencies and not as scientific premises governing all individual cases.

Generalization One: Adults Can Learn

That adults can learn has been proven in a variety of experiments. Although motor performance declines and it may take longer for the elderly to learn new materials, levels of information, comprehension, understanding, and vocabulary hold steady with age; the ability to abstract, reason, and recall hold up well; and judgmental capacities remain intact.1

That was written in 1961, but our society still tends to proceed as if one cannot, indeed, teach an old dog new tricks. The prime believers of this stereotyped notion, unfortunately, are those to whom it is applied: adults, particularly older adults.

In fact, adults have one advantage over youth in their ability to learn. They have a broad range of experiences upon which to draw. These experiences—learning through living—provide a frame of reference for the acquisition of further learning.

The work of Allen Tough and Patrick Penland is frequently cited as proof of the existence of adult learning on a rather massive scale. According to their research, adults—throughout life—participate in self-planned learning projects to acquire new knowledge or skills. These projects may be work related (e.g., in your case, studying the field of adult education) or related to a personal interest or hobby (e.g., learning to operate one's new personal computer). What may seem astounding is that Tough found that the average adult learner participates in five self-taught learning projects in a year and spends an average of 100 hours per learning project.


This research should be of interest to educators. It is clear from these findings that adults can—and do—learn and that, for the most part, they wish to be autonomous. They want some control over what is learned, how it is learned, and when and where it is learned. They want to be self-directed. However, many learners conducting self-teaching projects indicated that their learning would have been more efficient had they had more help (e.g., in planning the project, locating resources, and understanding difficult material). Self-directed, then, does not imply that learners need no assistance in their learning efforts.

Generalization Two: Adults Learn What They Consider Important

Clearly, the research on self-planned learning projects supports this generalization. When adults perceive a need for a new skill or new information, they are perfectly capable of working very hard to meet that need. The learning process may not be well conceived, but the motivation to learn is definitely there.

Similarly, when adults enroll in formal educational or training programs, it is usually for a specific purpose. In many cases, they are voluntarily enrolling in a program and paying for it out of their own pockets. This is not a captive audience. If their needs are not addressed and their goals are not met, they have the option of dropping out—and some will in fact exercise that option.

Generalization Three: Adults Are Often Time-Conscious Learners

Some adults participate in further education because it is a pleasant way to fill time. Retirees, singles, empty-nesters are among those who may enroll in courses to keep busy and mentally active as well as to socialize. However, many adults who enroll in courses to achieve immediate goals are very busy people who want to meet their educational goals as directly, quickly, and efficiently as possible.

Consider an adult's many roles (e.g., worker, spouse, parent, scout leader, union member). The role of student is likely not to be the adult's only role; most often it is not even a primary role. To manage all these roles, the adult cannot afford to ramble through course work in a leisurely way. The adult is practical. If an adult has enrolled in a computer literacy course in order to master the new personal computer at home, then he or she is likely to want to focus on that one skill and to gain that skill as quickly as possible—without interfering any more than necessary with his/her other roles.
Generalization Four: What Is Important Varies among Adults

The 18-year-old high school senior wants, generally, a ticket into the adult world. That ticket—the high school diploma—certifies his/her readiness to move on into the world of work or the world of higher education. Adult goals are more far-ranging.

The economically disadvantaged enrollee may want that same ticket into the mainstream and may want to secure that ticket through traditional course work. An associate’s degree from a brand-name educational institution may be perceived as prestigious—as a gateway on the road to upward mobility.

The busy executive who is interested in acquiring skill in management by objectives (MBO) techniques may not be interested in either course work or certificates. The best means to achieve his or her objectives would probably be the quickest means (e.g., a workshop or self-study).

Those adults for whom participation in educational activities is partly motivated by a desire to socialize and interact with others are unlikely to find independent study a satisfying educational approach, regardless of its effectiveness as a learning strategy.

Adults know what is important to them and tend to do best in educational experiences that provide what they value. They are generally goal-oriented, and if a piece of paper is part of that goal, they will seek, not the most appropriate program perhaps, but the one that provides the desired piece of paper.

Generalization Five: Adults Wish to Be Treated as Such—Sometimes

Having reached adulthood—at least chronologically—it is important to many adults to be treated as if they were responsible individuals with the capacity to be self-determining. They may not respond very well, therefore, to rigid attendance policies and in-locus-parenitis discipline policies. They are less likely to tolerate bureaucratic red tape, “Mickey Mouse” requirements, complicated registration procedures and policies, and the like.

Consider the following example. A 30-year-old woman with a college degree and eight years of occupational experience decided to change careers. She wanted to become a computer programmer. Armed with her college degree (with a major in English and a strong background in math and science), she set about enrolling in a local two-year technical school to secure training as a computer programmer. She was informed that she was required to pay for and attend the English and math courses that were part of the total program. She went elsewhere for the course work she desired.

But there’s a quirk in this generalization. An adult’s desire to be treated as an adult may stop short of accepting responsibility for independent learning. Adults whose former school experiences have all been structured and teacher-directed—whose only responsibility was to absorb and parrot back information provided by the teacher—will expect adult education to be the same. Much as they want and need—and demand—programs to meet their individual needs, they will often need help in accepting the responsibility demanded of the learner in such programs.

Generalization Six: “Them That Has, Gets”

There is overwhelming evidence that those who have successfully completed formal educational programs are most likely to seek further formal educational experiences. For one thing, nothing succeeds like success. Given that the formal educational system previously met their educational needs, they are likely to turn to that system to fill future needs. They feel comfortable with the system and confident in their ability to succeed. They are familiar with the system and know how to locate and gain access to the programs they need. And these people can usually manage to finance further education because they are employed.

The other side of this coin is that those who most need education to enter the mainstream of American life, which includes earning a living wage, are least likely to take advantage of the formal educational system. For these people, the system may have meant failure in the past, and they are unlikely to seek opportunities to fail. Furthermore, the functionally illiterate (those unable to function at a
minimum level in today's society) are generally unaware of the educational opportunities available to them and unskilled in tapping into those opportunities. Nor can they finance further education without assistance.

In short, those with the most acute need, in terms of survival, are the least likely to avail themselves of the system's many benefits.

**Generalization Seven: The Have-Not Need Special Support**

There are many adults who may require special support services if they are to locate, enter, and succeed in educational programming. It may take special recruitment efforts to ensure that those who need the institution's services are aware of those services. That's an obvious first step—or it should be. But adults may have other needs once they consider enrolling—needs that must be met before the adult can participate, for example:

- **Personal needs**—The adult may need help in financing his/her education, in locating childcare facilities, in arranging transportation, and so on.
- **Poor self-concept**—The returning adult may not realize what skills he/she possesses and may doubt his/her ability to succeed in school.
- **Poor basic skills**—The adult may lack the basic skills needed to succeed in the educational program.
- **Poor study skills**—An adult may need help in learning (or relearning) how to learn before he or she can get the most from the educational program.

Clearly, unless such special support is provided when needed, adult programming will not serve the client for whom it is designed. These needs are at the base of the hierarchy of educational needs and must be met first before higher educational goals (e.g., training, retraining, upgrading) can be addressed.

**Adult Development**

As you prepare yourself to work with adult learners, it is also important that you understand how people change, biologically and psychologically, over the adult portion of their life span—how they develop. If you are armed with increased understanding, you will have another tool to use in facilitating learning.

**Biological Changes**

In recent years, a trend has begun that is gaining momentum. More and more scientific investigations are being conducted in an attempt to understand human biological development beyond the childhood years. As this knowledge base grows, educators can use this knowledge to appropriately modify—and improve—their instructional strategies. Let's examine some of the major findings of recent years that relate to the capabilities of adult learners.

**Speed and reaction time.** Generally speaking, as people age, their reaction time decreases. It takes longer for information from the environment to be perceived, processed, and acted upon. It follows that the speed at which people learn also decreases with age.

However, even though reaction time does diminish with age, it is **not a critical factor** in terms of effective learning. This is especially true if the learners can control the pace. Experience and consistent effort negate any loss of sheer reaction speed. In fact, the performance of older adults is often superior to that of their younger counterparts for these very reasons. Also important to remember is the fact that reaction time varies widely among adult learners. There is, in reality, no “typical” adult.

**Visual acuity.** Human beings see best about the age of 18. After that age, they experience a relatively steady decline in visual acuity, with the most noticeable decline occurring between the ages of 40 and 55. Their eyes lose their elasticity, react less quickly to changes in illumination, and have a narrower field of vision. People also become more prone to cataracts and defective color vision as they age.

It is important to realize that these changes are normal and can be easily compensated for by the use of corrective lenses and by simple steps that you as an instructor can take. For example, you can assure that adequate lighting is available within the classroom and at laboratory work stations, that the type size used for overhead transparencies is large enough, and that individuals with vision difficulties are seated near the front of the classroom. Simple steps like these will eliminate most vision problems.
Auditory acuity. The loss of auditory acuteness may be among the most significant of the biological changes that occur as people age. There is generally a gradual decline in hearing ability until the mid- to late sixties. After that point, there is a marked decline. The loss is most noticeable at very high frequencies and very low frequencies. It is estimated that loss of auditory acuity—enough to interfere with normal conversation—ranges from about 5 percent in children under age 15 to approximately 65 percent in adults over the age of 65.

The implications of these changes are important, especially in a psychological sense. Adults who have difficulty in hearing the spoken word are likely to lose confidence in their ability to interact with others. This loss of confidence may result in avoidance behavior—people may avoid entering new situations and acquiring new experiences. The anxiety inherent in hearing loss may also affect the learning process. High anxiety levels reduce the ability to learn.

Intellectual functioning. The issue of adult intellectual abilities has provided continually fertile ground for differences of opinion. This is to be expected, since the issue is extremely complex. Differences of opinion exist in terms of what “intelligence” actually is, how it should be measured, and even the value of attempts to measure it. Rather than discuss the merits of various research designs and assorted explanations of what intelligence is, a summary of the best information now available about adult learning capabilities would better suit our purposes.

- The speed of learning is reduced in a number of areas, but the power to learn is generally not reduced. Speed may be reduced because scanning a large information store and integrating new information into that store takes longer—and adults have a larger amount of data stored in long-term memory.
- Adult capacity to use vocabulary does not decline. In fact, it often improves throughout life. This is especially true of those individuals who continue to actively use this particular capacity.
- The ability to make sound judgments reaches its highest level during adulthood.
- Although the reasons are unclear, adults do not tend to do as well as their younger counterparts in subjects requiring mathematical reasoning.
- The ability to remember remains relatively stable throughout adulthood, although short-term memory may be a little less efficient in older learners.
- On the whole, adult learners are less effective when learning tasks are complex (if sufficient learning time is not provided).
- As with younger learners, material is learned best when it is meaningful. Adults, particularly, are not likely to be motivated to learn material that appears useless or irrelevant.
- Overall, the learning ability of adults is little diminished over their life span, until very old age.

It is essential to keep these biological changes in perspective. Although they can be very important in some cases, most adults will not experience physical decline serious enough to affect their ability to learn—at least not until they are very old.

Continued awareness on your part of the potential for physically based learning problems and knowledge of the generally simple steps you can take to deal with them are needed if you are to make your adult instruction as effective as it can be.

Psychological Changes

A great deal more is known about how adults change physically than about how they change mentally. For one thing, it's much easier for a scientist to measure a person's reaction time, for example, than it is to measure or understand a person's psychological state. For another, research in this area has only recently become more popular.

Until a few years ago, the generally held view of human development was that psychological changes essentially slowed or stopped when adulthood was reached. Most social scientists simply dismissed adulthood. It was viewed as beginning with a sort of "settling down" period somewhere between age 20 and 29, after which not a great deal happened. Other than experiencing a gradual decline in mental abilities, adults were thought to be basically psychologically static.

Recent research has shed enough light on these assumptions to prove them false. Adults do change. Adulthood is filled with challenges that must be met.
The act of meeting these challenges necessarily results in changes in a person's internal psychological state.

For example, almost all adults must leave the home in which they were raised—usually in their late teens or early twenties. Breaking away from a safe, known environment, moving out into an uncertain world, and leaving loved ones behind involves a challenge—sometimes called a "developmental task." These challenges are common to most people and, to a certain extent, be predicted simply because they tend to occur at about the same time in the lives of most adults.

Researchers have identified some of these challenges in recent years and have developed classification schemes to better study and explain adult development. Some researchers have grouped tasks together into stages, calling them life stages or transition periods, or tagging them with descriptive titles like the trying twenties or mellowing.

As an instructor, you need to be familiar with and aware of these developmental stages, since they can affect the instructional process. The instructional process is affected because people bring their psychological states with them to any learning experience. People have attitudes, value systems, opinions, self-images, likes and dislikes, fears, anxieties, and so on—and these kinds of psychological elements are often linked to or affected by the developmental stage that a person is passing through.

For example, adults in their early twenties are generally concerned about breaking away from parental control, planning a career, establishing a stable identity or self-image, choosing a mate, forming educational goals, and so on. As they deal with these challenges, their opinions change or become reinforced, their attitudes are modified, their self-image becomes more defined—in short, they develop.

On the other hand, adults in their fifties, although also still developing, are likely to be concerned about different issues. They have already made many choices about family, career, and education. Their self-image is probably much more well-defined. They may be more concerned about loss of youthful vigor, the difficulties their children (or aging parents) are experiencing, or impending retirement.

Think about a young adult who has never been married and an older adult who has been married and divorced—or married for 30 years. These two individuals are likely to hold drastically different views about the institution of marriage.

Life stages can also affect people's attitudes toward formal education or training. A younger adult may be reluctantly enrolled in a course simply because it will bring him/her to the end of a formal training program—after which he or she can get out into the world and begin a career. An older adult may be truly excited about the same course because the content is something that he or she always wished to learn, but never had an opportunity to.

These are but two examples of the kinds of differing concerns, attitudes, and opinions that can affect the way in which people perceive and react to a given learning experience.

This brief discussion only touches upon the information that is available regarding adult development. Even though we are beginning to better understand adult development, it is essential to keep in mind that, although the developmental stages identified by researchers may apply to the adult population in general, they may not apply to a specific individual. For example, a given adult male might experience a "mid-life transition" a good deal later or earlier than the "average" male. Or, he may not experience it at all.

Once again, it is important to remember that there is no typical adult. We must guard against the natural tendency to stereotype or pigeonhole individuals into neat little categories. Adult developmental theory only provides a means by which you can better understand some of the factors linked to human growth and change that can affect the learning process.

Sample 2 provides a list of some of the many sources of information on adult development available at present. Also included on the list are sources of information on adult learning, self-directed learning, and lifelong learning—including journals and newsletters you can peruse periodically to keep up-to-date regarding the instruction of adults.
SUPPLEMENTARY RESOURCES


Darkenwald, Gordon O. Nurturing Adult Students. IN 226. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1981. ED 205 772


ERIC Update on Methods and Techniques of Teaching Adults, BB 74. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1985.

Exemplary Programs for Adults, Butterwayne, OH, Restaurant Network for Adult Educators, 1983. ED 220 028


In order to be an effective instructor of adults, it is strongly recommended that you do some additional reading in the area of adult education. At a minimum, you should read at least one additional text focusing on the characteristics and instructional needs of adult learners. Your resource person should be able to direct you to current or classic texts and journal articles, or you can select relevant texts from those listed in sample 2, pp. 16-17.

For example, to learn more about adult learners, you might choose to review works by Cross, Jones, Knowles, Knox, Krupp, or Reece. If you wish to learn about the self-directed learning activities in which adults typically participate, you could read works on that subject by Knowles, Penland, Smith, or Tough. For information about lifelong learning, you might wish to read works by Axford, Gross, Mocker and Spear, or Peterson et al.

To learn more about adult development, you may wish to read one or more supplementary references on that subject. Again, your resource person should be able to direct you to current or classic texts and journal articles, or you can select references from those listed in sample 2, pp. 16-17 (e.g., works by Gould, Levinson et al., Merson, Neugarten, Sheehy, or Vaillant). As an adult yourself, you should find such reading quite instructive, helping you to better understand not only your adult students, but also yourself.
You may wish to put into practice what you have discovered about adult development by engaging in the following role-playing activity. Assume the role of instructor and select a group of your peers to role-play the adult learners in a class you are teaching.

First, have the learners list the changes that have occurred in their own lives (or in the lives of parents, spouses, friends) in the past five years; you make a list, too. Then, begin the discussion by sharing one or two of the changes in your life with the group; next, have each class member follow suit.

After the activity, discuss the results. Discussion questions might include the following:

- Were the life changes experienced by people of approximately the same age similar?
- Did any members of the group experience physical changes with which they had to cope?
- If the ages of the individuals in the group varied widely, how different were their concerns about life choices?
- Did participants feel that their attitudes, values, and so on, were affected by the changes in their lives?
- Did group members feel that there really are identifiable, predictable adult life stages?

You may wish to reinforce your understanding of adult development by writing a short paper on adult development using your own adult life as its basis. You may use the Levinson model, Sheehy model, or any of the other adult developmental models about which you have chosen to read as a basis of comparison with your own life. If you are still in the early stages of adulthood, you may write instead about the life of someone close to you (a parent, friend, or other relative). Be sure to identify and use specific examples of developmental tasks and life events.

If you have written a paper on adult development, you may wish to arrange to have your resource person review and evaluate your paper. Give him/her the Adult Development Paper Checklist, p. 19, to use in evaluating your work. You may also wish to rate yourself. If you choose this option, make a copy of the checklist, complete one yourself and give your resource person the other; you may then meet later to compare and discuss your evaluations.
ADULT DEVELOPMENT PAPER CHECKLIST

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

Name ____________________
Date ____________________
Resource Person ____________

LEVEL OF PERFORMANCE

The paper:
1. addressed the concept of developmental tasks ..............
2. addressed the concept of sequential change during adulthood ...
3. provided specific examples of developmental tasks ...........
4. provided comparisons between the life stage model(s) and his/her own life events (or the life events of his/her subject) ........
5. addressed the concept of life eras or stages .................
6. provided comprehensive content ..............................
7. was logically organized ......................................
8. provided for full development of key points ..................
9. included appropriate documentation ..........................
10. was based upon adequate and appropriate resources ......

Level of Performance: All items must receive FULL or N/A responses. If any item receives a NO or PARTIAL response, review the material in the information sheet, The Adult Learner, pp. 9–17, revise your paper accordingly, or check with your resource person if necessary.
The following items check your comprehension of the material in the information sheet, The Adult Learner, pp. 9–17. Each of the three items requires a short essay-type response. Please respond fully, but briefly, and make sure you respond to all parts of each item.

**SELF-CHECK**

1. A 19-year-old, out-of-state student, who lives alone near campus, has been having difficulties in completing assignments and attending class sessions. You ask to meet with him, planning to center your discussion around the undoubted cause of his difficulties: the life changes he is experiencing (leaving home and its security, breaking parental ties, and so on). Is this an appropriate strategy?

2. One of your colleagues expresses concern that the members of one of her classes (mostly older learners in their fifties and sixties) might not be able to "cut the mustard." Her concern, which is shared by some of those students, is based upon the fact that the course she is teaching requires the learning of a substantial amount of cognitive material in a short period of time. It also involves the development of psychomotor (physical) skills, which call for a certain amount of manual dexterity, visual acuity, and so on. What would you say to this individual to relieve her concern?
3. During a discussion about teaching techniques, one of your colleagues contends that adults are just larger versions of children and would, if the truth were known, like to be taught in the same way. After all, teachers know best what is most important for learners to learn, and adults, like children, depend upon the teacher to tell them what they need to learn. How would you respond to this contention?
Compare your written responses to the self-check items with the model answers given below. Your responses need not exactly duplicate the model responses; however, you should have covered the same major points.

MODEL ANSWERS

1. You should certainly have a discussion with this student, but it would be a mistake to focus only upon the life-change issues. It is important to remember that adult development theories are meant only to describe the "average" adult population, not specific individuals. The life changes and stresses associated with the student's age group and situation may be contributing to the difficulties he is experiencing—or they might not be related at all.

His classroom difficulties might instead be linked to any number of other variables—a death in the family, financial problems, a learning disability, and so on. It is critical not to make quick assumptions about the root causes of learning problems by latching on to simple solutions. The student's problems should be investigated in some depth, with adult developmental theory being only one of the tools you use.

2. Your colleague's fears are probably grounded in myths about the capabilities of adult learners. Your best response would be to offer examples about what is now known about adult biological development and how learning ability changes over the adult life span. These reassuring facts may both relieve her concerns and help her to relieve the concerns that her older students have about their own abilities.

For example, you could mention that learning speed may be reduced in some individual adults, but the power to learn is generally not affected until very old age. You could also point out that the speed at which adults learn may be related to the fact that they have a larger mental database to manipulate, therefore increasing the time required for information processing. You might also note that, in any case, speed loss is generally small and does not usually present a problem in terms of learning ability.

Your colleague also needs to understand that sensory acuity usually plays only a minor role (for example, slower reaction time). Generally speaking, diminished sensory acuity has little effect on performance for two major reasons. The first is that almost any loss in acuity can be remedied (e.g., through use of hearing aids and corrective lenses). The second is that losses in speed can be made up for by experience.

For example, as far as job performance is concerned, older, experienced workers will generally be better performers than younger, less-experienced workers. In fact, jobs requiring a great deal of manual dexterity are often completed more quickly and with better results by older learners because they are more efficient than their younger counterparts.

Finally, you should make it clear to your colleague that in many areas of cognitive functioning, adults become increasingly more proficient as they age. For example, both the capacity to use vocabulary and the ability to make sound judgments generally improve as people age (if they remain mentally active).

3. Your best bet in responding to your colleague's notion that adults are just large children would be to focus on the differences between young learners and adult learners. It's apparent that your colleague holds what could be termed pedagogical assumptions about learners. This would then be a logical starting point for your rebuttal.

You could point out that assumptions about learners can be grouped at either end of a child-adult continuum, with each learner falling somewhere between the two extremes on any of a number of different dimensions—dependence, for example. A child is generally dependent upon his or her teacher in terms of decisions about what is to be learned and how it might best be learned. This dependency is in part determined by both the child's lack of learning experience and lack of subject knowledge. Children, in general, do not have an adequate base on which to make instructional decisions.
A similar set of conditions could hold true for a given adult learner. For example, an adult who had just returned to school to begin a program in electronics might suffer from a lack of recent experience in learning—how best to read textbooks, take notes, and so on. Nearly complete unfamiliarity with the subject matter, combined with this lack of experience, might prevent such an individual from making independent decisions about the how and what of instruction. The learner would, hence, by necessity be dependent upon the instructor.

However, at the end of his or her program, this same adult might be very capable of choosing both what to learn and how to learn it. This same kind of reasoning could be extended to other pedagogical/andragogical assumptions.

Level of Performance: Your written responses to the self-check items should have covered the same major points as the model answers. If you missed some points or have questions about any additional points you made, review the material in the information sheet, The Adult Learner, pp. 9–17, or check with your resource person if necessary.
Learning Experience II

OVERVIEW

Enabling Objective

After completing the required reading, demonstrate knowledge of learning preferences through analysis of one of your own past learning experiences.

You will be reading the information sheet, Learning Preferences, pp. 26-28.

You may want to read the following supplementary reference on individual styles: Guild and Garper, Marching to Different Drummers.

You will be demonstrating your knowledge of learning preferences by analyzing one of your own past learning experiences, using the Learning Experience Worksheet, pp. 29-32, as a guide.

You will be evaluating your competency by comparing Part III of your completed worksheet with the Model Response, p. 33.
Learning is an integral part of all our lives, throughout our lives. To find out how different people prefer to learn, read the following information sheet.

**LEARNING PREFERENCES**

Learning is an integral part of the human condition. To be human is to learn throughout life. This fact has always been known, but an understanding of the mechanisms by which people learn is only now developing. The determined efforts of many researchers in many different disciplines are providing us with a growing reservoir of information that we can use to help people learn more efficiently and effectively.

Some of these researchers are investigating the ways in which people interact with the environments in which learning occurs and attempting to identify the learning styles that people employ. Still others are attempting to unravel the mysteries of the brain itself. This information sheet will focus on one important piece of the learning puzzle: learning/cognitive styles.

As people learn, they take in information from their learning environment in many forms. This information is perceived and then processed in different ways by different individuals. An individual's characteristic way of perceiving, thinking, problem solving, creating, and so on, may be thought of, for our purposes, as either his/her learning style or cognitive style, since the two concepts are very similar. A person's learning/cognitive style can be thought of as the way in which that person approaches new learning.

For example, in approaching new learning, some people prefer to read (e.g., a text), others prefer to listen (e.g., a lecture), while still others prefer to touch and manipulate (e.g., a lab project). Group activities that are open and freewheeling are loved by some learners, hated by others. Some learners learn more readily in highly structured situations. Some learners prefer to solve new problems by examining the differences between similar problems, while others look for common relationships and features.

The subject of learning/cognitive styles is complex, and a wide variety of models have been conceived. Let's examine two representative kinds of models.

If you think of learning styles in terms of sensory preference, various styles can be grouped into three subgroups (modalities): auditory, visual, and kinesthetic-tactile.

An individual's preferred learning modality can be assessed either through observation or by means of some type of instrument (test), a number of which are now readily available. The method many experienced adult educators use is observation. An astute observer can easily gain a feel for students' sensory preferences by noting small behaviors in the classroom. Most students will tend toward use of one sensory mode, although some may favor two, or even all three, equally. Listed in sample 3 are some behaviors that you can use to tentatively identify the learning modality preferences of your students based upon this kind of classification.

If you think of styles in terms of perception, learners can be classified as field-dependent or field-independent. A field-independent learner characteristically approaches learning in an analytic way, separating the elements of a learning task from its background or field (hence the term field-independent).

A field-dependent learner, on the other hand, characteristically approaches learning tasks in a global sort of way, viewing the task as a whole, rather than separating parts from the field. Such learners are dependent upon the field to make sense of the problem.
Determining whether a learner is field-dependent or field independent requires an instrument like the Embedded Figures Test. A representative item from this kind of test is shown in sample 4. A person who is field-dependent will have difficulty in locating the figure on the left within the complex design on the right. This ability is, once again, linked to perception—the way in which people perceive their environment.

We have only touched upon two kinds of models. Other models describe the ways in which people assimilate information or identify information relevant to a problem. Still others describe the environmental conditions under which people are likely (or not likely) to learn best. There are literally dozens of different models that describe various aspects of the ways in which people learn.

Although there are many ways of describing how people learn, don’t let the complexity of the subject prevent you from learning more about cognitive styles and learning styles. Even though it is a complex subject, learning about and using even one model can provide you and your students with valuable information that can (1) help you design better instruction and (2) help students better understand how they learn best.
Individuals have different styles—leadership styles, teaching styles, learning styles. To learn more about these styles and how knowledge of styles can help you meet the instructional needs of adult learners, you may wish to read the following supplementary reference: Guild and Garger, *Marching to Different Drummers*.

This easy-to-read book on style is divided into three parts. In the first part, the authors define style and provide some background into research on style. In the second part, the work of some major researchers (Jung, Witkin, Gregorc, Dunn and Dunn, McCarthy, and Barbe and Swassing) is reviewed, and an example of how each research model could be applied in an educational setting is provided. In the third part, the authors present a way to organize your thinking about styles, raise additional issues, and discuss implementation and staff development. A comprehensive annotated bibliography and a list of additional references are provided for those wishing to study the subject in more depth.
Choose one or several self-directed learning experiences that you have had during the past year. You might select, for example, independent work you carried out as part of a class you took: an independent study or the work involved in writing a paper (e.g., selecting a topic, researching that topic, developing an outline). Or you could select a project you planned and completed totally on your own for reasons of professional development or personal interest.

Then, analyze those learning experiences, in terms of your learning style and the learning process used, by responding in writing to the questions in Parts I and II of the following worksheet. Finally, explain in Part III what your analysis reveals to you about learners and learning.

Each item on the worksheet requires an essay-type response. Please explain fully, but briefly, and make sure you respond to all parts of each item. Do not answer simply yes or no; explain your responses and provide specific examples where possible.

---

LEARNING EXPERIENCE WORKSHEET

Part I: Learning Style

1. Briefly describe the self-directed learning experience(s) that you had.

2. Describe the learning modalities you used (i.e., auditory, visual, kinesthetic-tactile, or some combination thereof).
3. Why did you choose the modalities that you did?

Part II: The Learning Process
1. How did you determine what you needed to learn?

2. Why did you need to learn it?

3. How did you locate the learning resources (both human and material) that you used?
4. What other resources would have been helpful to you in reaching your goals (if there were resources that you wished to use but were not able to do so)?

5. How did you evaluate the effectiveness of your learning effort?

6. How did you feel about the learning experience?

7. If you were to repeat the learning experience, would you choose to do anything differently? If so, what?
Part III: Learners and Learning

1. Considering your answers to the questions in Parts I and II, what have you learned about learners and learning (i.e., how they learn, both in terms of learning style and the process employed by most learners)?
Compare your written response to Part III of the worksheet with the model response given below. Your response need not exactly duplicate the model response; however, you should have covered the same major points.

MODEL RESPONSE

Part III: Learners and Learning

Your analysis of your own learning experience(s) should have revealed to you that the learning strategies you employ tend to reflect your learning style preferences. For example, if you are a kinesthetic-tactile learner, it is likely that you chose learning strategies involving hands-on activities. Or you may have discovered your preferences through negative experiences—by selecting learning strategies you did not enjoy or find to be effective in your case.

From this analysis, you should have concluded that all learners, including yourself, prefer to employ, or favor, one way of processing information from the environment. In terms of the sensory-preference model, people tend to favor and learn best by means of auditory input, visual input, or kinesthetic-tactile input. People have characteristic styles of learning.

You should also have discovered that learning is not something that happens only in schools; it is an integral part of our lives as human beings. Learning is in fact a lifelong process.

In analyzing your own learning process, you probably discovered that how you ultimately felt about the experience was directly related to how motivated you were, how well planned the experience was, how accessible learning resources were to you, and how effective the process was in helping you meet your goals. If, for example, you had difficulty in identifying exactly where to get needed information, it is likely that the experience was frustrating and that valuable time was wasted.

Depending on the specifics of your analysis, you should have drawn conclusions such as the following about the learning process:

- For purposeful learning to occur, a well-structured process should be followed.
- When a learner determines his/her own learning goals—based on felt needs—the motivation to learn is greater.
- When there is a wide variety of learning resources available, learning can indeed occur with neither school nor teacher.
- When resources cannot be identified or located, it can be a highly frustrating experience.
- It is sometimes difficult to evaluate the effectiveness of your own learning efforts.

Level of Performance: Your written response to Part III of the worksheet should have covered the same major points as the model response. If you missed some points or have questions about additional points you made, review the information sheet, Learning Preferences, pp. 26–28, or check with your resource person if necessary.
Your role as an instructor carries with it the obligation to continually improve your capabilities. People depend upon you to help them learn what they need and want to learn. To learn how you can become an increasingly better instructor, read the following information sheet.

PROFESSIONAL DEVELOPMENT

As has been said many times in a number of ways, change is one of the few constants in our world. Our society and the human beings who compose it are dynamic—continually in a state of change. No matter how much you might wish to maintain the status quo, it is generally beyond your power. You must be equipped to deal with change.

To deal with change effectively, you must stay up-to-date as an instructor. To become and remain an effective teacher of adults, you must engage in activities that will foster your own professional development. Your professional development needs can be grouped into three broad categories, as follows:

- The need to acquire knowledge and understanding of developments in education, training, and related disciplines, especially as they relate to the teaching of adults—and the need to acquire skills to implement that knowledge and understanding
- The need to develop and expand your technical skills and knowledge in your specific occupational area
- The human psychological need to grow and develop

Developments in Education, Training, and Related Disciplines

Advances in the understanding of how humans learn and develop are providing a growing knowledge base that you can use to improve your instruction. For example, knowing the kinds of mental strategies people use in learning concepts, solving problems, acquiring language, and so on, can help you develop instruction that will maximize the chances that people will learn as efficiently and effectively as possible.

Educators have also achieved a better grasp of the why's and how's of adult learning—the practical reasons motivating adults to participate in education and training and the ways in which they go about the business of learning. How they decide what they need to learn, how they locate appropriate resources, and how they evaluate their learning efforts, are all questions to which much more satisfactory answers exist than those that were available a decade ago.

The inner world of the adult is also beginning to be revealed. Psychological needs that form the basis for motivated behavior are gradually becoming better understood. The same holds true for both physiological and psychological developmental events—those progressive, predictable changes that most adults experience at one time or another.

Research findings such as these form the basis for identifying appropriate instructional strategies and techniques for adult learners. This, in turn, can improve the quality of the learning experiences provided—a goal toward which all instructors should be moving.

It is also important to be continually aware of the innovations that are the result of technological advances. New mechanisms for the delivery of instruction, like the computer, can greatly affect how you carry out the business of instruction. Computer applications—in the form of computer-based training and education systems, interactive video, computerized course/program management, and so on—offer promising tools for learning.

For example, sometimes large numbers of people must be trained as quickly as possible. In those cases, the learning process can be positively affected—in terms of student learning, program costs, and program management—by the use of appropriate computer-based systems. The learners can often be more efficiently and effectively assisted in their learning efforts by means of these kinds of instructional delivery systems than by use of more traditional systems, such as lectures and discussions.

Of course, factual knowledge alone is of limited value in terms of instructional improvement. If you are to reach your goal of becoming an increasingly better instructor, you must understand the application possibilities of this new information, and you must determine which skills and competencies, if acquired, would be most beneficial in helping you improve your ability to instruct adult learners.

Technical Skills and Competencies

It is important not to underestimate your need for technical expertise. It has been shown that students
consistently rate subject knowledge as the most important, or one of the most important, attributes that an instructor can possess. This is not to minimize other attributes and skills—interactive (interpersonal) skills, a repertoire of teaching techniques, and the like. But it stands to reason that without well-developed, current technical knowledge and skills, it is difficult, at best, for an instructor to teach effectively.

Since many knowledge bases change rapidly, it is critical that you continually update your knowledge and skills. This is important, of course, if your content area is one directly affected by technological advances.

Consider, for example, the speed with which new word-processing hardware and software are thrust into the marketplace and, consequently, find their way into many businesses. Students in secretarial courses will undoubtedly be expected to be familiar with specific types of word-processing programs that are in widespread use.

You must maintain an adequate level of knowledge about and skill in the current tasks, tools, and equipment of the trade in order to make informed decisions. Otherwise, students will likely be inadequately prepared for the workplace. You also run the risk of adversely affecting the reputation of the course, institution, or department. In these times of increasing competition and dropping enrollments, risks such as this are not acceptable.

Your Growth and Development

When people think of professional development, they often think of it solely in terms of knowledge- or skill-acquisition goals—for example, learning about computer-assisted instruction or acquiring group management skills. These kinds of goals enable you to focus and direct your learning efforts.

You also have other goals that are an inherent part of your human nature. You need to grow and develop—experience successes, enhance your self-esteem, accomplish difficult tasks, gain acceptance by peers, feel confident, and so on. In short, the achievement of your knowledge- and skill-acquisition goals is influenced by what are often termed affective factors.

Learning does not occur in the absence of emotions, interests, attitudes, feelings, values, and so on—affective factors. When people participate in a learning experience they bring with them this internal "luggage." Learners may be afraid, apprehensive, excited, interested, or apathetic. The way people perceive any learning experience, including experiences aimed at professional development, will thus be altered by their own collection of affective factors.

By engaging, on a continuing basis, in learning experiences aimed at professional development, you can maximize the chances that you will have successful learning experiences that will produce positive feelings. Of course, the more positive you feel about learning experiences, the more likely it is that you will look favorably upon future developmental opportunities. This, in turn, increases the chances that you will meet your instructional improvement goals.

For example, if you decided that it would be to your benefit to acquire increased skill in managing groups, you might locate a workshop that provided both solid content and hands-on experience. If you completed the workshop successfully, you might experience any number of positive feelings—satisfaction, increased self-esteem, and so on. These feelings would contribute to your growth and development goals, affect the way you view other potential learning experiences, and move you toward reaching your knowledge- and skill-acquisition goals.

To be the best instructor that you can be, you should both take advantage of the professional development activities that present themselves and, in addition, strive to create your own.
Strategies and Sources for Professional Development

There are many strategies and sources for professional development. Many of them can be grouped into the category of formal education and training, which encompasses most structured learning activities. There are also many unstructured kinds of learning activities that can be grouped into the category of informal education and training. Another method of professional development that is experiencing growing popularity is networking. It provides a means to meet some of the people most qualified and likely to give you a hand. An awareness and understanding of these sources and strategies will aid you in reaching your professional development goals.

Formal Education and Training

Formal education and training can, of course, be acquired through many channels. Among the best sources for information are professional associations. There are at least 12,000 professional and trade associations in the United States alone, with total membership numbering in the millions.

Information about teaching adult learners is available through membership in a professional association for your particular occupational area or one of the associations specifically focused on adult education, such as the American Association for Adult and Continuing Education (AAACE) and the National Adult Vocational Education Association (NAVEA), an affiliate of the American Vocational Association (AVA).

In addition to keeping track of and publicizing development opportunities in general, these associations often conduct/sponsor their own seminars, workshops, forums, lectures, and institutes. Some endorse and/or produce instructional materials. Almost all produce print media in the form of yearbooks, monographs, journals, magazines, and newsletters. Some organizations grant credit for completion of learning experiences. They are a rich source of developmental opportunities.

Another growing source of opportunities is the commercial vendor. Private concerns develop and aggressively market training programs and educational materials of every description. Their advertisements appear in professional journals and are distributed through the mail. Their wares are featured at trade shows, association conferences, and so on. A word of caution is in order, however. Many of the products offered by vendors are of excellent quality, but some are of dubious value. Be a wary consumer.

To identify appropriate professional associations and worthwhile programs and materials, you can do the following:

- Talk with colleagues.
- Contact your local universities, colleges, and vocational-technical institutions.
- Visit libraries; there are a number of association directories available that list contact persons and their addresses/phone numbers. You can also consult other print media related to your particular field. Many journals and newsletters provide abundant information about available programs and materials. Get the librarians to assist you.
- Talk with your students; some of them may already be practitioners and may be familiar with technical-skill-updating programs and materials.

It's important not to overlook the training opportunities (e.g., seminars, workshops) that might be available within your own organization. Such learning experiences sometimes go unnoticed by the people they're designed to serve. Unfortunately, one poorly executed workshop may receive such bad press that attendance at other potentially useful activities is affected. Don't be misled by secondhand reports or underestimate the value of in-house staff development efforts. Contact those in your organization who are responsible for staff development, and take advantage of the opportunities they provide.

There may also be more formal educational experiences available than you might guess, and many of these offerings have been created with you, the adult learner, in mind. If you've been away from the higher education scene for a few years, you might be surprised at some of the changes.

For example, continuing education, avocational, and vocational offerings have increased considerably at most institutions. Many more courses are offered in the evenings or on weekends. Telecourses, correspondence courses, and other distance learning techniques are achieving growing popularity.

It seems that almost any topic or subject that can be named is offered by one educational institution or another. A few phone calls to different institutions in your area should provide you with an abundance of information about available course offerings.2

2. To gain further skill in professional self-development, you may wish to refer to Module 1-1, Keep Up-to-date Professionally.
Informal Education and Training

Since adults generally have a need to direct their own learning efforts, you may prefer to engage in more-informal, less-structured kinds of learning activities.

Many opportunities for self-directed learning exist, in part, because of the wealth of materials available—books and periodicals (see sample 2, pp. 16-17), as well as audiotapes, programmed instructional materials, films, videotapes, and so on. These materials are relatively easy to locate and address a great number of topics at different levels and in different media forms. You can usually locate materials that are suited to both your content requirements and your learning style.

For example, if you prefer to learn by auditory means, you may be able to locate what you want to learn in audiotape form. Check your local libraries, college/university media centers or learning centers, advertisements in professional journals, information services that maintain databases of educational materials, and so on. Audiotapes exist that address everything from choosing media to adult learning theory. They are especially attractive in that they can be used while other tasks are being accomplished—while you're driving to work, for example.

For those who favor the written word, programmed instructional materials are another option. They, too, allow a learner to proceed at his or her own pace, get immediate feedback on progress, and learn when time permits.

Opportunities for self-directed learning also exist because of the many individuals interested in and committed to helping adults learn and develop. Don't be reluctant to seek advice from colleagues, librarians, educators at local institutions, your supervisor, and so on. You'll find many people willing to lend a hand in your developmental efforts.

Networking

One very effective way to develop professionally is to interact with other professionals. The following are some strategies that you might employ to develop or become part of a professional network:

- Form a support group with other professionals. Set up meetings, lunches, potluck dinners, cookouts, conference trips, etc.
- Join professional organizations. Be an active participant.
- Join trade associations.
- Join community groups.
- Develop a file of contacts. Have a system—don't rely on memory.
- Offer yourself as a speaker at association meetings.
- Attend workshops, seminars, etc.
- Follow up on contacts. Take the initiative.
- Visit other professionals at their workplace.
- Attend trade shows, open houses, etc.
- Correspond with other professionals.

With a little thought, you can devise many other strategies for developing relationships with other professionals. The key to success, however, is to actively seek out others in your profession. Plan for your growth and development.
Before you plan what you need to do to prepare to work with adults, it is helpful to assess where you are now in relation to the knowledge and skills important to instructors of adults. As an aid in assessing your present readiness, complete the checklist below. Read each of the statements on the checklist, and then check the appropriate box to the right of each statement.

### SELF-ASSESSMENT CHECKLIST
FOR INSTRUCTORS OF ADULTS

<table>
<thead>
<tr>
<th>I possess knowledge about or skill in:</th>
<th>Yes</th>
<th>Some</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. adult psychological development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. adult physiological development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. characteristics of adult learners (e.g., motivational, emotional)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. individual styles (learning, teaching, leadership)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. needs assessment techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. learner needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. program needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. instructional program planning and development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. program implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. instructional technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. instructional techniques/strategies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. instructional materials selection and development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. management of the physical learning environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. management of the psychological learning environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. management/administration of the instructional process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. evaluation of learning outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. program evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. student career information/placement assistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. recent occupational developments</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
By completing the self-assessment in the previous activity, you should have identified specific areas in which you need additional knowledge and skills.

Now, use the worksheet below to develop a plan for acquiring or refining the specific knowledge and skills you need. In the column labeled "The Need," list your own specific needs as indicated by your inventory. Then, in the column labeled "How to Fill It," list the specific means you will use.

It is very important that you be specific as you develop your plan. You should indicate the particular experience you plan to gain (e.g., knowledge of learning styles). Then, wherever possible, indicate exactly how you could gain this needed experience (e.g., by attending the conference on "Individual Styles" sponsored by XYZ University next summer).

<table>
<thead>
<tr>
<th>The Need</th>
<th>How to Fill It</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
After you have developed your plan for acquiring or refining the knowledge and skills you need to teach adult learners, use the Planning Worksheet Checklist, p. 43, to evaluate your work.
PLANNING WORKSHEET CHECKLIST

Directions: Place an X in the NO, PARTIAL, or FULL box to indicate that each of the following performance components was not accomplished, partially accomplished, or fully accomplished. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

---

**LEVEL OF PERFORMANCE**

<table>
<thead>
<tr>
<th>N/A</th>
<th>No</th>
<th>Partial</th>
<th>Full</th>
</tr>
</thead>
</table>

The plan to gain knowledge and experience:

1. included the specific knowledge and skills needed, as indicated by the results of self-assessment

2. identified opportunities for gaining the needed knowledge and skills through one or more of the following sources:
   a. professional associations
   b. commercial vendors
   c. local educational institutions
   d. libraries, media centers, curriculum labs
   e. colleagues and students in your own institution
   f. other professionals in a network

3. identified specific kinds of appropriate activities for gaining needed knowledge and skills

4. was realistic and feasible in application

**Level of Performance:** All items must receive FULL or N/A responses. If any item receives a NO or PARTIAL response, review the material in the information sheet, Professional Development, pp. 36–39, revise your plan accordingly, or check with your resource person if necessary.
Learning Experience IV

Terminal Objective

While working in an actual teaching situation, prepare to work with adult learners.

- Develop a teaching plan that addresses the needs of adult learners.
- Understand how to assess student progress and adjust instruction accordingly.
- Collaborate with colleagues to enhance your teaching skills.

You will complete the following tasks in your assignment:

- Prepare a detailed lesson plan.
- Conduct a peer review of another teacher's lesson plan.
- Reflect on your experiences and make adjustments to your teaching methods.

Have your resource person review any documentation you have completed.

Your competency will be assessed by your resource person using the Terminal Competency Assessment Form, pp. 47-48.

Based on the criteria specified in the assessment instrument, your resource person will determine whether you are competent in preparing to work with adult learners.

*For a definition of "actual teaching situation," see the inside back cover.
TEACHER PERFORMANCE ASSESSMENT FORM

Prepare to Work with Adult Learners (N-1)

Directions: Indicate the level of the teacher's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

<table>
<thead>
<tr>
<th>LEVEL OF PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
</tr>
</tbody>
</table>

In reviewing his/her present level of knowledge and skill concerning teaching adult learners, the instructor:

1. assessed the extent of his/her knowledge/skill in each of the following areas:
   a. adult biological development
   b. adult psychological development
   c. adult learning characteristics
   d. adult learning preferences
   e. program planning, development, and evaluation
   f. instructional planning, execution, evaluation, and management
   g. technical expertise

2. assessed his/her preparedness to provide instruction appropriate for adult learners, given their characteristics, preferences, and developmental patterns.

In gaining the additional knowledge and skills needed to work effectively with adult learners, the instructor:

3. identified the specific knowledge and skills needed in the following areas:
   a. adults as learners
   b. teaching skills
   c. technical expertise in the occupational area

4. provided for gaining needed knowledge and skills using one or more of the following types of activities:
   a. formal education and training
   b. informal education and training (e.g., consulting reliable print/audiovisual resources)
   c. networking

5. created a professional development plan that was appropriate, feasible, and realistic

6. participated in the planned activities
Level of Performance: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the instructor and resource person should meet to determine what additional activities the instructor needs to complete in order to reach competency in the weak area(s).
ABOUT USING THE NATIONAL CENTER’S PBTE MODULES

Organization
Each module is designed to help you gain competency in a particular skill area considered important to teaching success. A module is made up of a series of learning experiences, some providing background information, some providing practice experiences, and others combining these two functions. Completing these experiences should enable you to achieve the terminal objective in the final learning experience. The final experience in each module always requires you to demonstrate the skill in an actual teaching situation when you are an intern, a student teacher, an inservice teacher, or an occupational trainer.

Procedures
Modules are designed to allow you to individualize your teacher education program. You need to take only those modules covering skills that you do not already possess. Similarly, you need not complete any learning experience within a module if you already have the skill needed to complete it. Therefore, before taking any module, you should carefully review (1) the introduction, (2) the objectives listed on p. 4, (3) the overviews preceding each learning experience, and (4) the final experience. After comparing your present needs and competencies with the information you have read in these sections, you should be ready to make one of the following decisions:

- That you do not have the competencies indicated and should complete the entire module
- That you are competent in one or more of the enabling objectives leading to the final learning experience and, thus, can omit those learning experiences
- That you are already competent in this area and are ready to complete the final learning experience in order to “test out”
- That the module is inappropriate to your needs at this time

When you are ready to complete the final learning experience and have access to an actual teaching situation, make the necessary arrangements with your resource person. If you do not complete the final experience successfully, you should complete the entire module. You and your resource person will then arrange to repeat the experience or complete the module.

Options for recycling are also available in each of the learning experiences preceding the final experience. Any time you do not meet the minimum level of performance required to meet an objective, you and your resource person may select activities to help you reach competence. This could involve (1) completing parts of the module previously skipped, (2) repeating activities, (3) reading supplementary resources or completing additional activities suggested by the resource person, (4) designing your own learning experience, or (5) completing some other activity suggested by you or your resource person.

Terminology

Actual Teaching Situation: A situation in which you are actually working with and responsible for teaching secondary or postsecondary vocational students or other occupational trainees. An intern, a student teacher, an inservice teacher, or other occupational trainer would be functioning in an actual teaching situation. If you do not have access to an actual teaching situation when you are taking the module, you can complete the module up to the final learning experience. You would then complete the final learning experience later (i.e., when you have access to an actual teaching situation).

Alternate Activity or Feedback: An item that may substitute for required items that, due to special circumstances, you are unable to complete.

Organizational Specialty: A specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity.

Optional Activity or Feedback: An item that is not required but that is designed to supplement and enrich the required items in a learning experience.

Resource Person: The person in charge of your educational program (e.g., the professor, instructor, administrator, instructional supervisor, cooperating/room teacher, or training supervisor who is guiding you in completing this module).

Student: The person who is receiving occupational instruction in a secondary, postsecondary, or other training program.

Vocational Service Area: A major vocational field: agricultural education, business and office education, marketing and distributive education, health occupations education, home economics education, industrial arts education, technical education, or trade and industrial education.

You or the Teacher/Instructor: The person who is completing the module.

Levels of Performance for Final Assessment

N/A: The criterion was not met because it was not applicable to the situation.

None: No attempt was made to meet the criterion, although it was relevant.

Poor: The teacher is unable to perform this skill or has only very limited ability to perform it.

Fair: The teacher is unable to perform this skill in an acceptable manner but has some ability to perform it.

Good: The teacher is able to perform this skill in an effective manner.

Excellent: The teacher is able to perform this skill in a very effective manner.
### Titles of the National Center's Performance-Based Teacher Education Modules

#### Category A: Program Planning, Development, and Evaluation
- A1 Prepare a Community Survey
- A2 Write a Community Survey
- A3 Write the Findings of a Community Survey
- A4 Organize an Occupational Advisory Committee
- A5 Maintain an Occupational Advisory Committee
- A6 Develop Program Goals and Objectives
- A7 Conduct an Occupational Analysis
- A8 Develop a Course of Study
- A9 Develop Long-Range Program Plans
- A10 Conduct a Student Follow-Up Study
- A11 Evaluate Your Vocational Program

#### Category B: Instructional Planning
- B1 Determine Needs and Interests of Students
- B2 Develop Student Performance Objectives
- B3 Develop a Unit of Instruction
- B4 Develop a Lesson Plan
- B5 Select Student Instructional Materials
- B6 Prepare Teacher-Made Instructional Materials

#### Category C: Instructional Execution
- C1 Direct a Field Trip
- C2 Conduct Group Discussions, Panel Discussions, and Symposia
- C3 Present Information with Audio Recordings
- C4 Direct Students in Instructing Other Students
- C5 Employ Simulation Techniques
- C6 Guide Student Study
- C7 Direct Student Laboratory Experience
- C8 Direct Students in Applying Problem-Solving Techniques
- C9 Employ the Project Method
- C10 Introduce a Lesson
- C11 Summarize a Lesson
- C12 Employ Oral Questioning Techniques
- C13 Employ Reinforcement Techniques
- C14 Instruction for Slower and More Capable Students
- C15 Present in an Illustrated Talk
- C16 Demonstrate a Manipulative Skill
- C17 Demonstrate a Concept or Principle
- C18 Individualize Instruction
- C19 Employ the Team Teaching Approach
- C20 Use Subject Matter Experts to Present Information
- C21 Prepare Bulletin Boards and Exhibits
- C22 Prepare Instructional Materials, Real Objects, and Flannel Boards
- C23 Present Information with Overhead and Opaque Materials
- C24 Present Information with Films and Slides
- C25 Present Information with Models
- C26 Present Information with Audio Recordings
- C27 Present Information with Videotaped Materials
- C28 Prepare Instructional Materials
- C29 Present Information with the Chalkboard and Flip Chart

#### Category D: Instructional Evaluation
- D1 Establish Student Performance Criteria
- D2 Assess Student Performance: Knowledge
- D3 Assess Student Performance: Abilities
- D4 Assess Student Performance: Skills
- D5 Determine Student Grades
- D6 Evaluate Your Instructional Effectiveness

#### Category E: Instructional Management
- E1 Project Instructional Resource Needs
- E2 Manage Your Budgeting and Reporting Responsibilities
- E3 Arrange for Improvement of Your Vocational Facilities
- E4 Maintain a Filing System
- E5 Provide "In-Student Safety
- E6 Provide for the First Aid Needs of Students
- E7 Assist Students in Developing Self-Discipline
- E8 Organize the Vocational Laboratory
- E9 Manage the Vocational Laboratory
- E10 Combat Abuse of Student Chemical Use

#### Category F: Guidance
- F1 Galter Student Behavior Using Format Data-Collection Techniques
- F2 Galter Student Data Through Personal Contacts
- F3 Use Conferences to Help Meet Student Needs
- F4 Provide Information on Educational and Career Opportunities
- F5 Assist Students in Applying for Employment or Further Education

#### RELATED PUBLICATIONS
- Student Guide to Using Performance-Based Teacher Education Materials
- Resource Person Guide to Using Performance-Based Teacher Education Materials
- Guide to the Implementation of Performance-Based Teacher Education
- Performance-Based Teacher Education: The State of the Art, General Education and Vocational Education

For information regarding availability and prices of these materials contact—AAVIM, American Association for Vocational Instructional Materials, 120 Driftmier Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586