What people learn

Men and women set out to learn a wide range of knowledge and skill. Some of the subject matter sought in learning projects is complex, difficult, advanced, and abstract; some is esoteric, highbrow, or exotic; and other subject matter is simple, routine, even trivial.

The individual may set out to create major changes in his feelings and attitudes, in his cognitive knowledge, or in his physical skills and overt behavior. He may want these changes to last for a lifetime, or only for a few days. When the adult wants to produce major, far-reaching changes in himself, these desired changes will affect his self-concept, confidence, or mental health. Other learning projects may require only short-term and shallow changes, related only to routine or external goals.

In certain learning projects, the adult merely seeks some specific information that can be used as is. At other times, he must integrate or transform the information before applying it. Most learning projects seek established knowledge, which is gained directly or indirectly from other people who already possess it; a research scientist, though, may set out to gain some original knowledge or insight.

Preparing for an occupation, and then keeping up

A great many learning projects are related to the person's job or occupation. Because performance and attitudes on the job are of great importance to the economy of any nation, this type of learning is very significant to society.

Before entering a new occupation or job, an individual may have to take many courses or learn in other ways. In order to obtain a promotion or major new responsibility, the person may need to undertake an intensive learning effort. Job-related learning projects will probably continue to be important after the person enters the occupation or obtains a new job. At times, he may maintain or upgrade his competence by gaining general background knowledge or learning new skills. Also, as new knowledge is discovered in his field, and as procedures change, he will have to learn in order to keep up.

The range of trade, business, vocational, and professional subject matter is very wide. The fields of learning include electronics, tool design, blueprint reading, business administration, real estate, finance, salesmanship, accounting, law, agriculture, teaching methods, office management, typing, shorthand, bookkeeping, automobile and television repair, foreman training, practical nursing, welding, data processing, and countless others.

Specific tasks and problems on the job

Attempts to update and upgrade one's knowledge and skill are only a part of job-related learning efforts. Many other learning projects consist of just one step in dealing with an immediate problem, case, or task. The person's goal is to prepare a report, make a decision, solve a problem, handle a case, or complete a short-term project. In order to do so successfully, he may decide to spend a great deal of time learning about certain aspects first.

In this situation, the knowledge and skill are acquired for some immediate and definite use or application. The person is preparing for an immediate task or decision, not for some rather vague situation in the distant future. This sort of learning project is often self-planned, because the desired knowledge and skill is rather unique or because the person wants it immediately.

A politician, senior government employee, or top executive, for example, may be faced with a decision that will have a great impact on many individuals, or on the future of his organization or country. Before making that decision, he may devote many hours to learning about it. Many teachers of youth and adults want to improve their performance as an instructor. In order to do so, the person might set out to learn the content to be taught, learn how to use certain teaching methods, or study the background characteristics of the people he teaches. In addition, the instructor can seek feedback concerning his weaknesses by asking his students and others to react to his teaching, or by watching himself in a videotape recording.

Several other examples of specific job-related learning projects are provided by men and women we have interviewed.

- 1. A lawyer set out to learn a great deal about air crash law after a client walked into his office and announced that her husband had been killed in a plane accident.
- A community development worker had to read a great deal about the organization and family patterns of the Indian tribe with which she was working.
 A senior school administrator traveled a thousand miles and expended much
- A senior school administrator traveled a thousand miles and expended much effort to learn about possible solutions for dealing with disadvantaged adolescents in his schools.
- 4. One learning project for an engineer began when he was asked to design a new type of sturdy tape recorder to measure certain factors in an antisubmarine projectile.

- 5. Aware that his company might begin its first advertising campaign, an investment dealer offered to learn the knowledge necessary for preparing recommendations concerning media, content, and budget.
- 6. An especially important learning project for a woman working for a children's aid society began when she was assigned several battered child cases. She had to learn the correct legal procedures and how to understand and help the child and the parents.
- 7. A nursing educator was a leader in planning a new nursing curriculum. In order to plan an effective program, she learned about the characteristics of nursing duties, and about the curriculum and organization of instruction in other schools of nursing.

Learning for home and personal responsibilities

In many learning projects, the person expects to use the knowledge and skill in managing the home and family rather than on a job. In one year, for example, 1,890,000 Americans made a sustained attempt (with or without an instructor) to learn about sewing or cooking (Johnstone & Rivera, 1965). Adults also learn about furniture, rugs, drapes, and other aspects of decorating and furnishing their home. Before buying a house, car, washing machine, tape recorder, or hobby equipment they may learn about the cost and characteristics of various available items. Men and women also learn about budgets, insurance, the stock market, and investing. Other learning projects may begin just before a wedding, childbirth, or moving to a new neighborhood. Through reading, counseling, discussion, or encounter groups, an adult may try to become more effective in communicating and sharing with his or her mate, in achieving a closer and more joyful relationship, and in handling conflicts.

The characteristics of children and youth are greatly influenced by the competence, attitudes, and goals of today's parents. Fortunately, many parents make an effort to learn about caring for a child's health, about the emotional and social development of children, and about helping them develop into effective adults. Parents also learn about changes in schools and society that will affect their children, and later they learn how to set their adolescent children free.

Before making certain decisions of intense personal importance, some adults set out to learn and think a great deal about such decisions. This may occur when choosing a career, deciding which university and course to enter, considering whether or whom to marry, deciding whether to have an additional child, selecting a place to live, or planning for retirement.

The astounding number of practical, how-to-do-it books purchased in Western countries points up just how common it is for adults to learn for home and personal responsibilities. An American study indicates that Dr. Spock's book on baby and child care has been bought by more than 19,000,000 adults (Hackett, 1967). The third most popular book in the period 1895-1965 was a cookbook, and the fourth

an atlas. Another cookbook, and Dale Carnegie's *How to Win Friends and Influence People*, were also among the top ten. The lists provided by Hackett also indicate that adults have used more than one million copies of each of the following: several cookbooks, a bartender's guide, several atlases, several foreign and English dictionaries, books for developing vocabulary, home reference books on certain topics (medicine, home repairs and maintenance, housekeeping, marriage and sex, etiquette, gardening), and several encyclopedias.

Improving some broad area of competence

Sometimes an individual sets out to improve his competence in some broad area. The desired knowledge and skill are fairly definite, but may be applied in several areas of the person's life: in his home and family, while interacting with friends and acquaintances, on his job, and in his voluntary responsibilities in his community or some organization.

The individual, for example, may set out to improve his understanding of groups and individuals. This will enable him to be more effective as a group member or leader and in other interpersonal relationships. As a related or separate project, he may try to increase his understanding and acceptance of his own feelings, reactions, blocks, strengths, and weaknesses. He may try to decrease his defensiveness, increase his self-confidence or creativity, or overcome certain fears. He may attend a T-group or a Dale Carnegie course. The person may also try to work out his own meaning or values or goals in life. These may then be useful in guiding many practical decisions.

There are other areas in which learning projects are undertaken to improve one's competence in a broad area. Many adults work at improving their writing style, speaking ability, and vocabulary. Many learn about health, physical fitness, decreasing tension, dieting, or adjusting to bodily changes. The adult may also set out to become more creative and flexible when diagnosing and solving problems, more efficient in all his responsibilities, more imaginative, or less selfish throughout his life.

Learning for interest or leisure

Many learning projects are related to some hobby or other leisure-time activity. In one year, more than a million American adults took lessons in golf, swimming, bowling, tennis, skiing, sailing, scuba diving, surfing, curling, squash, or some other athletic activity (Johnstone & Rivera, 1965). A very large number learned some decorative art or craft such as ceramics and flower arranging. Others tried to improve their painting, drawing, sketching, or photography. Each year, a large number of adults learn to play a musical instrument, take singing lessons, or take dancing lessons. One of every 4.8 Americans play a musical instrument, "making self-made"

music second only to reading as the nation's most popular leisure-time activity (*Time*, January 14, 1966, p. 49)." Other adults learn about stereo equipment, stamps, hiking, bridge, or pets. Some adults who plan a trip spend many hours gaining information about where to go and what to see.

Some of these recreational interests will lead the person into whole new worlds that were almost invisible before. His new sport, hobby, or interest may lead him to join certain organizations such as a naturalists' club, an orchid growers' association, or a sailing club. A whole world of expertise, technical terms, magazines and newsletters, meetings, like-minded people, standards of excellence, and competitions may suddenly open up before him.

Curiosity or a question about certain subject matter

Many learning projects begin with a question, a feeling of puzzlement or curiosity, or just a general interest in a certain body of subject matter. Some people, for example, want to understand the physical or geographical world, and do so by learning about various regions and perhaps by traveling. Others study the behavioral or social sciences in order to understand society or human nature. Other common areas of learning are English literature, the physical and biological sciences, political science and politics, current events, and economics.

Persons who want to gain some notion of the likely future of mankind may read about probable trends during the next few decades or centuries. In order to gain some perspective about the future, they may also read about past history, about the evolution of man, and about the origin and structure of the universe. Some people want to work out their own set of religious beliefs or philosophy of life. They may learn about their own religion, other religions, or humanism.

Sometimes a dramatic event will puzzle or upset an adult, and he will then begin a major effort to understand what happened and why. A person who is suddenly asked for a divorce or separation, for example, may set out to understand the behavior and events that led to the other person's feelings.

In France, a survey found that geography and history were relatively frequent topics for study (Dumazedier, 1967). In the United States, approximately 3,500,000 people study the basic teachings of a particular religion, or some other religious or moral topic (Johnstone & Rivera, 1965).

An Emphasis on Use and Application

A number of studies in several Western countries have shown that some anticipated use or application of the knowledge and skill is the strongest motivation for the majority of learning projects. Most adults, in most learning projects, are motivated

by some fairly immediate problem, task, or decision that demands certain knowledge and skill. In relatively few learning projects is the person interested in mastering an entire body of subject matter.

In the United Kingdom, Robinson (1965) found that most adult learning arises from the personal, practical needs of everyday life, not from some intellectual curiosity about an academic body of knowledge. Most people "do not at some stage decide that they would like to know more about economics or psychology: they are concerned about how much it will cost them to redecorate their homes or why their children behave in the way they do. These interests might well lead them quite far into economics and psychology, but they will start with concerns of a personal kind [p. 181]."

In France, a survey conducted by Dumazedier (1967) also found an emphasis on practical and technical knowledge: "The preferred topics are connected to *utilitarian* preoccupations, answering a need for information about matters affecting daily life [p. 205]."

In Canada, a study of 35 learning projects found that the desire to use or apply the knowledge and skill was the strongest motivation in 71% of the projects and was present in every other project (Tough, 1968). In many learning projects, this reason was even stronger for continuing than for beginning. Apparently some learners, as they proceed with a project, discover some unexpected uses for the knowledge and skill.

Also in Canada, Knoepfli (1971) interviewed 21 women who were responsible for forming 21 autonomous learning groups, and found that each of the women, to at least some extent, was motivated by this reason. The 21 women mentioned a total of 66 specific applications of the acquired knowledge and skill.

An early lecturer in the United States (Channing, 1838) declared that self-education or self-culture is practical. "It proposes, as one of its chief ends, to fit us for action, to make us efficient in whatever we undertake [p. 18]."

Knowles (1967) has pointed out that adults "engage in learning largely in response to pressures they feel from current life problems; their time perspective is one of immediate application.... They tend to enter any educational activity in a problem-centered [not subject-centered] frame of mind [p. 278]." The practical nature of adult learning has also been pointed out by Love (1953), Johnstone and Rivera (1965), and Parker and Paisley (1966, p. III/22).

Houle (1961) found several goal-oriented learners – people who gain knowledge in order to put it to use in achieving some goal. Sheffield (1964) and Flaherty (1968), using factor analysis, subsequently found two sorts of goal orientations: in one the knowledge and skill are to be used in achieving a personal goal; in the other they are to be used for a societal or community goal.

With children, too, the desire to achieve some action goal may be an especially strong motivation for learning. Holt (1967) has suggested that "if we begin by helping children feel that reading and writing are ways of talking to and reaching

other people, we will not have to bribe and bully them into acquiring the skills; they will want them for what they can do with them [p. 112]."

Deriding One Type of Subject Matter or Motivation

Some people denounce or ridicule one sort of learning or another: they scoff at liberal education because it seems useless to the individual and to society, or they express contempt for vocational education because it is just narrow, practical training.

Many of the scoffers divide all learning into two categories: vocational and liberal, training and education, learning for use and learning for its own sake. They assume that any given learning project or course falls into either one category or the other. They fail to realize that both sorts of reasons are present in the typical learning project (Tough, 1968, section 16). It is rare for an adult to learn exclusively in order to use the knowledge and skill, or exclusively in order to acquire the affective benefits inherent in the knowledge itself.

When discussing preparatory education for an occupation or profession, some persons insist that many liberal courses should be included, and other individuals insist that these are a waste of time. Again, the approach taken by both sides presupposes that a simple dichotomy exists. When one looks more carefully at the various sorts of knowledge and skill that are learned for an occupation, the picture becomes more complex.

In a current master's study, for example, Tom Norton distinguishes several types of objectives in the post-secondary training of technicians. These include: (1) manual skills and the use of tools and machines; (2) the scientific theory and principles on which the specific technology is based; (3) general mathematics and science; (4) clear communication orally and on paper; (5) the contributions and context of the particular technology, and its relationships with management and with other technologies; (6) human relations; (7) political science and economics; and (8) the ability and willingness to continue learning about the occupation.

All of these clusters of knowledge and skill are relevant to a technician's performance. Surely it is absurd to declare that any one of them is unimportant to the individual and society, or lacks dignity and prestige. It also seems absurd to deride all these areas as simply "vocational," thus ignoring the range of knowledge and skill that is included.

It seems clear that people do – and should – learn all sorts of things. Some learning will be broad or shallow or superficial; some will be deep or narrow. Some will be practical, related to the job, or useful in some other area of life; some will result from curiosity, puzzlement, a thirst for knowledge, a seeking after truth. Much learning will combine several of these elements.

The Usefulness of Learning Projects in a Changing Society

Deliberate learning would be important even if there were no changes in the world surrounding the individual. Rapid changes do occur in that world, of course, but first let us look at certain sorts of learning that would occur even without those societal changes.

Some learning projects are initiated because of certain changes that occur in the individual as he moves through the life cycle. He marries and has children. His interests change with age, and he engages in new sports or leisure activities. As he achieves one goal, he moves on to another. As his savings increase, he buys a house or a new car. He receives a promotion because other people in the company retire or die. He receives new responsibilities on the job as his experience and competence increase. These changes and stages in the person's life, and the learning projects they spark, would occur even in a completely unchanging society.

In addition, though, rapid changes do occur in the world around the individual. These social, economic, political, and technological changes not only make an increase in learning necessary or desirable, but also influence the content of that learning.

Some learning projects are necessary to help the individual to *adjust* to changes in knowledge, processes, technology, values, and social organization. These changes affect him on the job, in the home, and elsewhere. He may have to prepare several times for a new occupation, or at least for new procedures and responsibilities in a single job. In his daily life, he must become familiar with new products, laws, recreational and cultural opportunities, and transportation procedures.

The pace and direction of future change in society will be influenced by the adult's resistance or willingness to change in certain ways as a parent, teacher, worker, or consumer. Changes in society will, in turn, result in people learning certain knowledge and skills that are not common at present.

Some learning projects are designed to *produce* or *direct* certain changes in society, not merely to adjust to them. They are oriented toward the future, toward planning or producing social or other change in an organization, curriculum, city, or region. For example, many learning projects occur throughout the sequence of research, development, invention, innovation, adoption. Planning for community or organizational change is often preceded by careful study.

In fact, any major decision of great public importance may be preceded by an intensive learning project. In this way, the most beneficial courses of action can be determined for achieving peace, controlling population growth, reducing pollution and other problems of urban industrial living, and promoting international development. By studying the possible wide-ranging consequences of various routes to achieve a specified goal, public officials can make the decision within a wider and longer-term context.

Further Explorations that are Needed

As one reflects on what people learn, the need for several further contributions to theory and practice becomes evident. There are many approaches that can be taken to arrive at an adequate picture of what adults learn.

Developing lists

Because most surveys of adult learning have missed so many learning projects, there is a need for a large-scale survey of what people learn. One task of this survey would be to work out an appropriate way of describing, clustering, or categorizing the diversity of knowledge, skills, attitudes, and affective changes in learning projects.

This survey, or a subsequent one, might include adult populations in many countries. Do people learn different sorts of things in France, Germany, Scandinavia, England, Canada, and the United States? Do people learn quite different knowledge and skills, and for quite different reasons, in developing countries? To what extent do people learn different things in Africa, South America, India, and Southeast Asia?

The survey might also include all ages, even children. It would be interesting to know at what age or stage most people learn each cluster of knowledge and skill. In what ways does a person's language change as he moves through the life cycle?

Instead of studying the actual present learning of adults, an investigator might ask what adults *should* learn. Several lists of what children and adolescents should learn have already been developed; for example, *Cardinal Principles* (1918), Bobbitt (1924), National Education Association of the United States, Educational Policies Commission (1938), Kearney (1953), and French (1957). Perhaps, if it is possible to develop one, a comprehensive list of what adults should learn would also be useful. This list might include things that adults should learn for their own benefit, things they should learn for society's benefit, and things they should learn in 1990 or some other future time. By comparing such a list with the results of the proposed survey of actual learning, the gaps between what adults do and should learn would become evident.

New ways of learning new subject matter

The next 20 years might see the development of new ways of learning new things. Developing new ways of learning subject matter that few people now try to learn is a very exciting prospect – it may turn out to be one of the most significant areas of new practice in adult learning.

The last 20 years have produced some important new additions to the content of adult learning projects. Through group and individual methods, many adults now set out to increase their self-insight, their awareness and sensitivity with other

persons, and their interpersonal competence. They learn to "listen to themselves," to free their body and their conversations from certain restrictions and tensions, to take a risk, to be open and congruent. Attempting to learn this sort of knowledge and skill seemed incredible to most people 20 years ago. Great changes in our conception of what people can and should set out to learn have been created by T-groups, the human potential movement, humanistic psychology, and transpersonal psychology.

Perhaps the next 20 years will produce several important additions to what we try to learn. In 1990, when people look back to our conception of what adults can learn, will they be amused by how narrow it is?

It is natural for many things to seem incredible to us. Perhaps it is not really impossible, though, to develop ways and resources for an adult to learn how to relax or go to sleep in 10 minutes anytime, anywhere; how to set and modify his life goals; how to perform his daily tasks with half the effort and tension; how to control his heartbeat and brain waves; how to eliminate any bad habit he chooses; how to deal effectively with his own emotional problems and interpersonal difficulties; how to assume effective control over his own physical health; how to assess political candidates and their speeches and decisions; how to choose the best environment and style for any particular task or activity. Already efforts are being made in some of these directions.

In the future, perhaps it will also be far more common for an adult to set out to become a highly sensitive and joyful spouse or parent; to become a much more competent learner or helper; to gain an accurate feeling for his own place in history and in the universe; to express himself in music, poetry, film, and sculpture; to become competent at planning travel and recreation; to expand his consciousness or develop competence at meditation; to become less selfish or more committed to some mission in life; and to learn how it feels to be a corporation president or an Asian peasant.

One of the greatest challenges for the innovative practitioner is to develop new materials and methods that will increase the amount and ease of learning in these areas.

A personal inventory

In addition to global surveys, it might be useful to explore better ways of helping each individual see clearly what he already learns and what else he should learn. Constantin A. Doxiadis, the noted planner, raised this possibility in 1968. While writing his chapter for the book What I Have Learned, he realized that "we cannot make an inventory of our intellectual gains as easily as we can of our material ones – perhaps because there is no internal revenue department to keep track of them. Is it not time to think of an annual declaration of our gains in learning, not in order to pay tax on them, but so that we may know how far behind we are and what we need to catch up [p. 36]?"