This paper examines services that link the adult learner's interests to the learning resources of the society. Two sets of research studies are used as a background for analyzing needs and services. The first set of studies consists of thirty state and national surveys or needs assessments of "learners," "would-be," or "potential learners." The second set of studies consists of investigations into the self-directed learning activities of adults. The author attempts to integrate the findings of both sets of research. A third resource which is examined consists of more than forty sets of recommendations for program implementation. In supplying the missing link between learner interest and learning resources the author focuses on three general areas: (1) facilitating access to appropriate learning resources, a process that includes access for underserved groups and advocacy for the special needs of adult learners; (2) providing information to adult learners about available learning resources and about themselves and their strengths and weaknesses, and (3) providing counseling and referral services designed to assist learners in planning, and matching learner needs to appropriate learning resources. Appendixes contain a bibliography of recommendations for lifelong learning and a classification of recommendations by topic addressed. (CSS)
The Missing Link: Connecting Adult Learners to Learning Resources

K. Patricia Cross
Educational Testing Service, Berkeley, California
The College Entrance Examination Board is a nonprofit membership organization that provides tests and other educational services for students, schools, and colleges. The membership is composed of more than 2,000 colleges, school systems, and education associations. Representatives of the members serve on the Board of Trustees and advisory councils and committees that consider the Board's programs and participate in the determination of its policies and activities.

Copies of this booklet may be ordered from College Board Publication Orders, Box 2813, Princeton, New Jersey 08543. The price is $1.50.

Editorial inquiries concerning this booklet should be directed to Editorial Office, The College Board, 888 Seventh Avenue, New York, New York 10019.

Copyright © 1978 by College Entrance Examination Board. All rights reserved.

Printed in the United States of America.
Publication of this report has been made possible by a grant from the Exxon Education Foundation
What is FDLS?

The Future Directions for a Learning Society (FDLS) program is a major effort toward the realization of a learning society in the United States. The program focuses on improving access and transition for learners, which has been the Board's role in education for more than 75 years. By building on recent Board programs that have increasingly focused on adults, the program extends its historic role to include assistance to adult learners and to the diverse agencies, institutions, and organizations that provide learning opportunities for them.

Funded by the Exxon Education Foundation, FDLS develops consensus and support for strategies, services, and policies that can best meet current and projected needs of participants and providers in a learning society. To this end, the program solicits and relies on the participation of professional people in the field, public policymakers, and the larger community. A major purpose of the Exxon grant is to promote the mobilization of additional funds and other resources necessary for major initiatives in this developing field. The initial support covers the project's planning and management, the identification and design of service areas, the review and analysis of public policy, and publishing relevant materials.

The program will produce projections of future trends, information about the needs of learners and providers of educational opportunities and resources, policy recommendations, and services. The program is engaged in finding better ways to gauge the needs of learners, in identifying the problems institutions face in meeting learners' needs, in strengthening learning opportunities, and in increasing public, professional, and political understanding of the field. A chief focus of the program is to demonstrate promising new approaches and specific services.
Contents

Foreword, Rexford G. Moon, Jr. .................................. xi
Figure 1 The Learning Society ................................... 8
Table 1 Participation Rate in Adult Learning in 1975 .......... 13
Table 2 Preferences for Dissemination of Information about Adult Education ........................................... 32
Table 3 Percent of Adults Indicating Interest in One or More Services ......................................................... 36,
Table 4 Knowledge of and Desire for Advisement Services, by Educational Level ........................................... 40
References .................................................................. 49
Appendix A. Bibliography of Recommendations for Lifelong Learning ......................................................... 52
Appendix B. Classification of Recommendations by Topic Addressed .......................................................... 57
In its report Diversity by Design (1973), the College Board Educational Testing Service Commission on Non-Traditional Study, chaired by Samuel Gould, recommended:

"The survey of clientele for non-traditional study begun under the auspices of the Commission should be continued and expanded." The commission continued: "We need to know, on the broadest possible scale, not only who prospective students are and what they want to study and why, but also how much time they can and will put into the effort at what times of day or night, where they live (region and city, suburb, or rural area), the amount and nature of their employment, and even the language they speak."

Few of the commission's recommendations were received more enthusiastically. Although it is impossible to ascertain precisely the number of surveys and studies that have been and are being conducted to discover what the needs of adult learners are, the total is probably several hundred, and the number increases daily.

As the College Board undertook to extend its role to include services to adults and the institutions that serve them, it soon became clear that these research studies—especially those emanating from state agencies and those with national perspectives—provided a rich source of significant insights and of data for consideration in our program planning. More than 40 studies were identified as being significant for the Board's future work in this field.

But to analyze these diverse studies was no small task. More than analysis was required, we needed to know how these studies should be interpreted in relation to future needs and what new services for learners and institutions they might suggest. And that called for special judgment and wisdom.

Our choice for this complex assignment was K. Patricia Cross, Distinguished Research Scientist at Educational Testing Service and Distinguished Research Scientist at the Center for Research and Development in Higher Education at the University of California, Berkeley. Change magazine, in reporting her selection by more than 4,000 educators as one of 44 outstanding leaders of higher education in America, noted:

"... Cross has emerged as a leading spokeswoman for shaping educational programs for the nontraditional learner and has con-
ducted major research into new evaluation approaches for educational programs.

Dr. Cross has synthesized for us a great deal of data. Her findings have implications for all who would serve the human development aspirations of adults, not only for those of us in organizations and institutions, but also for those in important policy positions in the states and the federal government. Everyone who reads this statement will find new insights and useful advice on how to increase the quality of services to adult learners. Perhaps the most insightful observation in the following monograph is Dr. Cross' distinction between adult learners' need for information about learning resources (to which considerable attention has been, and is being, given) and adults' need for information about themselves. At this time, little is known about what kinds of information is needed by adults for self-appraisal, but as Dr. Cross notes, several studies have indicated that adults want such help, those who regularly counsel and advise adults report that this need is central to most of them.

The College Board, in undertaking the Future Directions for a Learning Society program, described two important goals:

1. To disseminate information and opinion on the needs of adult learners and of those agencies, organizations, institutions, and associations which serve them, and

2. To develop activities, programs, and services to improve access and transition to learning opportunities.

We are fortunate indeed that Dr. Cross has delineated for us responses to these two goals. In an important way, this report is the key planning document for the College Board’s future in this field. We thank Dr. Cross for the splendid job she has done here, recognizing that in doing so we also accept a challenge to bring many of these needed services into reality.

Rexford G. Moon, Jr
Managing Director,
Future Directions for a Learning Society
Introduction

It is quite possible that lifelong learning now outranks motherhood, apple pie, and the flag as a universal good. Almost everyone is in favor of lifelong learning despite mounting confusion among experts over the meaning of the term. If a lifelong learner is one who engages in one or more activities of "organized instruction," then surveys indicate that from 12 to 31 percent of the adults in the United States can be called lifelong learners (NCES, 1975, Carpenter and Roelfs, 1974). If, however, a lifelong learner is one who "plans independent learning projects" or "makes highly deliberate efforts to learn," then research indicates that from 79 to 98 percent of the adult population can legitimately lay claim to the title of lifelong learner (Penland, 1977; Tough, 1971).

Some analysts resolve the difficulty of gauging the size of the learning force by distinguishing between adult education and adult learning (Tough, 1971; Ziegler, 1977). To oversimplify a bit, adult education has given relatively greater attention to teaching, i.e., to developing programs, courses, and instruction to meet the special needs of adults, whereas those concerned with adult learning place the emphasis on finding new ways to facilitate learning for adults. Following this distinction, the supporters of adult education would enter the learning society working toward equal opportunity and improved access for adults. They would, for example, provide more evening and weekend colleges, grant credit for experiential learning, and lobby for financial entitlements for adult part-time students. Their emphasis would be on getting adults into an educational system consisting largely of group instruction, that might, however, be credit or noncredit, offered by industry, churches, and community agencies as well as by schools and colleges.

The advocates of adult learning, on the other hand, would bend their efforts toward facilitating individual learning on any topic of interest to the learner by providing mentors, learning contracts, educational brokerage services, and so on. They would give relatively more attention to helping people plan their own learning programs.

The research that made the distinctions between adult education and adult learning a legitimate debate was started by Allen Tough (1971) early in this decade. He, and subsequent researchers using his methodology of probing interviews, found an impressive amount
of self-directed learning taking place completely outside organized learning programs. Tough (1978) concludes that roughly 90 percent of the adult population conduct at least one learning project each year, and that the typical adult conducts five learning projects per year spending about 100 hours on each project. That adds up to about 500 hours per year or 10 hours per week. Tough (1978) cites numerous examples of learning projects, among them the woman who was working for a children's aid society who set out to learn legal as well as counseling procedures when she was assigned several battered-child cases. Others have gained extensive knowledge about foreign countries in preparation for travel or about such things as the history and procedures of making wine. Teachers typically spend long hours in self-directed projects related to their teaching.

There is some discussion in the current literature about whether adult learning and adult education represent two distinct missions which ought to remain separate or whether some merging of the two is possible and desirable. Allen Tough (1978) takes the position that society is in transition from adult education to adult learning. He concludes that "In both research and practice in adult education, there is some evidence of a shift of focus. The traditional focus, providing education or instruction. The emerging focus, facilitating relevant learning." Warren Ziegler (1977, p. 5), on the other hand, asserts that "adult education and the learning of adults, past, present and future, are conceptually and practically distinct." Ziegler takes the position that any merger of adult education and adult learning is undesirable. Nevertheless, he sees a disturbing trend in society to move from adult learning to adult education—exactly the opposite trend seen by Tough. In support of his view, Ziegler points to the attempts to legitimize adult learning by turning it into adult education by attempting to attract adults to college classes, by granting credit for experimental learning, and so on. In short, he sees "a strong trend towards getting more and more citizens to conduct their learning activities within the organizational arrangements of the formal educational system" (pp. 5-16).

Seemingly, there is no common interpretation of the evidence on the directions in which society is moving— from adult education to adult learning or vice versa—and there is even less agreement on the
direction in which it should move. Most people talking about the learning society these days simply assume that education in particular and society in general should become more responsive to adult learning needs and interests. In support of this conviction many states have conducted extensive “market surveys” or “needs assessments” in an effort to determine what kinds of programs and services should be provided for adult part-time learners. Presumably the more effective adult education is in responding to learning needs, the more adults will be attracted to the new programs. At issue is the question of whether adults will be attracted away from self-directed learning projects into programs directed by others.

This worries critics such as Ziegler (1977, p. 6) who maintains: “There is and should continue to be an active tension and creative conflict between adult education and lifelong learning.” He is sufficiently concerned about the “threat of an over-credentialed society... to warrant a radical conservative stance towards public policy formation oriented towards the so-called interests of the adult learner.” His recommendation is to “leave adult learners alone to conduct their learning in ways and about concerns which meet their own criteria and standards” (p. 17). He advocates a public policy that would encourage a highly diversified system in which choice and responsibility remain with individual learners.

Interestingly, the most vigorous discussions about what should be done to bring about the learning society are conducted among staunch advocates of adult learning. The fundamental issue in the debate is not really whether lifelong learning should be a goal of the future but rather who should bear the primary responsibility for planning and directing the learning society—educators, planners, and organizations, or individual adult learners. If the former, then the targets for change are professionals, institutions, and organizations, and the issues are institutional responsiveness, standards, and equal opportunity. If the latter, then individuals and the groups they choose to form become the targets, and consumer education, dissemination of information and materials, and the facilitation of self-planned learning become important missions of the learning society.

If one wished to find some middle ground on which to base agree-
ment—as opposed, perhaps, to sharpening thinking and stimulating discussion about future directions for the learning society—most people could probably rally around the concept of self-planned learning for adults. Self-planned learning implies that the learner makes the decisions about learning goals, selecting from a wide variety of materials and resources those that best fit his or her goals. There is a continuum of freedom and self-direction implied in this use of the term. The greatest responsibility (and freedom) for planning rests with adults who pursue their own interests completely outside the framework of organized instruction. They are free to select their own time, place, materials, and standards of performance. They need satisfy only themselves. Learners incorporating organized classes into their learning plan trade some self-direction for external expertise, and those who pursue a degree or certificate program trade still more freedom in self-planning for greater external assistance and legitimization.

The most common form of lifelong learning now and in the foreseeable future is probably represented by the adult who mixes organized classes, self-taught projects, and informal learning. The learning contract is an attempt to systematize planning by specifying the desired outcomes and then designing a program to achieve such ends. In this form of self-planned learning, adults assume a large share of the responsibility—larger than that currently exercised by traditional undergraduates—for knowing what goals they wish to reach. Materials, resources, courses, and programs can then be selected to achieve the desired ends.

Scope and Method

The present paper, entitled “The Missing Link,” takes as its point of departure the learner and his or her needs. It subscribes to the general principle that the goal of the learning society is to make adults stronger, more self-motivated and self-directed learners. One critical step in reaching this goal is to provide the services that will link learner interests to the learning resources of society.

My vision of the learning society corresponds with the philosophy stated by the Commission on Non-Traditional Study (1973, p. xv):
It puts the student first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and deemphasizes time, space, and even course requirements in favor of competence and, where applicable, performance. It has concern for the learner of any age and circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic, or occasional study.

The suggestions set forth herein will not cover the entire spectrum of programs and services that can be provided for adult learners. Rather, they will be deliberately biased in the direction of services that put the needs of learners first.

Two rather different sets of research studies form the background for this analysis. Both kinds of research start with learners; but one approach, conducted by means of questionnaires or telephone surveys, asks the learner what he or she would like provided in the way of educational programs and services, whereas the other research methodology of "probing interviews" studies learning in its natural form to see how the learning society can capitalize on the natural inclinations of human beings to learn continually throughout their lifetimes.

The first set of research studies consists of some 30 state and national surveys frequently termed "needs assessments." Usually undertaken for educational planning purposes, these large-scale studies typically describe "learners," "would-be," or "potential learners," and attempt to present statistical summaries of the barriers, interests, and participation rates of a cross section of adults in "organized" learning activities. The results of these studies have been synthesized (Cross, in press, Cross and Zusman, 1978) with the general conclusion that patterns of participation and interests are highly similar from study to study.

The second set of studies consists of perhaps a dozen investigations into the self-directed learning activities of adults. Typically, these studies use probing or intensive interviews, urging adults to recall any "sustained deliberate efforts" that they have made to gain new knowledge or attain new skills. These studies, too, have been recently synthesized (Coolican, 1974, Coolican, 1975, Tough, 1978).
with the conclusion that there is considerable consistency of findings across this set of studies.

What has not been done is integrate the findings of both sets of research and derive from them possible implications for facilitating the learning of adults. This paper will undertake to do that.

One further valuable resource exists for our analysis. Since 1970, no fewer than 40 documents have appeared, each with a set of recommendations for the implementation of a particular vision of the learning society (see Appendix A for a listing of major reports). These documents generally emanate from a study group charged with the task of recommending, to state or federal agencies, actions that will improve adult participation in learning activities. Many of the recommendations arise from the needs assessments data. Like the needs assessments and studies of adult learning projects, there tends to be a high degree of consistency among the various sets of recommendations. There are few surprises and few evidences of anyone marching to a different drummer. It appears that we form a solid phalanx, at least as far as recommendations are concerned, as we march into the learning society.

It is only fair to point out, however, that each of the three resources used in this analysis has its own agenda, if not its own bias. The needs assessments tend to focus the attention of the respondent on what kinds of programs and services adults would like provided for them. In that respect, the data from these sources are more compatible with adult education as it was described earlier, i.e., the provision of programs and services by someone other than the learner. This does not imply, however, that merely because services are provided by others, they need rob adults of their opportunities for self-determination. Indeed, a strong case can be made that some services should be provided by others in order to help adults become more aware of their needs and options in planning and carrying out their learning activities—whether through "taking courses" or engaging in other kinds of learning activities.

The second resource, consisting of sets of recommendations, many of which are derived from the data of the needs assessments, shares the bias of the needs assessments toward adult education as opposed to adult learning. Naturally, institutions and planning offices are
interested in knowing what services should be provided for adults. The recommendations vary considerably in the extent to which they "put the student first and the institution second" (Commission on Non-Traditional Study, 1973). Some recommendations are rather obviously concerned with institutional welfare. They focus on ways to supplement the declining 18 to 24 year old student population with more plentiful adult learners. Other recommendations, especially those set forth by task forces with broad educational concerns and wide representation, show a broader concern for providing the kinds of services—in postsecondary institutions and out—that will facilitate lifelong learning.

The third resource, the research on self-planned learning, is explicitly biased in favor of putting learner interests first. While most of those writing from this perspective do not go as far as Ziegler in suggesting that formal education would be doing learning a favor to separate itself from the learning projects of adults, there is the conviction that adult education should become more like adult learning rather than vice versa.

Conceptually, the learning society encompasses all forms of adult education and adult learning. Figure 1 provides a convenient way to visualize the learning society.

It is beyond the scope of this paper to discuss in detail the vast array of learning resources illustrated in Figure 1. It is, however, important to recognize the richness of the variety of learning resources that exist for adult learners as well as their interrelatedness. For example, it is increasingly easy to convert learning done in "nonschool organizations" or through "individually used resources" into credits recognized by schools. Also, colleges, industry, and community organizations are increasingly likely to cooperate in providing learner services. Colleges offer contracted instruction for employees, public libraries and museums offer services to colleges, employers serve on curriculum advisory committees of colleges, and so on. Such cooperation and coordination in behalf of learners is highly desirable and lies at the heart of the learning society.

This paper is concerned primarily with the top two boxes of Figure 1—learner needs and the process of linking needs to resources. Almost any needs assessment study shows a large gap between the
Figure 1. The Learning Society

Learner Needs and Interests

"The Missing Link"

Learning Resources

Schools*
- Elementary and secondary schools
- Public school adult education
- Extension and continuing education
- College and university undergraduate
- Graduate and professional programs
- Proprietary schools
- Community education

Non-school Organizations*
- Community organizations
- Government service
- Military services
- Agriculture extension
- Federal manpower programs
- Private industry
- Professional associations
- Trade unions
- City recreation departments
- Free universities

Individually used Resources
- Friends
- Experts
- Books, newspapers, magazines
- TV, radio, tapes
- Travel

* These categories of learning resources and examples are from Peterson (in press).
number of "learners" and "potential" or "would-be" learners. According to the latest national study of actual and potential learners (Carp, Peterson, and Roelfs, 1974), learners constitute about one-third of the adult population, whereas nearly three-fourths of the adults in the United States express an interest in further learning. Thus, much work remains to be done if adults who express an interest in further learning are to be linked to the appropriate resources.

We already know that many adults, classified as "would-be" learners in the needs assessments are actually self-directed learners, but even these presumably independent learners express a need for help. A study of the self-directed learning of Tennessee adults (Gordon and Peters, 1974, p. 27) found that "approximately half of the interviewees said that they needed help at some time during their learning project." Allen Tough (1978) concluded his synthesis of studies of self-directed learning with the assertion, "One finding is clear, adults want additional help and competence with planning and guiding their learning." Equally emphatic are researchers conducting statewide needs assessments. California researchers Peterson and Hefferlin (1973, p. 57), concluded, "Many adults at one time or another need aid in thinking through their educational occupational plans and relating them to their broader life goals." A synthesis of data across state needs assessments (Cross and Zusman, 1978) concluded, "Adults are quite clear in their desire for more and better information on educational opportunities, and many want a wider range of counseling services than is now usually provided." The link between learner interests and learning resources is a critical one in facilitating adult learning.

**The Missing Link**

There is no need to start from the beginning in formulating some suggestions for linking learners to resources. "One aspect of the linking function, for example, is performed by educational brokers." A dedicated and effective network of educational brokers already exists and the 1977-78 description of FIPSE (Fund for the Improvement of Postsecondary Education) describes 15 experimental brokerage projects funded by this one small program of the
federal government. Most educational brokers, however, have been so busy dealing with their clients or trying to locate or maintain financial support for their endeavors that there has been little opportunity to think broadly about the linking function. We shall try to provide some of that perspective, while building on the practical experiences of brokers. Specifically, we shall be looking at the congruence between the plans and practices of educators and the apparent interests of adult learners as these are revealed through surveys and studies of self-planned learning.

The functions of the educational broker as described by Heffernan, Macy, and Vickers (1976) include:

- helping clients define goals through self-assessment, value clarification, occupational exploration, and long-term planning;
- helping clients set objectives for further education through making decisions about needed competencies and/or credentials;
- helping clients to select appropriate learning experiences based on complete information about all available learning resources;
- helping clients gain access to appropriate learning opportunities through facilitating admission, financial aid, recognition for prior learning, and so on.

Supporting and expanding the brokerage functions defined by Heffernan, et al. (1976) are those that have been recognized by various study groups making recommendations to state and federal agencies regarding the access of adults to learning resources. For the present project, we collected 44 sets of recommendations (see Appendix A) and attempted to develop a classification scheme for the common access issues addressed in the recommendations. Appendix B provides specific illustrations for each of the categories that emerged from our analysis. The major headings from our classification of the recommendations are as follows:

1. Information
   A. Creation of a data bank of learning resources
   B. Dissemination to help people locate appropriate learning opportunities
   C. Advertising and promotional efforts to attract learners to educational institutions
II. Counseling services
   A. Creation of comprehensive counseling services
   B. Making counseling services easily accessible to adults
   C. Development of mechanisms and/or counseling services to meet learner needs with learning resources
   D. Development of counselor training programs

III. Provision of support services

IV. Access and advocacy
   A. Improving access for everyone
   B. Special recruitment efforts for underserved groups
   C. Advocacy for access to educational institutions
   D. Creating more flexible admissions criteria and procedures

V. Financial aid
   A. Establishing equity in fees
   B. Providing financial assistance

VI. Credit
   A. Establishing a credit registry
   B. Evaluating previous learning for credit
   C. Providing opportunities for credit-by-examination

There does seem to be some consistency in the way in which practitioners and planners are conceptualizing the linking process. For our purposes here, the issues can probably be addressed under three general functions:

1. Facilitating access to the appropriate learning resources, a process that includes access for underserved groups and advocacy for the special needs of adult learners because they are adults.

2. Providing information to adult learners about available learning resources and about themselves and their strengths and weaknesses.

3. Providing counseling and referral services designed to assist learners in planning and matching learner needs to appropriate learning resources.

The emphasis in the ensuing discussion will be based on services to be provided in order to facilitate the access of adults to learning...
resources. While we will not be addressing, in this paper, matters pertaining to the improvement of instructional programs, and the like, it is important to remember that what is provided is critically important. Adults will not care about access if learning opportunities are not appropriate to their needs.

Facilitating Access

Access for Underserved Adults

The privileged classes are clearly overrepresented in adult and continuing education. Table 1 shows the participation rate of various categories of adults over the age of 17 who were not full-time students in 1975. According to National Center for Education Statistics data, 11.6 percent of the adults in the United States were engaged in some form of organized instruction during the year. In order to highlight the underrepresentation of certain segments of the population, categories having participation rates of 11 percent or lower are italicized in Table 1.

The message is clear that adult education, defined as "organized instruction" in industry, government, and community agencies as well as schools and colleges, is serving the advantaged classes out of proportion to their numbers in the population. The italicized categories in Table 1 reveal that blacks, elderly people, those with part-time jobs, low incomes, and low educational attainment are not well served by current forms of organized instruction.

The national survey of adult educational interests sponsored by the Commission on Non-Traditional Study (Carp, Peterson, and Roelfs, 1974) found higher numbers of participants than the NCES data shown in Table 1, but the pattern with respect to socioeconomic variables was very similar. That study found that 30 percent of the adult population were current learners (had received instruction within the past 12 months), 46 percent were "would-be" learners (not currently participating but interested in further learning), and 23 percent said they were not interested in further learning (non-learners). In general, the data from state and national surveys show that on socioeconomic indicators, learners are most similar to today's college students and non-learners least similar. Would-be learners
Table 1. Participation Rate in Adult Learning in 1975

<table>
<thead>
<tr>
<th>Age</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-24</td>
<td>11.5</td>
</tr>
<tr>
<td>25-34</td>
<td>20.6</td>
</tr>
<tr>
<td>35-44</td>
<td>15.0</td>
</tr>
<tr>
<td>45-54</td>
<td>10.5</td>
</tr>
<tr>
<td>55-64</td>
<td>5.8</td>
</tr>
<tr>
<td>65 and older</td>
<td>2.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>6.9</td>
</tr>
<tr>
<td>White</td>
<td>12.1</td>
</tr>
<tr>
<td>Other</td>
<td>13.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>11.7</td>
</tr>
<tr>
<td>Female</td>
<td>11.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary (0-8 years)</td>
<td>2.0</td>
</tr>
<tr>
<td>High school (1-3 years)</td>
<td>4.6</td>
</tr>
<tr>
<td>High school (4 years)</td>
<td>11.9</td>
</tr>
<tr>
<td>College (1-3 years)</td>
<td>17.6</td>
</tr>
<tr>
<td>College (4 years)</td>
<td>27.0</td>
</tr>
<tr>
<td>College (5 or more years)</td>
<td>30.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income (dollars per year)</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 3000</td>
<td>4.4</td>
</tr>
<tr>
<td>3000-4999</td>
<td>5.5</td>
</tr>
<tr>
<td>5000-5999</td>
<td>7.5</td>
</tr>
<tr>
<td>6000-7499</td>
<td>9.1</td>
</tr>
<tr>
<td>7500-9999</td>
<td>11.5</td>
</tr>
<tr>
<td>10,000-14,999</td>
<td>12.9</td>
</tr>
<tr>
<td>15,000-24,999</td>
<td>15.8</td>
</tr>
<tr>
<td>25,000 and over</td>
<td>17.7</td>
</tr>
</tbody>
</table>

(Table continued on page 14)
<table>
<thead>
<tr>
<th>Hours worked May 11-17, 1975.</th>
<th>Participation Rate¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10.</td>
<td>7.2</td>
</tr>
<tr>
<td>10-14 hours</td>
<td>8.6</td>
</tr>
<tr>
<td>15-34 hours</td>
<td>11.6</td>
</tr>
<tr>
<td>35 or more.</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Region:
- Northeast: 10.0
- North Central: 11.2
- South: 10.4
- West: 16.6

Metropolitan status:
- In SMSA²: 11.0
  - Central city: 11.0
  - Outside central city: 14.0
- Not SMSA: 9.4
- Non-farm: 9.8
- Farm: 6.7

1. Participation rate is computed from a total population base of 146,612,000 noninstitutionalized adults 17 years of age and over. In 1975, the overall participation rate was 11.6 percent. Groups with an 11 percent participation rate or less are italicized.

2. The Census Bureau classified Hispanics as either black or white.

3. Standard Metropolitan Statistical Area (SMSA) is a complex category of population density used in Census Bureau analyses.

Source: Compiled from preliminary data. SMSA 1975.

are statistically more like the average American than either learners or nonlearners. Nonlearners come primarily from the ranks of the elderly and lower socioeconomic classes.

It is probable that at this time adult education as a whole is more elitist than the more traditional segments of postsecondary education consisting of community colleges, technical institutes and four-year colleges and universities. Although the elitism of adult education may surprise many people who still think of night school as a
lower class immigrants' college, it is not especially surprising when
we look at the changes in postsecondary education in recent years.
Not only is postsecondary education for young people fairly well
endowed with financial aid moneys, but the first two years of col-
lege have become increasingly accessible and increasingly necessary
to a broad cross section of American young people. Adult education,
on the other hand, has little financial aid money available, is largely
voluntary and self-motivated, and so far has not been easily acces-
sible nor widely known to many people. The idea of "college" may
seem more possible to disadvantaged young people than any form
of adult learning seems to their parents.

The variable of educational attainment is the single most impor-
tant predictor of an adult's participation in further education. Edu-
cation is addictive, the more people have, the more they want and
the more they participate. Whereas more than one-third of today's
college graduates are engaged in some form of adult education, less
than 5 percent of those without a high school diploma are (ACES,
1975). While the addictive nature of education is encouraging to
educators, it is discouraging to policymakers striving for equal op-
portunity in the society. Survey data are stubbornly consistent in
showing that those very adults whom policymakers are likely to feel
most "need" education are not only not very likely to participate, but
they are also not very likely to express any interest in doing so.

Although virtually every set of recommendations listed in Appen-
dix A recommends that strong efforts be made to serve disadvan-
taged adults, almost no one has any sure suggestions for recruit-
ment. The survey data offer some guidance regarding the interests
and perceived barriers of educationally disadvantaged adults. The
problem with the data is that most investigators analyze the data only
for would-be learners on the quite reasonable grounds that until
those who indicate an interest in further learning are served, it is
useless to spend time on those who say they are not interested. This
gives the overall data more than a tinge of middle- and upper-class
bias. Even when data are analyzed separately for would-be learners
of low academic attainment, the figures with respect to the attitudes
of undereducated adults toward education are likely to be severely
distorted, because they represent the atypical poorly educated adult
who is interested in further learning and say nothing about more typical lower-class adults who are not interested. We know, for example, that the cost of education appears consistently in the data as a major barrier for poorly educated would-be learners. Many people conclude, therefore, that financial entitlements would help disadvantaged adults gain access to education. But to use the California (1975) data as an example, what the data actually say are that only 35 percent of adults with less than a high school diploma express any interest in further education, and that 32 percent of these cite cost as a barrier. Taking these figures at face value, we could help about 18 percent of the poorly educated adults gain access to education by providing financial assistance. But we still have 63 percent of the educationally disadvantaged who profess no interest, and we don't know why. Because the needs assessments have been more like "market surveys" than "research," we have almost no data that would help us understand the reasons for the lack of motivation for further learning on the part of a group of adults that planners and policymakers would like to reach. Some in-depth interview studies are urgently needed if we are to formulate realistic plans for reaching educationally disadvantaged adults. Meanwhile, we operate with a number of hypotheses generated from the data that we do have on the interests of the educationally disadvantaged. In comparison with better-educated groups, would-be learners with low levels of educational attainment are:

- less likely to know where to get information about adult learning opportunities, but also less likely to express an interest in using information services;
- more interested than better educated adults in receiving information about opportunities via radio or television;
- more likely to want counseling help;
- more likely to be job- and income-oriented in educational interests;
- less likely to be interested in a degree, but more likely to be interested in a certificate of some kind;
- more likely to be interested in improving basic skills;
- more likely to be interested in more active and socially interactive forms of learning, e.g., on-the-job training as opposed to classroom lectures.
less likely to cite "lack of time" as a barrier, but also less likely to want to devote more than nine hours per week to study;

more likely to cite cost, lack of child care facilities and transportation as barriers;

more likely to cite lack of motivation, self-confidence, and energy as barriers.

(Synthesis across needs assessments from Cross, in press)

Three interrelated conclusions stand out in this composite. Poorly educated adults are handicapped in locating and obtaining access to educational opportunity, they seem "turned off" by the prospect of further education, and if they do participate, it would be primarily to improve their economic status. All of this is easy to understand but not very easy to change. Perhaps the most obvious formula would be to provide the type of education that would lead to better jobs: do it in a nonthreatening, noncompetitive atmosphere, make sure people know how such learning will help them, and ease the routes of accessibility to new opportunities.

Any approach to increase the participation of underserved adults probably has to be multidimensional. There is not even the luxury of solving one problem at a time. Providing information and financial aid won't help if the learning programs are not appropriate to their needs. Providing attractive learning options won't help unless people know about them and outmoded images of "school" are changed. Improved images won't help if child care and costs remain problems, and so it goes.

Certainly there is no single service that will solve the social problem of the growing gap between poorly-educated and the well-educated groups of people. Without government subsidized intervention, however, it is highly likely that the greater the availability of new educational options for adults, the more the well-educated with the motivation, the information networks, and the money will increase their educational advantage over the poorly educated. Furthermore, most of the impetus for the learning society is stimulated by the providers of postsecondary education—two- and four-year colleges and universities, technical institutes, and trade schools. Currently 85 percent of the participants in organized instruction are
high school graduates, and postsecondary education provides 43 percent of all adult instruction (NCES, 1973). Thus the learning society is primarily a postsecondary phenomenon, but even within that large society, it is predictable that adults with some college experience will pull rapidly ahead of high school graduates in their participation in learning activities.

Federal and state policymakers are especially concerned about equal opportunity issues in the learning society. The language for the authorization of Education Information Centers specifies that the services offered shall include: "information and talent search services designed to seek out and encourage participation in full-time and part-time postsecondary education or training of persons who could benefit from such education or training if it were not for cultural or financial barriers, physical handicap, deficiencies in secondary education, or lack of information about available programs or financial assistance." (Subpart 5, Section 125, Part A, Title IV Higher Education Amendments, 1976)

We shall return later to the problem of recruiting unserved adults in the sections on information and counseling.

Advocacy for Adult Needs

The issue of the need for advocates for accommodating the special needs of adult learners is usually raised in connection with traditional institutions of postsecondary education. Most other learning resources illustrated in Figure 1 were designed with adult learners in mind, but colleges and universities were designed for full-time, dependent learners, and adjustments ranging from minor to major are required to serve adults.

Increasing the access to postsecondary education has received widespread attention for several decades but until quite recently the concern has been directed to younger people and to the community colleges as low cost, open-admissions, conveniently-located institutions. Low cost, easy accessibility, and nonselective admissions, of course, help many people gain new access to educational opportunity. But adults have some access problems because they are adults, and it is to those issues that we now turn.

There are three general access problems that are unique to adults.
(1) Adults are unable to devote full time to learning because of jobs and other adult responsibilities. The major needs here are for equity in services and fees for part-time students and for learning schedules that do not conflict with other adult commitments. (2) Adults have had more and more varied experiences than have young people and their backgrounds are more diverse. The implications here are that placement and credit need to be considered for adult learners individually. (3) Many adults have been out of "school" for some years. Schools and other adult learning opportunities have changed, and adults themselves have changed, necessitating a re-orientation to learning and changed images of adult education.

For the most part, there has been an exceptionally vigorous response to these special needs of adults on the part of postsecondary education. The United States Commission on Civil Rights recently conducted an extensive study of age discrimination, concluding that colleges and universities (except for medical schools) were doing quite well in providing for the needs of older students. Their conclusions with respect to higher education are as follows:

"Institutions of higher education are increasingly providing new opportunities to meet the needs of the so-called nontraditional student, those over the age of 22.

Most institutions examined by the commission are responding to the changing age distribution of the student population out of economic necessity and in response to expressed individual and social needs. Some institutions have waived national standardized tests for students beyond a certain age. Special programs and innovative measures have been initiated in many instances to accommodate the concerns of nontraditional students.

For example, continuing education activities have been developed or expanded at many institutions. There has been an increase in professional retraining courses as well as in short-term courses for the benefit of early retirees, persons seeking new careers, and those who desire to update their training. Some institutions provide students with credit for professional experience, or for other types of similar learning experience. Credit is given increasingly for knowledge and skills gained from life experiences which are comparable in scope to learning, or derived from college level courses.
Institutions are also responding to trends whereby states are increasingly requiring relicensure in certain occupational areas which require students to update their own skills." (from Higher Education and National Affairs, January 13, 1978)

It appears that postsecondary education is doing quite well in general. But we might look somewhat more closely at some of the special issues that surface in education for part-time students.

Administrative Modifications for Adults

The primary modifications made for adults have been the introduction of more flexible schedules and the use of off-campus locations. The survey of colleges commissioned by the Commission on Non-Traditional Study (Ruyle and Geiselman, 1974) showed that two-thirds of the programs for adult learners provide off-campus locations, and numerous scheduling options are offered. The overwhelming majority of programs (88 percent) offered scheduling alternatives to daytime classes. Weekend classes are available in nearly one-fourth of the programs, periodic blocks of several days are involved in 20 percent, one in six programs offer maximum flexibility with no predetermined schedules, i.e., self-paced, open entry/open exit programs.

The options available seem to correspond reasonably well to the preferences of adult learners as these are revealed in the needs assessments (Cross and Zusman, 1978). The majority of potential learners prefer evening schedules, but a substantial minority (especially retired people and women with school-age children) prefer daytime schedules. Typically, less than 10 percent of the respondents say that weekend scheduling would be attractive to them, but those low demand figures may reflect the past more than the future. It appears that weekend colleges are enjoying considerable popularity. As more people experience weekend colleges, interest and demand reflected on questionnaires will probably rise.

Despite the range of scheduling options, the scheduling of learning activities when they cannot attend is cited as a barrier to learning by 25 percent of the learners in California (1975) and by 16 percent nationwide (Carp, Peterson and Roelfs, 1974). It may well be that scheduling remains a problem for particular topics of learner
interest in some locations, but the question must be raised as to whether the perception of scheduling barriers is the result of lack of scheduling alternatives or lack of information about the options available. It is hard to imagine, for example, that in California with its extensive system of community colleges, most offering evening classes, scheduling should be a barrier to one out of four learners. Some in-depth studies are needed to determine how much potential learners actually know about the options available to them. Until that is done, it is hard to advocate greater attention to the needs of adults for flexible schedules.

An evaluation of the progress made in establishing equity in fees and services for part-time students is somewhat more equivocal. There does appear to be widespread awareness of the need for part-time students to have access to libraries, counseling and placement services, and other student support services on an equal basis with full-time students. But as recently as five years ago, the Commission on Non-Traditional Study (Ruyle and Geiselman, 1974) reported that while the great majority of community colleges (85 percent) provided counseling at times convenient for adult students, only half the senior institutions did. And then questions should be asked about the type of services provided. The Commission found that only about 10 percent of the institutions serving adult students provided counseling services geared to their special needs.

The situation with respect to fees and financial aid is mixed. The commission's survey found that fees for part-time students are generally assessed on a per-credit or per-unit basis. In only 3 percent of the institutions were part-time students required to pay the same tuition as full-time students (Ruyle and Geiselman, 1974). Financial aid, however, is a different matter. A special report of the A.C.E. Committee on the Financing of Higher Education for Adult Students (1974) concluded, "Regardless of family income, [adult] part-time students on the whole are massively discriminated against in federal and state student and institutional aid programs, social security survivors' benefits, institutional tuition rates and financial aid programs, and income tax requirements." (p. 3)

As recently as 1973, only four state needs-based student aid programs offered eligibility to part-time students. In 1975-76, part-time
students received 17 percent of state student aid dollars, and by 1976-77, an estimated 25 percent of aid funds were awarded to part-time students (ACE, 1974; Winkler, 1976). There is now a general awakening to the financial needs of part-time students whether in traditional or nontraditional programs. A special study of the applicability, or inapplicability of current financial need analyses to the needs of part-time learners is underway now at Educational Testing Service sponsored by National Institute of Education funding.

The concept that is beginning to surface is that financial aid for adult students requires something quite different from a simple expansion of traditional financial assistance. The entitlement plans presently under discussion emphasize the need to center financial support on students rather than institutions, thus enabling adults to make their own decisions about where they wish to pursue learning. The diversity and decentralization of both instructional and support services for adults is another factor that necessitates a rethinking of present financial aid programs.

It is far beyond the scope of this paper to present the numerous proposals and analyses that have been offered within the last year or so. Good descriptions and rationales of some of the foremost proposals for federal entitlements can be found in Kurland (1977).

Recognition of Nonschool Learning

The issue of advocacy for adults has surfaced more visibly, and perhaps more controversially, over recognition of past learning than over any other single issue. In principle, institutions of higher education have accepted the idea that how, when, or where learning occurred is irrelevant, and that what should be measured is the possession of knowledge or competence by the individual. Measuring that learning and determining its appropriateness for academic credit is more difficult. It may, however, be one of the more important issues in learning society's future.

Today there are basically three approaches to granting academic credit for noncollegiate learning: credit by examination, credit for experiential learning via special assessment of student competencies, and credit for noncollegiate learning via evaluation of courses or
educational programs. These three approaches are most frequently associated with the names of specific programs and organizations offering services directed toward the recognition of the varied learning experiences of adults.

The College Level Examination Program (CLEP) and College Proficiency Examination Program (COPE) are examples of examination programs designed to assess the knowledge of adults in traditional academic subject areas. More than two-thirds of the colleges in the country now grant degree credit by examination in amounts varying from less than one quarter or semester of full-time credit to a bachelor's degree by examination (Ryle and Geiselman, 1974).

The CALT (Cooperative Assessment of Experiential Learning) program has just completed three years of work dedicated to the assessment of adult competencies by expert judgment. That program culminated in 27 publications designed to help institutions establish sound procedures for assessing competencies, largely through non-written modes. CALT is continuing its work as a consortium of some 250 colleges under the name of the Council for the Advancement of Experiential Learning and by all indications it will continue to play an important advocacy role for the recognition of nonschool learning for adults.

The Office on Educational Credit of the American Council on Education was established, among other things, to make recommendations regarding credit for adult education courses and programs not sponsored by educational institutions. The office sends teams of subject matter specialists to visit the site of courses offered by government agencies, industry, military, volunteer organizations and the like. The team examines the courses, and the Office of Educational Credit publishes a guide of recommendations regarding the amount and category of credit that could be awarded. Thus far, more than 1100 courses sponsored by over 80 organizations have been evaluated and credit recommendations made.

To my knowledge none of these services were established in direct response to "consumer demand." Only two of the needs assessment surveys even attempted to determine the extent of interest in the evaluation of noncollege experiences for possible credit. California (1973) found that 9 percent of the adults said they would be
interested in using such services, and the figure in Iowa (1976) was 14 percent. The need for the variety of services represented by CLEP, Cb, and OEE was seen by advocates and professionals far closer to the cutting edge of change and with much greater vision and knowledge about future directions than the average adult. The services described above provide many thousands of adults with very important services and all have gained increasing credibility and support within the academic community. The point is that planning for the learning society cannot be done safely on the basis of marketing surveys and consumer demand. The average adult can only respond on the basis of relatively limited knowledge and experience. Progress in uncharted domains is not generally made by responding to requests for the things people have already experienced, it is more likely to come about through the imagination of people who see a need and can propose a better way of doing things. This is not to recommend doing away with needs assessments and certainly not to suggest remaining aloof and out of touch with the learning needs of the average adult. It is to suggest that planning for the learning society will be inadequate and always somewhat behind the times if planning and funding are based on a pedestrian implementation of the “demand” figures from the admittedly valuable background information provided by the needs assessments.

There is relatively little data on adult interest in a variety of services related to the recognition of nonschool learning. There is, however, widespread acceptance on the part of educators of the soundness of the argument that learning or knowledge resides in the individual rather than in the courses offered by providers. Eventually the learning society will have to be based on more adequate measures of student learning than the time-serving measures that currently exist. Such measures are not very adequate for so-called traditional education, but they are totally inadequate for the newer forms of learning coming into existence with the learning society. As the Commission on Non-Traditional Study (1973, p. 126) observed five years ago, “A growing number of educators are convinced that new systems of evaluation and credentialing are required everywhere in education.”

Despite the valuable contributions made by Cb and others in the
assessment of experiential learning, much remains to be done. CAEL has concentrated largely on helping institutions assess experiential learning occurring either prior to or in conjunction with college-sponsored programs. The essence of the CAEL contribution to date is distilled in a small and useful booklet entitled Principles of Good Practice in Assessing Experiential Learning by Warren Willingham (1977). CAEL has taken the position that the assessment of learning for the purpose of granting credit is the prerogative of degree-granting educational institutions. CAEL emphasizes that only the institution itself can know how students' learning should be evaluated in relation to its own programs. All institutions, however, are helped through CAEL to apply "good practices" in assessing experiential learning.

Viewed from the perspective of the learner, the CAEL approach at least opens the door to the possibility of obtaining credit, but it leaves the potential degree candidate shopping around for the best bargain in the credit department. It may also be necessary for the candidate to pay rather substantial sums of money to each institution where an assessment is desired. Nor are the problems of the mobile learner over if he or she desires to transfer to another institution where credit may or may not be granted for assessments receiving credit at other colleges.

Far more desirable from the learner's point of view would be a central assessment agency where assessment experts documented the competencies of candidates and sent "scores" or profiles to institutions listed by candidates. A possible model is present in both the history and the current practices of admission tests such as the Scholastic Aptitude Test (SAT). There was a time when each college had to develop its own measures for determining the acceptability of candidates for admission to the college. With the creation of the College Board and Educational Testing Service, however, it became possible for students to take one program of tests at a location near their homes and have the scores sent to colleges where they wished to apply for admission.

The need for a central testing agency was dictated by some of the same conditions now present for adult learners wishing recognition for prior learning. First, there was the problem that high schools
differed greatly in the populations they served, the grades awarded, and the quality of instruction. Thus learning measured as a characteristic of the individual furnished a necessary balance for the great variability in learning resources and student experiences. Second, as students became more mobile, colleges lost personal familiarity with individual high schools and their characteristics, and it was increasingly difficult to make assessments without some kind of test. Third, it was not feasible to have learners traveling all over the country, paying separate fees, taking different tests to see what chances they had of admission to the college of their choice. Ultimately the adult population—at least that part of it interested in degree credit—will find itself in the same situation, and colleges will become increasingly burdened by the need to establish excessively costly “assessment centers.”

As we look ahead, it seems that someone should be thinking about both a psychometric program for the assessment of competencies and a program of services that would establish assessment centers, report “competencies” to both employers and colleges, and facilitate the movement of lifelong learners in the society. There is no reason to think that such a service would threaten the autonomy of institutions with respect to the granting of credit or employers with respect to the hiring of workers any more than the reporting of SAT or American College Testing Program (ACT) scores threatens the right of colleges to set their own admissions policies.

Providing Information

Information about Learning Resources

There is virtually unanimous agreement among planners and providers that adult learners need more information about available learning resources—despite a general lack of convincing data that information about existing opportunities is a top priority item for a large number of adults. It is a highly unusual set of planning recommendations, for example, that does not address specifically and in a variety of ways the need to improve the collection and dissemination of information (see Appendix B). And action seems to be following recommendations very rapidly, especially at the federal level.

26
substantial proportion of the 1977-78 RPSE (Fund for the Improvement of Postsecondary Education) budget, for example, was allocated to experiments and models for providing information to adults; and the higher education amendments for 1976 authorize federal funding for the creation of Education Information Centers (EIC) in the states.

When one looks at the data from needs assessments or from the research on self-directed learning, however, the demand is not as clear as it seems to most planners. Figures from needs assessments show that at most 20 percent of adults who say they would like to learn cite lack of information about available opportunities as a barrier to their participation, in no study is lack of information a barrier to as many people as cost, lack of time, lack of convenient schedules, and so on. If the question is put positively, for example, “Do you know where to go for information about learning opportunities?” a rather reassuring 70 to 80 percent of would-be learners say they do (Central New York, 1975; Iowa, 1976). (The overwhelming majority would go to a school counselor.) Even when adults were asked if they would like information “about educational opportunities in the region—where to find courses, how to use libraries, museums, etc., where to take equivalency exams, and so forth.” if the location were convenient and the fees low, a scant 12 to 15 percent indicated an interest in using such a service (California, 1975; Iowa, 1976). The only high-demand figure from the needs assessments comes in answer to questions such as, “Would you like more information than you now have?” In verification of the notion that more information is presumably always welcome, 70 to 85 percent of the potential learners responded in the affirmative (Central New York, 1975; New York, 1977).

The urgency of the demand for information is no greater when viewed from the perspective of self-directed learners. Tough (1971) reports that the major difficulties experienced in self-directed learning are more likely to lie in the inadequacy of the help received rather than in a failure to recognize the need for help or to know where to go to find it.

How, then, do we explain this strange preoccupation of planners to provide help in locating resources? The motivations are multiple
Arad, in our opinion, sound. In the first place, underserved populations—ethnic minorities, the elderly, and those of low educational attainment and low job status are much less likely to know where to get information than are people in the better educated segments of society. Furthermore, most of the information currently available is more accessible and more attractive to well-educated groups. It consists primarily of course listings distributed through print media of newspapers and mailed announcements (Central New York, 1975). The message seems to be that if equal opportunity is a primary motivation for improving the information network, then great care should be taken to make certain that the information reaches the intended audiences. We shall return to this matter later.

A second motivation for providing information is that it seems apparent that adults do not know as much as they think they know about learning opportunities. New York, for example, has been a national leader in providing new programs and services designed specifically for adults, yet less than one-third of the adults responding to a regional survey had even heard of the State University of New York’s Empire State College, and only a handful were aware of the Regents’ External Degree Program (Northeast New York, 1974). Another illustration is found in the data showing that an amazing 35 percent of the adults in a national study (Carp, Peterson, and Roelfs, 1974) said that the fact that they did not want to go to school full-time constituted a barrier to their continued learning. As almost all planners and educators know, there are very few subjects and very few locations where any adult anywhere would have to “go to school full-time” to advance his learning. The problem seems to be a simple lack of information about new kinds of part-time learning opportunities.

Adults seem to have an image of learning as a classroom exercise for young people who usually spend full time under the tutelage of authoritative teachers. That is what it was when they “went to school,” and for nonparticipants nothing has happened since then to change this image. Thus a strong case can be made that adults need a new image of adult learning, and to this end, they need up-to-date information, whether they know it or not.

A third motivation for providing information about educational
programs and services is that colleges are very eager to attract adults to their programs. From our perspective of “putting the student first and the institution second,” that motive is not always completely learner-centered, but most colleges are sincerely trying to serve adult needs; they are spending money and time to do so, and there is no point in providing opportunities if people don’t know they exist—which, in fact, seems to be the case. Hence, from the standpoint of the providers, the dissemination of information to potential users is highly desirable.

Finally, a fourth motivation lies in the need of planning offices for comprehensive information about learning resources so that unnecessary duplication and expense can be avoided, and so that services can be provided in response to accurately informed demand.

Any one of these motivations would be sufficient argument for the collection and dissemination of information about learning resources, but together they make a compelling case. Our analysis that shows quite energetic response to fairly low client demand for information, however, points up the problem of taking figures from needs assessments too literally. Bits and pieces of data cannot be extracted and cited as conclusive evidence either that a need exists or that it does not exist. For example, Iowa’s (1976) data showing that 12 percent of the adults in the state say they would use a service providing educational information is not overly impressive until it is confronted with the alternative of not providing information about educational services. Requirements from funding agencies to “demonstrate demand” through survey research may not be helpful and may even be misleading if not viewed within the larger perspective.

In view of these purposes to be served through the appropriate dissemination of information, what suggestions might be offered? First, there is the general problem of simply collecting the appropriate information about learning resources. Recommendations from planning documents seem to cluster around three distinct purposes. One goal concerns the collection of information (see Category 1-A in Appendix B). A second goal is more concerned with the dissemination of information to adult learners (see Category 1-B in Appendix B). The third purpose is recruitment for colleges and uni-
iversities (I-C, Appendix B). Thus the collection of information appears to serve three purposes: to help planners provide appropriate and nonoverlapping educational opportunities, to serve as a data base for public dissemination, and to help educational institutions weather the decrease in the number of 18 to 24 year olds by serving a new clientele of older learners.

In some of the recommendations made by planners, data banks are narrowly conceived, suggesting the collection and collation of adult education programs offered only by colleges and universities. As Figure 1 shows, however, the educational resources of colleges and universities constitute a small, albeit important, part of the learning resources of the learning society. To be sure, the collation of even so limited a resource as "adult education courses" available in a given region would constitute a giant step ahead, but it would not appear to be maximally useful to either planners or learners.

It seems imperative to extend the data banks of learning resources beyond the offerings of postsecondary institutions. The extent of this undertaking calls for central leadership in devising the methodology and classification system for a computerized data bank.

At the present time, there are many local efforts to provide better information about learning resources to potential learners. They range from telephone exchanges with volunteers operating from index cards, to school counselors and libraries collecting brochures and catalogues, to computer-generated publications of college-level offerings throughout an entire state. But so far there has been a great deal more enthusiasm than expertise and there is no sign that order will emerge from the present chaotic scene without some kind of central coordination and leadership.

A number of problems are not being addressed by current efforts. First there is the problem that few, if any, information listings are comprehensive. Potential consumers should know, for example, that they can get a course in "speed reading" for $2.00 in 10 weekly lessons at the local adult school, for $225.00 at a plush resort weekend, for college credit at the community college, or through correspondence study from the extension program of the state university.

Second, there are no arrangements, so far, to gather information
across providers in comparable form. It is exceptionally difficult, even for the professional counselor or well-informed disseminator of information, to make comparisons from promotional brochures or information submitted (or omitted) by providers. Third, there are an increasing number of options available to a national clientele. Local information banks rarely include national options such as correspondence and television courses, nonresident degrees, credit for noncollegiate learning, military and government programs, and so on. Finally, there is the problem that with so many states recognizing the need for better informational services, of various task forces pressing hard for the creation of information data banks, and with the new federal authorization for Education Information Centers, it would be more helpful to users, not to mention more economical for states, if there were some consistency and comparability across state lines.

For all of these reasons it is timely to suggest that some central agency should take the leadership in devising a model for collecting and classifying learning resources. Such a centralized agency might devise the appropriate forms and procedures for collecting and storing data, thus enabling local jurisdictions to collect and update information in an efficient format. Local agencies however, would be encouraged to supplement the national core model as appropriate for the region and clientele. The responsibility for collecting and keeping current learning opportunities available nationally would be assumed by the central agency. Since it is probably unrealistic to attempt a comprehensive model for listing all of the learning resources illustrated in Figure 1, it might be appropriate to limit the national classification scheme to “organized instruction” along the lines of the National Center for Education Statistics definition of adult education. In summary, there is a need for some coordination and leadership in collecting information about learning resources. That says nothing yet about disseminating it to potential users.

Like collection, dissemination has been a haphazard affair. For the most part, dissemination has been left to providers, and newspaper advertisements and mailed bulletins have been the most common methods. Such methods are usually rated effective by both learners and providers (Central New York: 1975). Table 2 presents
Table 2. Preferences for Dissemination of Information about Adult Education

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailed notices</td>
<td>9570</td>
<td>50.1</td>
</tr>
<tr>
<td>Newspaper</td>
<td>3578</td>
<td>18.7</td>
</tr>
<tr>
<td>Catalogues/posters</td>
<td>2203</td>
<td>11.5</td>
</tr>
<tr>
<td>Information Center</td>
<td>1567</td>
<td>8.2</td>
</tr>
<tr>
<td>Radio/TV</td>
<td>1287</td>
<td>6.7</td>
</tr>
<tr>
<td>Place of work</td>
<td>636</td>
<td>3.3</td>
</tr>
<tr>
<td>None of these</td>
<td>251</td>
<td>1.3</td>
</tr>
</tbody>
</table>


Data from a study conducted by the New York State Education Department in response to the question, "Which one of these six ways would best help you know what is available in adult education?"

While these data are useful to providers seeking to make their offerings known, they have limitations with respect to implementation for the broader learning society. In the first place, surveys tend to overrate the familiar, most people have not experienced alternative ways to get information. Second, while the overall preference is clearly for mailed notices, other data show that adults with low incomes and low educational attainment are more likely than others to prefer radio or television dissemination. While acting on the data shown in Table 2 would probably satisfy the majority of potential clients, it would continue to serve those who are already best served. Third, these data apply to traditional images of adult education—courses offered by schools and colleges. This form of dissemination would do little to change the image of adult learning. And it is, I suggest, one of the tasks of the total learning society (although not necessarily of individual providers) to present a broader image of the variety of learning opportunities now available.

Recognizing some of the limitations of dissemination by print media, there has been some recent experimentation with information centers to disperse information. To date, such centers have usually used a counseling model, and have typically been located on
so-called neutral ground, i.e., not on the premises of a provider. Since most have been financed by federal funding, target clients have tended to be the disadvantaged, and the centers have been located in the center of low-income populations. This makes good sense since it is a consistent research finding that proximity is a significant factor in the use of educational services. The one-on-one counseling model also follows research findings indicating that disadvantaged adults are likely to want and to need personalized help.

A regional New York study (Western New York, 1976) found, for example, that 34 percent of the whites but 78 percent of nonwhites said they would like to talk with someone about learning opportunities. Other research data, as well as experience, suggest that well-educated adults are more interested in complete and accurate information, whereas the educationally disadvantaged express a greater need for help with interpretation and referral. The newly-proposed Education Information Centers (Higher Education Amendments, 1976) are likely to follow the model of establishing information centers in neighborhoods where they are likely to reach a variety of people, but especially the disadvantaged.

There are, however, other steps that can be taken that have been generally ignored in this country. Experience in Sweden has shown that recruitment of undereducated groups has been far more successful when conducted at work sites than when conducted in housing areas (Rubenson, 1977). The reason is believed to lie in the influence of reference groups. Having one's coworkers value and support learning activities is thought to be especially important among working class people. The disturbing finding that labor union members are not taking advantage of union-negotiated financial assistance for education (Levine, 1976; O'Keefe, 1977) may well be a reflection of the lack of reference group support. Indeed it may even indicate hostility or derision toward education for adults.

The attitudes of the poorly educated toward education have been generally underplayed in the recruitment efforts in this country. Far more attention has been given to the removal of what I have called situational and institutional barriers than to dispositional barriers (Cross, in press). Despite evidence to the contrary, there seems to be a conviction that all people are interested in further educa-
tion, and that if providers of learning resources could remove institutional barriers and if child care, financial assistance, and transportation could take care of the barriers arising out of one's situation in life, then people would be able to fulfill their desire for further learning. Many people, especially those with low educational attainment, have probably had very bleak experiences with education. If they learned one thing in the schools, it may have been that they were not good at learning (reinforced by a string of Ds and Fs on their report cards) and that their feelings of self-worth will not be enhanced by exposing themselves to further failure.

This analysis indicates that it is not simply a matter of making information about educational opportunity available to undereducated Americans, it is a matter of changing the image of education and learning—for individuals and for whole groups. We need to think more imaginatively about how that can be done.

The popular press has been giving some attention recently to the social phenomenon of adult learning. The New York Times (January 8, 1978), for example, devoted some 15 pages to adult learning, and June usually brings a rash of local human interest stories on intergenerational graduating classes—especially in community colleges. These are fine as far as they go. They do change the image of adult learners, and the so-called “average adult” can usually identify easily with the featured graduates. The typical human interest story, however, does not do much to change the image of adult learning. While many are pleased to see laborers and grandmothers getting college degrees, that may not appear to be a realistic goal for the father of four with a high school education and a low-paying, but full-time job.

Two things are needed—more attention to the variety of learning resources in schools and colleges as well as those offered by museums, industry, community agencies, and so on, and a continuing flow of information showing why and how educational opportunity is relevant and possible for disadvantaged adults. The first might be accomplished through a concerted effort to expose media personnel to the new options. They, too, may have outdated images of adult learning; steering clear of sending television crews and photographers out to take yet another picture of a classroom with older
people sitting in rows in front of the blackboard and a professor. If research is correct in concluding that the overwhelming majority (90 percent) of adults are pursuing self-directed learning projects and that 60 to 70 percent are interested in participating in organized learning activities, television producers should be made aware that there would be substantial audience identification with adult learning activities. Indeed it is not too farfetched to suggest that perhaps the public should see the learning activities of Rhoda, the Jeffersons, and other television personalities on national network television. Such a suggestion may offend some academics, but the fact is that national network shows are far more likely to reach underserved adults than public television or printed course schedules. Furthermore, the potential for changing images of education is probably greater through network television than through more academically oriented presentations.

A service that should be provided on behalf of the learning society is a coordinated, concerted effort to inform media personnel of the probable high interest of the public in a variety of adult learning activities. Television, because it reaches the underserved should be a particular target, but newspapers and magazines are also in need of some information that would convey new images of the learning society.

Newspapers and magazines, for example, might appropriately be encouraged to provide a continuing flow of accurate information through syndicated columns similar to those dealing with health and financial planning. The topics to be dealt with seem as interesting and inexhaustible as those for health, financial planning, and travel. Questions and answers could also be a feature of the column. The goal would be to present a constant flow of information that would suggest new possibilities to potential learners, create interest and identification, and provide accurate up-to-date information. The effectiveness of such an approach was demonstrated in 1975 when a newspaper article described some new open learning programs and referred to the College Board/Educational Testing Service Office of New Degree Programs. The office received a virtual avalanche of requests for information—sometimes as many as 50 letters a day during the first few months after the article appeared.
It is perhaps belaboring the obvious to say that information about the learning society should be presented in a variety of modes and that it should be targeted to the desired audiences. But effective dissemination involves far more than getting minimal information about courses, fees, and meeting times into the hands of potential learners. It involves making the image of the learning society as exciting as it really is.

**Providing Information about Self**

There appears to be an unmet, and even largely, undiscussed, interest in self-assessment on the part of adults. Of the numerous needs assessments examined, we found only two that included items related to self-assessment (California, 1975; Iowa, 1976). When the possibility of getting more information about themselves was posed to adults, however, they gave it high priority. Table 3 shows that

**Table 3. Percent of Adults Indicating Interest in One or More Services**

<table>
<thead>
<tr>
<th>Service</th>
<th>California</th>
<th>Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course or adult program of learning</td>
<td>26</td>
<td>17</td>
</tr>
<tr>
<td>Assessment of personal competences</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Testing of strengths and weaknesses</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Information about adult education opportunities</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Personal counseling</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Testing to obtain advanced standing</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Educational and career counseling</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Establishing a record (transcript) of educational experiences</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Providing a place to study</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Evaluation of noncollege experiences for possible credit</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Basic skills training</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Not interested in any of the above</td>
<td>39</td>
<td>50</td>
</tr>
</tbody>
</table>

Sources. California, 1975, p. 67 and Iowa, 1976, p. 321
“assessment of personal competencies” and “testing of strengths and weaknesses” rank high on the list of services that adults would like provided.

I suspect that the percentages presented in Table 3 should be considered somewhat low for two reasons. One is that these data are reported for all adults in the state sample, regardless of whether or not they expressed an interest in further learning. In California, percentages are higher—31 percent interested in assessment of personal competencies and 28 percent interested in testing strengths and weaknesses—when the sample is limited to “would-be learners.”

Secondly, some of the options presented in the list are not familiar to adult learners, and it is difficult in brief surveys of this type to educate adults to some new possibilities and to determine how they would react to opportunities where credibility and usefulness are yet to be established. It is a little like asking people 50 years ago who were accustomed to preserving food by use of an icebox, how they would respond to an electric refrigerator and frozen foods. Sometimes it is necessary to show people what can be done before they know whether they “need” it or not. Much as most people today would insist that they need a refrigerator, perhaps most learners tomorrow will insist that they need to be able to assess their personal competencies or to establish a record of educational experiences.

From these data we may conclude that there is a need for some kind of self-assessment kit that, used privately or in conjunction with a counselor, would help adults assess their strengths, competencies, and needs for further learning. The problem is that there is almost no information available about what adults really want to know about themselves.

The first step would be to find out what adults want to know about their competencies and their strengths and weaknesses. Do they want to know how they would fare in the classroom with younger students? Do they want to know which weaknesses, if corrected, would lead to greater personal and job satisfaction? Do they want to know if they are capitalizing on their best talents in their present line of work? Do they want tests of knowledge, performance appraisals of skills, judgments of personal development? Do they want
to be able to purchase a reputable self-assessment kit they can administer and interpret themselves, or are they asking for the greater availability of existing interest and achievement tests, typically interpreted now by counselors? Can they articulate what they want to know about themselves and what would be acceptable forms of providing the information?

This seems to call for further research into the need for self-assessment. Once the interests are clear, an action agenda could call for the responsible development of measures and instruments that could be provided to adult learners in a form they would find acceptable.

Providing for self-assessment would be a distinct departure for educators. When dealing with children and young people, it has been assumed that test scores and other measures of personal development are to be used by counselors and teachers, rather than by students themselves. Indeed, until quite recently, it was considered desirable not to inform even college-age students of test scores or personality measures except through "interpretation" by a professional counselor. There has been a general easing of the secretiveness surrounding personal assessments in recent years, but with the continuing flow of adults into the educational system, our position on such matters must be reexamined. If adults are to assume responsibility for their learning, then they must be able to assess their progress and to evaluate their needs.

There already exists a large number of tests, inventories, interactive computer models, and other measures useful in self-assessment. Most were devised for younger students, but many may be applicable or modified to become appropriate for use with adults.

An important service could be provided to adult learners if a concerted effort were made to determine what adults want to know about themselves, examine existing instruments and measures to see which are appropriate or what modifications might make them so, devise new measures where necessary, and recommend a program for administration and interpretation of self-assessment.

This is a complex undertaking involving a unified program of research, development, and recommendations for implementation. It should involve counselors, adult learners, researchers, and mea-
surement professionals. Serious consideration should be given to developing a self-assessment kit that is truly self-administering and self-scoring, freely available for use with or without a counselor. In addition, however, consideration should be given to combining some aspects of self-assessment with the centers suggested earlier for the assessment of competencies for possible college credit. All this would take time. As an interim measure, it would be useful to have a layman's guide to self-assessment measures. The guide should be carefully indexed and should contain all relevant information pertaining to availability, skills assessed, administration, scoring, and interpretive materials, and so on. It would be highly desirable to have a panel of professionals review the measures recommended for inclusion. Although the issue may be a sensitive one for publishers of materials and inventories, it would be most useful to have a selected rather than a comprehensive listing. The guide could be made available to libraries, adult education information centers, and counselors in government agencies and personnel offices as well as in schools and colleges. Some serious consideration should be given to which measures would provide useful information to adults wishing to use them independently.

Providing Counseling and Referral Services

The process of matching learner needs and interests to appropriate learning resources is a crucial one for the learning society. And, of course, the process begins with self-assessment and information about resources as just discussed. This section, however, is concerned with the actual matching process.

Most research indicates that adults want to maintain a high degree of control over their learning activities. The number of adults interested in "information" almost always exceeds the number interested in "counseling," which seems to imply more intervention.

A national study of the need for counseling on the part of adults undergoing or anticipating career or job changes determined that approximately 36 percent of the American population between 16 and 65 are "in transition" (Arbeiter, et al., 1976). These adults constitute a strong potential market for education since a majority (62,
percent) plan to seek additional education. Most of these in-transition adults are more interested in information than in counseling. When 29 illustrative services were ranked according to the percent expressing high interest in each one, those services providing information (as opposed to guidance, counseling, or training) clustered toward the top of the list. The two top-ranked services, for example, were lists of available jobs and facts on occupational fields.

One could conclude from these data that computer printouts of up-to-date, accurate information would be a low-cost, efficient way to serve many adults. But this approach, valuable as it is, would serve the needs of well educated people better than poorly educated ones. We already know that educationally disadvantaged groups are more interested in counseling and advisory services than are better educated groups. Blacks are more interested in guidance and counseling than whites, and low income groups are more interested in counseling regarding personal and on-the-job problems than high income groups (Arbeiter, et al., 1976). Table 4 presents typical data showing increasing independence as educational level rises.

In general, research suggests that counseling services providing personal contacts should be overrepresented in low-income areas, both because the interest in personal contact is greater on the part of those with low educational attainment and because higher income groups prefer, or at least are better able to use, less labor-intensive mechanisms for matching their interests to available learning resources.

Table 4. Knowledge of and Desire for Advisement Services, by Educational Level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Percent knowing location of adviser and information sources</th>
<th>Percent desiring to discuss adult learning activities with someone</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7 years</td>
<td>29</td>
<td>47</td>
</tr>
<tr>
<td>8-11 years</td>
<td>62</td>
<td>37</td>
</tr>
<tr>
<td>12-15 years</td>
<td>73</td>
<td>37</td>
</tr>
<tr>
<td>16 or more years</td>
<td>92</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Western New York, 1976, pp 110 and 121
It appears that the most efficient way to provide for matching learner interests to learner resources would be to develop the necessary base of information about self and resources, which can then be used independently, or with minimal personal or telephone assistance, by those willing and able to do so, and through counselors for those desiring or needing more personal attention.

But if disadvantaged adults are to get the kind of personal and human help that they want and need, some ways will have to be found to balance off those heavy labor-intensive expenditures by finding alternative ways to serve large numbers of adults without an need or a desire for traditional one-on-one counseling.

Although most surveys indicate a consistent lack of interest in technology in education, there is reason to think that much of the apparent resistance is due to lack of knowledge and lack of experience rather than rejection of technology per se. Indeed, it is also a consistent finding of research that most people who have used the new technologies give them very high ratings. Such a computerized System of Interactive Guidance and Information that helps students match their career values and interests to occupational choices, received enthusiastic endorsement from more than 85 percent of the students using it, and counselors rejected by a wide margin the notion that computer-based guidance was a fad or a threat to their jobs, feeling instead that such systems would relieve them of routine duties and help students make appropriate decisions (Chapman, et al., 1977). For another example, Miami-Dade Community College uses a computer-generated letter to inform learners of their progress. RSVP (Response System with Variable Prescriptions) provides off-campus learners with an analysis of their work, explanations of errors, and prescriptions for further study. It has been consistently rated the most popular feature of any course using it.

There is little doubt that computerized matching of interests to opportunities will become increasingly feasible, effective, and popular. But there is also a great variety of noncomputerized approaches to helping adults match resources to interests. Print materials are popular and useful for many, especially better educated adults who can do their own "matching" if they have information about available options. Beyond that, a strong argument can be made that
courses on "consumerism in education" should be required of people preparing to become lifelong learners. People should be taught how to analyze their needs as these change over the developmental stages of adulthood, which methods of education work best for them, and how to locate and evaluate learning resources. Such skills can be developed in group sessions designed to provide an orientation to lifelong learning. They can also be taught by self-instructional packages. There are identifiable tasks in developing a learning plan. They consist of steps such as defining goals, locating and evaluating resources, gaining access to appropriate opportunities, receiving credit for prior learning, and so on. It would be useful if someone would develop a set of references and materials appropriate for planning a coherent program of learning activities, to be used independently, in class sessions, or in one-on-one sessions with counselors or mentors.

In short, there should be a variety of approaches to helping people plan appropriate learning activities. One-on-one counseling is probably the best method for quite inexperienced learners, group methods and computerized guidance systems are probably appropriate for large numbers of so-called average people who need help and direction at certain points, and self-instructional packages may be adequate and welcomed by more independent adult learners.

To date, there are not enough alternatives to the one-on-one counseling model on the one hand, and the random trial-and-error model on the other. All possible encouragement should be provided to help adults assume responsibility for planning and obtaining learning programs appropriate to their needs.

Summary

There remains little doubt that a learning society lies in our future. Indeed, research indicates that the overwhelming majority of adults are already engaged in a fascinating array of learning activities both inside and outside educational institutions. Current pressures in society and in postsecondary education are pushing toward the provision of more services and programs for adult learners. These pressures can be used constructively to link the interests of adult learners
to a vast array of learning resources or they can be used destructively to "legitimize" and redirect the spontaneous learning projects of adults into a narrow range of "educational" activities.

The position advocated in this paper is that the goal of the learning society is to make adults stronger, better-informed, more self-directed learners, it is not to make learners increasingly dependent on others to tell them what, when, where, and how to learn. Educators have a vital role to play in this effort. Research indicates that adult learners do want and need help. In particular, they need help in planning and utilizing learning activities that will help them to reach their goals. One of the greatest needs in a society with a rich variety of learning resources and a potential constituency of millions is to make the necessary connections between learners and resources. If that "missing link" can be supplied, the learning society can become a reality.

These suggestions are consistent with the priorities of the Commission on Non-Traditional Study (1973, p. xvi) which described the learning society as one that "... puts the student first and the institution second, concentrates more on the former's needs than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and deemphasizes time, space, and even course requirements in favor of competence and, where applicable, performance. It has concern for the learner of any age and circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic, or occasional study."

Three resources were used in developing this paper. Since 1970, more than 30 major surveys have been conducted in an effort to determine the needs and interests of adult learners and would-be learners. Because the findings are remarkably similar across studies, it is possible to present a reasonably consistent profile of adult interests. It is simplistic, however, to interpret such data directly as indicating consumer "demand" or as determining the desired directions for a learning society. The needs assessments provide one valuable source of information. Used in conjunction with other data about desirable goals for the learning society, they greatly enrich the potential for wise planning.
A second resource available to us consists of more than 40 sets of recommendations. This enables us to build upon the extensive considerations of a network of well-informed people thinking about future education needs; primarily for purposes of statewide planning.

A third resource consists of the dozen or more research studies using probing interviews to help adults recall a great variety of self-initiated learning projects. These three major resources contributed valuable insights and a range of ideas about needed services to link the learning interests of adults to the resources available in the learning society.

Supplying the missing link, between learner interests on the one hand and learning resources on the other, seemed to call for attention to three general areas:

- Facilitating access to the appropriate learning resources, a process that includes access for underserved groups and advocacy for the special needs of adult learners because they are adults.
- Providing information to adult learners about available learning resources and about themselves and their strengths and weaknesses.
- Providing counseling and referral services designed to assist learners in planning and match learner needs to appropriate learning resources.

**Facilitating Access**

Two sizable problem areas emerge when issues of access are considered. First, all data indicate that today's adult learners are disproportionately young, white, fairly well-educated adults making good incomes. Disadvantaged adults, especially those of low educational attainment, are not participating in today's adult education programs, and they express little interest in doing so. This suggests the need to change the image of education. Many adults who dropped out of school early had bleak encounters with education and experienced early failure in the school system. Unless we can provide these adults with a better understanding of how today's variety of opportunities are appropriate to their lives and needs, it is prob-
able that the increased availability of learning opportunities will increase the educational gap between those with the motivation, knowledge, and resources to take advantage of the learning society and those whose negative image of education makes them unresponsive to the opportunities available.

A second access question concerns the modification of traditional services so that they are appropriate to the special needs of adults. In general, this issue has received considerable attention because of the interest of postsecondary institutions in attracting an adult clientele to cushion the predictable drop in the enrollment of full-time students. Adults do seem to be achieving equity in fees and access to services in that educational institutions are making the necessary administrative arrangements to offer schedules, locations, and services appropriate for part-time learners.

The problem of recognizing the experiences and prior learning of adults is more difficult. There is widespread agreement now that traditional time-serving measures of learning are not adequate for the learning society. Many institutions are beginning to grant credit by examination, credit for experiential learning, and credit for learning done under the auspices of noneeducational agencies. And some institutions are beginning to establish their own assessment centers in order to facilitate placement and appropriate program planning for adult learners.

Since the assessment of learning has become a general problem, in and out of traditional educational pathways, and since it provides the base on which planning for life-long learning must rest, it is time to look at the potential for professional assessment services that can serve individual learners as well as educational institutions, and even employers, by conducting competency assessments. The suggestion is for a network of assessment centers that will conduct assessments and provide reports to agencies or institutions indicated by individuals.

Providing Information

Almost all planning documents at state and federal levels recommend the development of some form of information service to help in connecting learner interests and available resources. Data from
Various socioeconomic groups of adults indicate that a variety of dissemination methods should be used to reach targeted audiences. While information disseminated via print media is a familiar and popular form of providing information, there is evidence that it serves well educated people best. People from lower socioeconomic groups express a greater need for more personalized one-to-one conversations that can help them make the connection between individual goals and appropriate learning opportunities.

Our analysis recognized the need for national leadership in designing the procedures and forms—a model—for collecting information about a variety of learning resources. Local jurisdictions could then be responsible for collecting the basic “core” information, supplementing it with opportunities appropriate for their region and clientele. The national service would assume responsibility for collecting and disseminating to local regions all information about the increasing number of opportunities available to a national clientele.

The second dimension of “providing information” is concerned with providing adults with information about themselves. Although very few needs assessments thought to pose the question, when people were asked if they would like more information about their competencies, strengths and weaknesses, and so on, substantial numbers expressed an interest. We suggested the need for a research program that would explore what adults want to know about themselves and how such information should be made available to them. Once this is known, existing measures could be examined for their usefulness and modified and supplemented as appropriate. As an interim measure, it was suggested that a handbook of selected assessment tools for adults should be prepared and made available to all people working with adult learners.

Providing Counseling and Referral Services

The critical element for stimulating the learning society lies in the effectiveness of the matching process. With the increasing number of learning options available, adults will need to become astute consumers of educational offerings. This involves establishing individual learning goals and selecting the learning resources appropriate
Numerous ways are suggested to do this, ranging from the one-on-one traditional counseling model, to group sessions and classes on educational planning and "consumer" choice, to interactive computer models. Different methods have varying degrees of acceptability to various populations and also various financial advantages.
Footnotes

1. Robbins and Parker (1976) performed a valuable service by compiling and indexing recommendations from 17 documents. Their work contributed substantially to my analysis of recommendations.

2. The term educational brokering was coined by Heffernan, Macy, and Vickers (1976) to describe the process of linking adult learners to learning resources.

3. A monthly Bulletin is published by the National Center for Educational Brokering to inform and stimulate exchange among brokering services throughout the country.

4. Although the recommendations addressed staff development, management, instructional, and other issues, Appendix A contains only the recommendations dealing with the facilitation of access for students.

5. A synthesis of adult interests in new kinds of subject matter, instructional methods, scheduling, and other aspects of learning under the direct control of providers may be found in Cross and Zusman (1978) and Cross (1978).

6. We probably should discount the extent of cost barriers somewhat for two reasons. (1) there is evidence that many adults, especially those of low educational attainment, have no idea what various educational options cost, and (2) cost is a more “socially-acceptable” reason for nonparticipation than more personally threatening barriers such as lack of ability or lack of interest.

7. Comparable data not available for Iowa.

8. For one example of a program of this type see Trani, et al., 1978.
References


Coolican, P. M. Self-Planned Learning Implications for the Future of Adult Education. Working Draft, Syracuse, N.Y.: Educational Policy Research Center, Syracuse University Research Corporation. 1974


Appendix A: Bibliography of Recommendations for Lifelong Learning

California


Connecticut

Florida


Illinois

Iowa

Kansas
Massachusetts


Mississippi


Missouri


New York


15. Correa, M. Regional Needs and Resources for Postsecondary Education. A Report of the Northern Region Postsecondary Education Group. Potsdam, N.Y., Associated Colleges of the St. Lawrence Valley. 1976


10. Vivona, R., Miringoff, M., and Watsky, C. Adult Post-Secondary Continuing Education in the Mid-Hudson Region. Increased Access to Improve the Quality of Life. Poughkeepsie, N.Y. Associated Colleges of the Mid-Hudson Area and New Paltz, N.Y., Mid-Hudson Region Continuing Education Project, 1975


Ohio

22. Ohio Board of Regents Higher Education in Ohio Master Plan 1976 Summary Columbus, Ohio Author, 1977

South Carolina


Texas


27. Hall, J. P. "Adult and Continuing Education Programs for Meeting the Needs of Local Government in Texas." In A. C. Neidhart (ed.), Continuing Education for Texas Special Studies of Non-Traditional Approaches to Education San Marcos, Tex. Southwest Texas State University, 1974


29. Harvey, J. N. and Holland, E. J. "A Model for Administration of Credit by Examination Programs in Texas." In A. C. Neidhart (ed.), Cont-
A tinrang Education for Texas Special studies of Non-Traditional Approaches to Education. San Marcos. Tex. Southwest Texas State University. 1974


United States


Utah

Appendix B: Classification of Recommendations by Topic Addressed

I. Information

A. Creation of a data bank of learning resources

New York (14)*

2. The first stage in the provision of educational and career information and counseling services for adults is the establishment of a State-wide regionally-based information data base of resources. The types of resources to be catalogued regionally should include: (1) educational opportunities, (2) employment and training opportunities; and (3) community services.

United States (39)

14. Inventories of current non-traditional arrangements, programs, changes in structure, and credentialing should be undertaken nationally within each level or segment of higher education.

United States (39)

36. The resources of communities and regions should be assessed to create an inventory of existing educational activities conducted by various agencies (business, industry, labor unions, and social, cultural, and collegiate sponsors) and thus identify the total potential of programs, facilities, and faculty.

Iowa (8)

6. Steps should be taken to expand, articulate and routinize the collection of data in Iowa relevant to effective planning for lifelong learning.

B. Dissemination of information to help people locate appropriate learning opportunities

New York (16)

9. A cooperative, regional, toll-free telephone hot-line should be

*Numbers in parentheses refer to bibliographic entries in Appendix A. Number preceding recommendation refers to the recommendation number in the indexed set.
established on a trial basis to ascertain to what extent it would be used to obtain information about adult learning opportunities. Brochures and newspapers currently widely used to inform adults could be used to publicize the existence of the telephone hot-line.

**New York (14)**

3. Information on regional resources should be provided in an inexpensive format, be regularly updated, and employ uniform indexing and cataloging procedures so that the information can be shared cross-regionally.

**California (2)**

13. The Legislature should appropriate funds to the California Postsecondary Education Commission to operate a network of regional postsecondary program clearinghouses designed to facilitate institutional planning, program improvement, and advising of potential learners by a variety of agencies.

**New York (20)**

37. Guidance and counseling services should direct more attention to developing means to increase the knowledge of educational options among working class people.

**Texas (24)**

10. Information banks should be developed at least at the regional level to assimilate program offerings and assist persons in locating courses of their interest.

**New York (14)**

4. Information should be made available in locations which are non-threatening and easily accessible to the public. A recognized component of information dispersal is adequate advertising and public relations so that the public is informed of available services.

**Illinois (7)**

VIII-B. A statewide information retrieval and counseling system
(should be established) for advising adult students about the full range of postsecondary opportunities available to them.

C. Advertising and promotional efforts to attract learners to educational institutions

New York (19)
6. Plan and advertise programs which will entice more of the respondents who are not interested in educational or training activities into becoming involved. Particular target groups should be housewives and retired persons.

New York (15)
8.7.2. To reach the low income people, program information should be made available through church groups, taverns and other community centers where such groups tend to congregate.

New York (15)
8.9.1. Better promotional efforts are needed to attract adults to continuing education programs. It is not sufficient to rely solely on printed matter distributed through traditional avenues.

New York (15)
8.9.3. Another avenue for promoting continuing education offerings more fully would be the television medium.

New York (15)
8.11.3. Community leaders such as clergymen, legislators and other civic leaders should be made to feel part of the planning process so that they could, in turn, channel adults into the educational institutions.

United States (41)
III-10. The university should publicize the availability of all enrollment options to inform potential participants of varying approaches to meeting educational needs.
17. The Legislature should appropriate funds to the California Postsecondary Education Commission to conduct a regionally-based public information program about all available postsecondary opportunities, with a particular focus on the proposed information and counseling service.

II. Counseling Services

A. Creation of comprehensive counseling services

California (2)

10. To meet the need of potential adult learners for information about learning opportunities and for counseling about career plans—the most immediate and widespread of all learning needs—the California Legislature should appropriate developmental funds to create a statewide system of Educational Services Centers to provide information and referral, assessment of interests and competencies, counseling and career planning, and aid to individuals in coping with institutions.

Utah (44)

17. A strong, well-informed, coordinated counseling and guidance service should be maintained on the campus of every postsecondary institution with some expertise for advising and counseling the mature adult learner. This service should evaluate the student and direct him to that program or institution which best fits his purposes, aptitudes, abilities, and interests. Information should be provided on the variety of programs available, where they are located, costs involved, and methods of instruction employed.

United States (39)

8. Student guidance and counseling services, in specially created centers when necessary and appropriate, should provide expert advice relevant to both individual need and available resources.
Iowa (8)

4. All Iowa residents should have the full range of adult supporting services conveniently available, including a source or sources of financial aid, such that re-entry into appropriate postsecondary education is facilitated.

New York (17)

4. Greater emphasis must be placed on the guidance/counseling/advisement function as it is related to individual and group needs.

New York (17)

6. Construct and implement a plan for more adequate information, referral, and counseling services for the adult learner.

Florida (5)

14. It is recommended that post-secondary educational institutions expand their programs of educational information, referral, appraisal, and counseling to all adults in the community.

United States (32)

2. Help states establish occupational and educational information systems as well as (education consumer) brokering services which would help individuals of all ages make more intelligent choices about careers and educational and leisure activities.

B. Making counseling services more easily accessible to adults

New York (16)

3. Serious study and effort should be given to the urgently needed upgrading of adult guidance services. Because of the costs involved, the principal provider organizations in the region should explore the desirability and fiscal feasibility of developing jointly financed and staffed adult guidance and counseling centers that could be used by all providers as well as by prospective adult participants.

New York (18)

1. Off-Campus Learning Centers. It is recommended that off-cam-
pus learning centers be established in localities more than 20 miles from an existing educational institution. These centers would preferably be established in conjunction with local libraries which have a commitment to postsecondary education and some already existing resources, in the form of books, periodicals, and instructional technology.

New York (15)
8.18.1. Because of the expenses involved, it would be highly recommended that a team of well-qualified career and vocational counselors be formed who can travel to various locations in the region to provide career, vocational and academic counseling to adults of the region. Testing and test interpretation abilities, combined with a knowledge of the world of work, should be required of these counselors.

California (3)
13. An extensive program of academic and non-academic counseling should be provided for part-time students.

Texas (24)
21. Appropriate administrative and counseling services of a university or college should be available in the evenings and on weekends to accommodate the part-time or non-matriculating student. There should be no distinction made between the services offered on-campus to the full-time student and those available to a non-traditional student.

New York (15)
8.3.3. Adult counseling and academic advising service personnel need to be made aware of, and more responsive to, the particular needs of adults. At times, the age of the counselors can be an important factor in limiting their understanding of the older adults' problems.

C. Development of mechanisms and/or counseling services to match learner needs with learning resources
California (2)
16. California should assess present experiments in referral services to educational resources and other sources of assistance, and develop a statewide system of postsecondary information and referral services by 1980.

California (2)
18. California should initiate a statewide network of information and referral, appraisal, and counseling and career planning services to offer comprehensive aid without extensive duplication to adults in planning their continued development and learning.

Connecticut (4)
G-13. Make up-to-date personal counseling available to all segments of the population, not just students, through regional centers, supported by a computer service. The computer would match up qualifications and preferences of applicants with the measurable characteristics and requirements of the state's institutions of higher education.

New York (17)
6. Construct and implement a plan for more adequate information, referral and counseling services for the adult learners.

D. Development of counselor training programs

Connecticut (4)
G-12. Extend the training of counselors in contemporary approaches, including the use of the computer as a counseling tool.

New York (20)
2.1. The development of a training program for counselors or adults in educational institutions and at community agencies be established at one (or possibly more) institutions in the region.

New York (20)
2.2. Short-term training programs in institutes and workshops for
counselors of adults in continuing education should be developed.

New York (20)

3.6. Directors of counseling services and counselors should be oriented to the uses of technology for maximum effectiveness, economy and utilization of such services.

New York (20)

3.8. Counselors employed by counseling and referral services in continuing education should be oriented to the developmental needs of adults and to methods of organizing and disseminating education information.

New York (16)

3. Serious study and effort should be given to the urgently needed upgrading of adult guidance services. Because of the costs involved, the principal provider organizations in the region should explore the desirability and fiscal feasibility of developing jointly financed and staffed adult guidance and counseling centers that could be used by all providers as well as by prospective adult participants.

New York (16)

4. Emerging efforts at mid-career counseling and advisement should be multiplied and bolstered through vigorous research efforts by the Region's colleges to gain more insight into the needs and problems of adults facing mid-career changes.

New York (16)

5. Graduate programs specializing in the counseling of adults should be more extensively developed. Modest support for the development of such programs should be provided through funding by the New York State Department of Education as part of its announced commitment of broadened access to postsecondary continuing education opportunities for adults.
III. Provision of Support Services

California (3)
10. Existing campus facilities should be fully available to the part-time student, particularly in the late afternoons, evenings, on weekends, and in the summer.

New York (15)
8.3.3. Policies for the use of gymnasium facilities, libraries and other services can be adjusted to accommodate the part-time student adult who has a family with dependents.

New York (15)
8.3.6. Offices of the registrar, the deans of students, academic advisors and counselors, the cashier and the book store should be open at hours suitable for working adults. These offices should be open for some hours during weekends or evening hours. These hours should be sufficiently well advertised to enable the working people to plan ahead.

United States (41)
III-7. Appropriate advisory and administrative services of the university should be available at night and on weekends to accommodate nonconventional participants engaged in programs offered during those times.

Florida (5)
11. It is recommended that postsecondary educational institutions make all resources and services, such as physical facilities, counseling and referral, student financial assistance, registration systems and libraries available on an equitable basis to part-time learners.

Massachusetts (10)
By. Efforts should be made to remove other barriers women face through adult day programs for women with children in school, day care facilities on campus for women with small children, and the
IV. Access and Advocacy

A. Improving access for all

United States (39)
1. Full educational opportunity should be realistically available and feasible for all who may benefit from it, whatever their condition of life.

United States (39)
2. Basic, continuing, and recurrent education should be strengthened and made more available than at present to adults of the United States.

United States (41)
1-3 The congress should enact a universal bill of educational rights that would guarantee to every citizen access to the widest possible educational opportunities.

United States (41)
1-6. Consortia of institutions should be established on a local, regional, and national basis to pool resources for continuing education, with the aim of making sure that virtually all citizens have access to continuous learning of high quality.

United States (41)
1-7 Each university should continuously renew its commitments as well as identify the resources necessary to meet its responsibility in lifelong learning. Account should be taken of the changing educational needs of groups to be served, and strong efforts should be made to improve access to programs.

United States (36)
1. The Commission recommends that all states enact legislation providing for admission to public community colleges of all applicants who are high school graduates or persons over 18 years of age who are capable of benefiting from continuing education.
California (2)
1. California's colleges and universities should act affirmatively to treat older adults and part-time students along with young people and full-time students as equal members of intergenerational education communities.

California (2)
6. The California State University and Colleges and the University of California should further extend their regular degree programs to off-campus locations in ways, times, and places convenient to adults.

   The Legislature should allocate program development funds to both systems to design new programs and modes of instruction, such funding to be limited to two years for each new program.

   State subvention for External Degree programs of the State University and Colleges should be on approximately the same basis as that for regular on-campus programs having the same purpose.

Iowa (8)
5. Meeting the educational needs of the nontraditional learner should be a cooperative effort by all relevant institutions and organizations coordinated statewide.

Massachusetts (10)
A. Access to the system of continuing and part-time post-secondary education in Massachusetts should be assured for all elements of the adult population through a variety of measures.

Florida (5)
1. It is recommended that the Florida Legislature mandate a public policy which enables the state's adult learners to have the educational resources and services of public and private postsecondary educational institutions accessible to them throughout their lifetime and that such access be made available without regard to race, age, sex, or place of residence.

Florida (5)
C. Advocacy for access to educational institutions

**California (2)**

19. Together with the prior services, California should support educational assistance or advocacy on behalf of its citizens in their dealings with institutions, agencies, and employers.

**United States (41)**

III-12. Wherever appropriate, the information and assistance center specialists should act as ombudsmen, working to facilitate educational participation and minimize bureaucratic inconvenience.

**Iowa (8)**

4. Supporting services should among other things, “take an advocate’s role on behalf of their clients, urging institutions to remove unnecessary barriers, devise useful and appropriate programs responsive to the adults’ learning needs and interests, and find sufficient support to enable the adult to participate.”

D. Creating more flexible admission criteria and procedures

**Connecticut (4)**

G-13. Encourage the acceptance by all institutions of higher education, but especially by the community colleges, of a certain number of students who give evidence of potential even though their background does not fall into traditional kinds of preparation.

**United States (39)**

25. Admission of students to non-traditional programs should be based on new kinds of examining procedures or more flexible and interpretive application of criteria.

**Texas (28)**

K. For mature students in public postsecondary educational institutions, there should be no standardized tests or admission requirements beyond high school graduation. Standards for performance should be imposed for exit, not entrance.
C. Advocacy for access to educational institutions

*California (2)*

19. Together with the prior services, California should support educational assistance or advocacy on behalf of its citizens in their dealings with institutions, agencies, and employers.

*United States (41)*

III.12. Wherever appropriate, the information and assistance center specialists should act as ombudsmen, working to facilitate educational participation and minimize bureaucratic inconvenience.

*Iowa (8)*

4. Supporting services should among other things, "take an advocate's role on behalf of their clients, urging institutions to remove unnecessary barriers, devise useful and appropriate programs responsive to the adults' learning needs and interests, and find sufficient support to enable the adult to participate."

D. Creating more flexible admission criteria and procedures

*Connecticut (4)*

6. Encourage the acceptance by all institutions of higher education, but especially by the community colleges, of a certain number of students who give evidence of potential even though their background does not fall into traditional kinds of preparation.

*United States (39)*

25. Admission of students to non-traditional programs should be based on new kinds of examining procedures or more flexible and interpretive application of criteria.

*Texas (28)*

K. For mature students in public postsecondary educational institutions, there should be no standardized tests or admission requirements beyond high school graduation. Standards for performance should be imposed for exit, not entrance.
struction should be proportionate to the part-time student's course and credit load.

_Utah (44)_

24. Part-time resident or nonresident students (those enrolled for less than ten credit hours) should be assessed tuition on a per-credit-hour basis proportionate to the tuition paid by full-time students.

_Utah (44)_

28. Students enrolled for credit in continuing education or extension division courses should be assessed tuition on the same credit hour basis as provided in the regular tuition schedule.

B. Providing financial assistance

_Utah (44)_

19. The State Board of Regents should seek legislation and adopt rules and regulations to grant tuition-free access to all Utah residents aged 65 years and over in all courses and units of the Utah System of Higher Education, subject to space availability. The only expense to such students would be any non-tuition fees and books and supplies students may wish to purchase.

_California (2)_

2. The Trustees of the California State University and Colleges should examine their sliding scale of student services fees and perhaps reduce by up to a third the per unit fee for those enrolled less than full-time while increasing the fee slightly for students enrolled for 16 units or more.

The Regents of the University of California should implement as soon as possible a fee structure with a reasonable floor and several steps to reflect more accurately the differences in costs and services received by regular part-time and full-time degree credit students.

_California (2)_

3. The Legislature, the State Scholarship and Loan Commission, and
struction should be proportionate to the part-time student's course and credit load.

_Utah (44)_

24. Part-time resident or nonresident students (those enrolled for less than ten credit hours) (should) be assessed tuition on a per-credit-hour basis proportionate to the tuition paid by full-time students.

_Utah (44)_

28. Students enrolled for credit in continuing education or extension division courses (should) be assessed tuition on the same credit hour basis as provided in the regular tuition schedule.

B. Providing financial assistance

_Utah (44)_

19. The State Board of Regents (should) seek legislation and adopt rules and regulations to grant tuition-free access to all Utah residents aged 65 years and over in all courses and units of the Utah System of Higher Education, subject to space availability. The only expense to such students would be any non-tuition fees, and books and supplies students may wish to purchase.

_California (2)_

2. The Trustees of the California State University and Colleges should examine their sliding scale of Student Services fees and perhaps reduce by up to a third the per unit fee for those enrolled less than full-time while increasing the fee slightly for students enrolled for 16 units or more.

The Regents of the University of California should implement as soon as possible a fee structure with a reasonable floor and several steps to reflect more accurately the differences in costs and services received by regular part-time and full-time degree credit students.

_California (2)_

3. The Legislature, the State Scholarship and Loan Commission, and
the governing boards of public institutions of higher education should act to end discrimination against part-time and adult students in their financial aid policies and practices. Aid policies should be based largely, if not exclusively, on ability to meet educational costs.

**California (2)**

4. The Legislature should provide funds to the Continuing Education and University Extension Division of the California State University and Colleges and the University of California to establish fee waiver programs to assure needy students access to existing programs.

**Connecticut (4)**

A.3. We recommend legislation which would provide grants for part-time graduate and undergraduate students in independent institutions.

**Massachusetts (10)**

E. The Commonwealth should establish a Massachusetts Adult Continuing Education Vouchers program for low-income, low previous education adults to be operated through the Board of Higher (Postsecondary) Education.

**Texas (25)**

4. Persons over 65 years of age in need should be exempt from tuition fees for continuing education offerings, on a space-available basis.

**United States (39)**

3. Financial support (either scholarships or loans) should be provided to all postsecondary school students on which they may draw according to their educational needs, circumstances of life, and continuing or recurrent interests in improvement.

**United States (41)**

111-12. Such (part-time) students should receive equivalent con-
consideration for financial aid, commensurate with their degree of need and extent of educational participation.

**Texas (24)**

24. The current types of student financial aid should be made available to the non-traditional student on an equal basis, regardless of whether he is engaged in a degree program or a non-credit lifelong learning program. New, more relevant adult financial aid systems should also be developed.

**New York (20)**

4.5. Higher education institutions should strengthen their commitment to provide increased financial aid to part-time students.

**New York (20)**

4.9. New York State should pursue a policy of developing an entitlement program for all adults in the state for the not too distant future.

**New York (16)**

6. Financial aid based on need should be made available to the adult part-time student from both public and private funds. Special attention to the financial needs of minority groups should be given.

**IV. Credit**

A. Establishing a credit registry

**Illinois (7)**

VIII.C. A central depository (should be established) in which any student who so elects can have recorded all of his or her credits earned in post-secondary education, and from which a transcript of these credits can be readily obtained.

**United States (39)**

51. A national educational registry should be established to evaluate a student's total educational accomplishments as measured by course
-credits, examinations, or other means: keep a continuing file to which items could be added, and offer advice on ways to complete a degree program.

California (2)

12. To meet the need for academic certification of persons who have acquired knowledge or skill in other than academic settings, the Legislature should appropriate developmental funds to create a statewide learning validation service for awarding degree credit for prior learning, granting associate, bachelor's, and master's degrees on the basis of demonstrated knowledge and skill, maintaining a credit bank, and providing a record of all career-relevant experiences.

New York (15)

B. Evaluating previous learning for credit

Utah (44)

5. The value of credit awarded (should) not be related to the time, location, or method of instruction. Credit awarded through external options should be considered equal to "regular" credit, if it is applicable to college transfer or baccalaureate level programs.

Utah (44)

7. Each Utah postsecondary institution (should) provide, through regular institutional bulletins and announcements, information concerning office locations and procedures for validating academic and vocational learning and obtaining credit for learning or skills acquired in other than higher education settings. Adult and part-time students who spend less time on the campus particularly need to be provided appropriate information regarding available options for...
pus life, time (prescribed years of study), space (residence on campus), and systems of academic accounting (credits or honor points earned).

**United States (39)**

35. The techniques used by the Commission on the Accreditation of Service Experience (CASE) of the American Council on Education should be used in other alternate systems to establish credit and other equivalencies for courses offered by government, industry, and other sponsors.

**New York (15)**

8.3.2 It would be very useful if the colleges could work out a method of recognizing some of the programs of other professional organizations by awarding academic credits for some of the work and thus add credibility to the programs while providing an incentive to bring members of the organization back to campuses.

**Florida (5)**

13. It is recommended that postsecondary educational institutions explore and develop opportunities to grant academic credits for validated learning acquired through life experiences, field experiences, work experiences, and previously acquired continuing education units.

C. Providing opportunities for credit-by-exam

**United States (41)**

III-14 The university should continue and expand availability of waiver examinations and credit by examination.

**Utah (44)**

8. Because of the variety of testing programs, the domain of individual departments and the need for appropriate articulation agreements among institutions of the state, existing Regent policy concerning credit-by-examination (should) be restated and widely publicized.
Texas (28)

O. Institutions should review and evaluate their policies concerning the acceptability of the results of the College Level Examination Program in order that mature students may be able to capitalize on their life experience as they continue their education.

United States (39)

49. Degrees should sometimes be awarded by examination if two conditions are met. The institution concerned is an established and reputable educational authority, and valid and reliable examinations are available to test the attainment of the degree's objectives.
Texas (28)

O. Institutions should review and evaluate their policies concerning the acceptability of the results of the College Level Examination Program in order that mature students may be able to capitalize on their life experience as they continue their education.

United States (39)

49. Degrees should sometimes be awarded by examination if two conditions are met. The institution concerned is an established and reputable educational authority, and valid and reliable examinations are available to test the attainment of the degree's objectives.