

Improving the System: Promising Roles for Technology

6

Adult literacy programs, regardless of funding source or sponsor, share many of the same difficult problems and critical needs. These include issues of recruitment, retention, and mandated attendance; instructional issues regarding curriculum, staff development, and assessment; issues related to the integration of literacy and social services; and administrative issues concerning funding and coordination. Technology offers promise for dealing with many aspects of these common concerns.

FINDINGS

- Recruiting adult learners and retaining them in programs long enough to make significant changes in their literacy levels are persistent concerns for literacy programs of all types. Technology has been used successfully to draw learners into programs, hold their interest, and adapt instruction to their needs and levels.
- Mandated literacy for special populations is affecting literacy programs in a number of ways. The target groups that must be served differ substantially from those who enter programs voluntarily—in terms of education level, motivation, need for support services, and higher incidence of personal problems affecting their literacy quest. Programs must adapt considerably to serve these groups effectively, and these adaptations will likely affect all those served by the programs.
- One of the major challenges for programs is finding curricular materials appropriate for adults, flexible enough for their multiple learning styles and relevant to learners' goals and needs. Survival skills, getting and keeping a job, workplace content, and family needs all provide context for literacy



instruction that is meaningful to adult learners. Technology-based media that use sound, video, graphics, and text and can be adapted easily for the individual learner offer great promise as tools for creating pertinent and engaging curriculum.

- Program evaluation and assessment is stymied by a reliance on school-based models of effectiveness, such as gains in grade-level equivalents on standardized tests. Multiple measures of effectiveness are needed, including performance-based assessments. An effective program must take into account the reality that a learner's personal literacy goals may be different from the outcomes measured for evaluating a program's overall success.
- Maintaining up-to-date student records and program accounting data is costly, time-consuming, and difficult for most programs. Computer-based solutions such as databases containing information on student progress make it possible for programs to streamline operations as well as keep better track of students and their educational needs. Another solution has been the use of personal student data cards; these minimize repeated placement testing and expensive intake procedures, benefiting both programs and learners.
- Professional development of adult educators is unlikely to be achieved without changes in State credentialing requirements, development of master's level programs in adult learning and literacy, and creation of career ladders for those in the field. Better communication is needed between programs and colleges and universities that could provide preservice and inservice training to staff and volunteers. Technology offers a promising resource (via computer networks, distance learning systems, software, and video materials) for training staff and volunteers, sharing information about promising practices, and reducing the isolation of many programs.

- Limited, unstable and short-term funding from multiple sources affects many decisions about staffing, services, and instructional methods, making it difficult to plan, purchase materials, or serve more than a small percentage of those in need. Tight budgets and limited planning capabilities especially affect the ability to make technology a central part of instruction or program management.
- Different and sometimes incompatible Federal funding streams, eligibility restrictions, and accountability requirements are sources of frustration for State and local literacy practitioners and drive these programs in ways that may not always reflect local learner needs or promote efficient management practices. Technology offers resources for improving coordination and consolidating service to improve efficiency, while still allowing local flexibility and control.

RECRUITING, RETAINING, AND SERVING LEARNERS

Bringing learners **into** literacy programs and keeping them long enough to meet their goals are continuing concerns for programs of all types. Recruitment and retention go hand in hand because the same problems that keep learners from entering programs in the first place resurface as factors contributing to the inability to stay with a literacy program. Indeed, many who enter literacy programs drop out and are then targets for renewed recruitment drives.

Recruitment Issues and Strategies

Many factors make adults reluctant to enter literacy programs. Most common among these are the stigma of admitting one's problems, conflicting demands from family and work that make time commitments difficult, and past negative

experiences with schooling.¹ Some adults are overwhelmed by how much time would be required to meet their goals. Remembering that they were unable to succeed as youngsters when attending school all day, every day, they wonder how much progress can be made attending only a few hours a week.² For many, the memory of school and their past academic failure makes the idea of returning to school—the scene of so much prior humiliation—a frightening or undesirable prospect.

Public information campaigns have sought to encourage those with literacy needs to come forward. A string of Federal initiatives—from the 1969 “Right to Read Initiative,” the 1980 Adult Literacy Initiative, and Barbara Bush’s advocacy of literacy for all Americans, as well as the private sector’s Project Literacy US (PLUS) and countless State and local efforts—have presented literacy as a problem that can be solved if those in need sign up and others volunteer time and assistance. The message has been delivered through public service announcements on radio and television, on posters, and in newspapers and magazines. However, as discussed in chapter 3, many of those needing help have coped adequately in the past, or cannot be convinced that classes will really help them. Often, as one educator noted: “A person with low literacy skills who has a job which does not demand higher skills will not appreciate the need for instruction until he or she loses that job, the job is eliminated, or the job’s demands begin to escalate because of global competition.”

With this in mind, some workplace programs have used video as low-pressure but effective recruitment tools to encourage employees to enter their voluntary literacy and training programs. For example, the United Auto Workers and General Motors, with a grant from the U.S. Department of Labor, developed an interactive videodisc to illustrate how quickly the skills needed to succeed in the auto industry are changing.⁴ Workers touch the screen to interact with the material and test their knowledge in various skill areas. In one plant, the program was set up in the cafeteria so that employees could work on it for as long as they wanted; many returned over and over, or kept at it for several hours on their own time, trying various self-assessments to see how close they were to having the skills needed for working in the year 2000.⁵ In another recruiting approach, the United Auto Workers-Ford video “The Breakfast Club” suggests that there’s no stigma attached to improving one’s academic skills at all levels.⁶ Participation in Ford’s Skills Enhancement program is encouraged by showing a variety of employees including a young engineer working on his master’s degree, a worker with many years of seniority pursuing his high school diploma, and a Rumanian immigrant studying English. The message is clear: everyone can pursue higher educational goals with the help of the Skills Enhancement Program.

Literacy programs have discovered that computers can be powerful vehicles for attracting learners and drawing them into programs. For example, the Harlem Community Computing

¹ Hal Beder, “Reasons for Nonparticipation in Adult Basic Education,” *Adult Education Quarterly*, vol. 40, No. 4, summer 1990, pp. 207-218.

² In one study, adults in literacy programs in New York City made the most gain in the first year, and then improved more slowly. By the end of the third year, improvement seems to have leveled off for those with literacy levels below the 7.5-grade level. Thomas Sticht, “How Fast Do Adults Acquire Literacy Skills?” *Mosaic: Research Notes on Literacy*, vol. 2, No. 2, July 1992, p. 2.

³ Garrett W. Murphy, director, Division of Continuing Education, The State Education Department, New York, personal communication, September 1992.

⁴ UAW-GM Human Resource Center and the U.S. Department of Labor, “Skills 2000,” brochure, n.d.

⁵ OTA site visit, United Auto Workers program, Delco Chassis Plant, Livonia, MI, March 1992.

⁶ J.D. Eveland et al., Claremont Graduate School, “Case Studies of Technology in Adult Literacy Programs,” OTA contractor report, June 1992.

Center's popular "Playing to Win" program, now in its 10th year, attracts more than 500 people a week. The center's president explained the drawing power of technology:

Why might a learner respond so willing when a computer is mentioned? Because he or she is no dope, because people who can't read, write, calculate or communicate as well as society could wish are not totally unaware. They know that this is a technologically-based world . . . that acquiring comfort and skill with technology is just as important from their point of view as learning to read, write and calculate more successfully.⁷

Many adult learners associate technology with tomorrow's skills, not yesterday's failures. They find that using computers legitimizes literacy studies; they are proud to be "learning computers" when in fact they are also learning *with* computers. It can be like starting fresh for those who have associated traditional classrooms or textbooks with their past school failures.⁸ Others who were frustrated and embarrassed by their slow progress in prior literacy classes or tutorials savor the privacy offered by computers and headphones so that ". . . the guy next to you doesn't have to know what you're working on." They also appreciate the infinite patience of computers. "They will read something over 100

times without (the computer) saying 'You know that word; I just told you that word.' "g

Retaining Learners Long Enough to Meet Goals: The Problem of Attrition

Once learners have come forward and secured a place in an adult literacy program, the next big issue is keeping them involved long enough to meet their goals.¹⁰ Student attrition is a central and vexing issue. The statistics are bleak:

- Between 15 and 20 percent of all clients who go through the intake process never actually receive any instruction.¹¹
- In the first 5 weeks, from one-quarter to almost one-half of all adult learners stop going to class.¹²
- After 40 weeks, only about 12.5 percent of those who began classes are still active.¹³

overall, attrition rates are in excess of 60 percent in many adult basic education (ABE) and general equivalency diploma (GED) courses and over 70 percent in some State literacy programs.¹⁴ (See figure 6-1.)

Many overlapping factors conspire against completing a program. A longitudinal study of students enrolled in adult literacy programs in New York City in 1988 found that less than 1 in 10 (8.3 percent) said they left because they had

⁷ Antonia Stone, "Tools for Adult Learners," paper presented at the International Urban Literacy Conference sponsored by the United Nations, August 1992.

⁸ See Eveland et al., op. cit., footnote 6.

⁹ William M. Bulkeley, "Illiterates Find Computers Are Patient Mentors," *The Wall Street Journal*, Nov. 16, 1992, p. B1.

¹⁰ The high rate of student attrition was placed at the top of the list of program concerns of adult basic education (ABE) and general equivalency diploma (GED) administrators at the 1992 Joint ABE/GED Annual National Administrators Conference and of statewide literacy and ABE administrators in Pennsylvania and Georgia at their 1991 and 1992 professional development conferences. B. Allen Quigley, "The Disappearing Student: The Attrition Problem in Adult Basic Education," *Adult Learning*, vol. 4, No. 1, September/October 1992, p. 25.

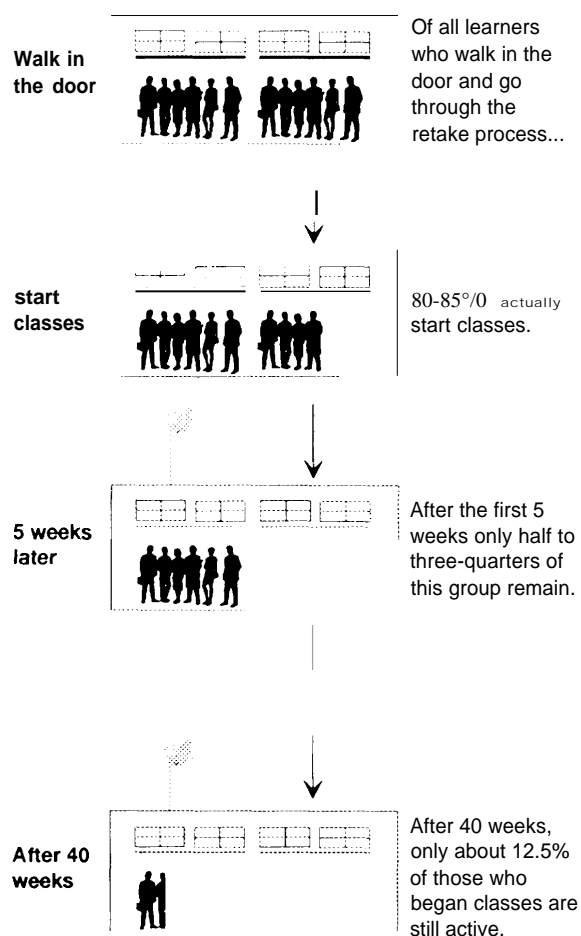
¹¹ Mark Morgan, associate director for Data Processing and Analysis, National Evaluation of Adult Education Programs, Development Associates, Inc., personal communication February 1993. Data taken from a nationally representative sample of about 21,000 new intakes to Adult Education Act-funded programs. Data based on Development Associates, Inc., "Second Interim Report: profile of Client characteristics," draft report, 1993.

¹² Lauren Seiler and Peter Nwakeze, "Attrition in Adult Education: Causes and Recommendations," *Literacy Harvest: The Journal of the Literacy Assistance Center*, vol. 2, No. 1, winter 1993, p. 26.

¹³ Morgan, op. cit., footnote 11, p. 2.

¹⁴ Quigley, Op. cit., footnote 10.

Figure 6-1-The Pattern of Attrition in Literacy Programs



SOURCE: Office of Technology Assessment, 1993, based on data from Development Associates, Inc., "Second Interim Report: Profile of Client Characteristics," draft report, 1993; and Lauren Seiler and Peter Nwakeze, "Attrition in Adult Education: Causes and Recommendations," *Literacy Harvest: The Journal of the Literacy Assistance Center*, vol. 2, No. 1, winter 1993, p. 26.

learned enough.¹⁵ The vast majority left without completing their educational goals. The reasons for leaving were categorized as follows:

- Situational deterrents (64 percent): work, health, childcare, family, transportation, or other external problems;
- Institutional deterrents (11 percent): uninteresting or inappropriate programs;
- Dispositional deterrents (3.6 percent): tired of school or were not accomplishing goals; and
- Combination of situational, dispositional, and institutional deterrents (7 percent).¹⁶

It is uncommon to have information on why students drop out, for most who leave literacy programs just stop coming and the factors creating the dissatisfaction leading them to "vote with their feet" are never known or addressed. Furthermore, because many learners leave programs and then return at a later date, there is reluctance to record a learner as "terminated."

Many programs have begun to develop record-keeping systems to help them analyze patterns of attrition. For example, volunteer organizations have developed software packages to help local programs maintain computerized databases on learners and tutors, allowing for more systematic analysis of retention factors.¹⁷ These systems are part of a general effort to improve retention by providing "better matches" between tutors and learners, but there is little data to confirm that this makes learners stay in programs longer.¹⁸

Even mandatory programs find retention a problem. Education programs for welfare recipients also report that their biggest problem is poor

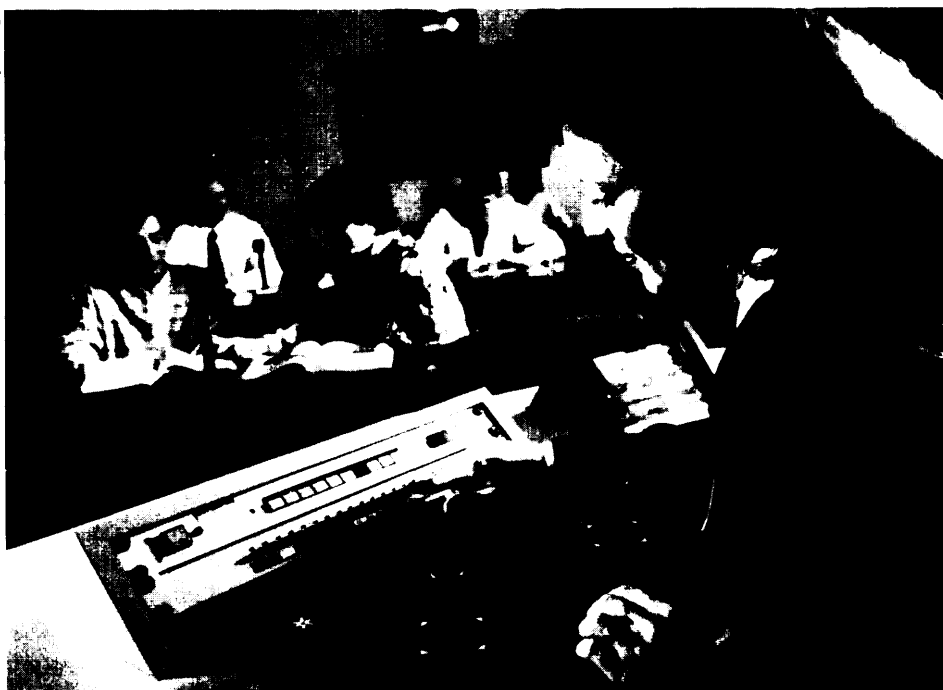
¹⁵ Seiler and Nwakeze, op. cit., footnote 12, p. 27.

¹⁶ Ibid.

¹⁷ The Verse 1.0 &- management system, developed by Literacy Volunteers of America (LVA), maintains &- for volunteer programs, and helps track mailing information demographics, tutor-learner matches, hours, and other data on volunteers, tutors, and learners.

¹⁸ An evaluation study of 953 learners at six Literacy Volunteers of America sites throughout the United States showed a slight pattern Of correlation between tutor and learner similarity and learner achievement. However, the researchers suggest that the data on which the analysis is made is limited. V.K. Lawson et al., Literacy Volunteers of America, Syracuse, NY, "Evaluation Study of Program Effectiveness," unpublished report, January 1990, p. 24.

Kirkwood Community College



Distance learning projects bring instruction to students in remote locations. This class is being sent from Kirkwood Community College to centers spread across a 4300-mile service area.

attendance.¹⁹ Only when basic needs are satisfactorily cared for can one concentrate on the difficult task of learning. For those whose financial, emotional, and health situations keep them on the edge, the recurring problems and crises of day-to-day life take precedence over long-term learning goals. Most programs try to deal with the situational, institutional, and dispositional factors that drive students from programs, but it is a huge job.

Community-based organizations are especially sensitive to the need for providing the comprehensive services that remove some situational barriers. Often their literacy activities are part of a broader program that seeks to help clients deal with the myriad issues of housing, employment, childcare, health, and personal relationships. Counseling and social services are as central to their mission as literacy classes. Offering service in

storefronts, libraries, community centers, or housing projects can bring programs to people in places where they feel most comfortable, while alleviating some transportation problems.²⁰

In some rural areas, where distance and lack of public transportation are significant problems, distance learning projects have brought programs closer to participants; e.g., adult high school completion programs offered by Kirkwood Community College's telecommunications networks (see box 6-A).

Scheduling programs to accommodate the learners' needs helps boost retention. For example, many programs try to schedule classes in the morning for women whose children are in school; daytime classes also attract women whose safety concerns make them unwilling to attend night classes. However, since many adult literacy teachers work full time in other jobs (most often

¹⁹ Edward Pauly et al., *Linking Welfare and Education: A Study of New Programs in Five States* (New York, NY: Manpower Demonstration Research Corp., March 1992), p. 14.

²⁰ Some programs provide bus or subway tokens to help learners get to classes.

Box 6-A—Extending Educational Opportunities Through Telecommunications: Kirkwood Community College

For more than a decade, Kirkwood Community College in Cedar Rapids, Iowa, has sought ways to extend its reach to all learners, especially those most cut off from educational services in the past. While the college offers a full range of traditional classroom-based college courses on campus, this is just one method of reaching students. For example, the college is in its 12th year of providing residents of eastern Iowa with live interactive college credit courses over its microwave telecommunications network. Today no resident of Kirkwood's seven-county, 4,300 square-mile service area is more than a 20-minute drive from a distance learning classroom setup in high schools, community centers, and businesses.

Students in these distance learning classes are typically older adults who cannot easily come to the Cedar Rapids campus or are uncomfortable with the idea of attending classes on campus with students much younger than they are. Many build up their confidence once they see that they can compete successfully with 'regular' college students. A student can earn an associate's degree exclusively through Kirkwood's distance learning program, without ever coming to the main campus.

At Kirkwood, distance learning has been a success—both in terms of numbers of students served (almost 1,500 students each semester) and by the quality of the instruction. Evaluations of student performance consistently indicate that the distance learning students perform at least as well, if not better, than traditional on-campus students. Some distance learning courses are also offered in conjunction with area high schools, allowing advanced students to earn college credits while still in high school.

Kirkwood also offers alternative programs for students who have dropped out of high school, through secondary-level courses available at learning centers throughout their service area. High school credit courses have been developed using a self-paced format of instruction. These 40 courses complement the traditional courses and individual tutorials. Nearly 400 students took alternative high school classes in the 1992-93 academic year, Kirkwood actually had the largest high school graduating class in the Seven-county service area.

Taken together, these experiences have taught Kirkwood administrators important lessons about alternative approaches to delivering instruction. Past assumptions have been proven false, challenging conventional wisdom about who can benefit from alternative educational approaches:

Older students perform as well as younger students; high school level curriculum is as successful as college level curriculum. It is no longer valid to assume that older adults would have an innate fear of technology, or that ABE or GED *students would be* overly challenged by newer instructional technologies.¹

Building on what has been learned through these nontraditional self-paced high school credit programs and the telecommunications-based college credit programs, Kirkwood plans to take the next step and offer adults without high school degrees expanded educational opportunities via live interactive telecommunications. In the **1993-94 academic year, the college will work with high school dropouts** in off-campus sites, offering distance learning courses that include career development, technical mathematics, and environmental science. The college envisions adding other technologies, including computer-assisted instruction and multimedia courses to augment this program. They also hope to extend similar strategies to adult basic education programs in the near future. The Dean of Telecommunications sums up Kirkwood's attitude and hopes for the future this way: "Telecommunications technology and related instructional technologies certainly hold the promise of extending greater opportunities to those residents who have thus far benefited the least from our educational system."²

¹ Rich Gross, dean of telecommunications, Kirkwood Community College, Cedar Rapids, Iowa, personal communication, February 1993.

² Ibid.

teaching K-12), daytime classes can be difficult to schedule.²¹ Workplace programs, held on site between shifts, make it easier for employees to attend. Finally, for some learners, classes can be supplemented with or substituted by study at home, through the use of televised literacy programs such as those offered by Kentucky Educational Television or other public broadcasting stations. These offer the ultimate in convenience, safety, and privacy for learners.

Maintaining regular contact with learners increases likelihood of improving student retention. This may mean serving fewer students in order to do a better job of providing necessary support services such as case management.²² This involves greater use of counselors or social workers who can provide regular visits to schools or to students' homes to see how students are doing and why they may be missing classes. Teachers or volunteer tutors are often reluctant or unable to take on this role.

Serving Learners: Balancing Supply and Demand

While recruitment and retention are important, the problem goes beyond that. The larger issue is serving all those in need.²³ Although there is variation among local and statewide efforts, on average, most estimates indicate that fewer than

10 percent of those in need are being served.²⁴ Furthermore, mandated programs are changing the concept of recruitment, often forcing programs to serve one group of learners—those required to attend—at the expense of others who come voluntarily.²⁵ English as a second language (ESL) programs are often oversubscribed, and many agencies are forced to put a cap on these services so as not to overwhelm and consume their total adult literacy program.²⁶ A survey taken in New York City in 1988 suggested there were 10,000 people on a waiting list for ESL classes, with indications that the numbers have grown since then.²⁷

Technology is extending the range of services. Ironically, as technology makes it possible to reach more people, through hotlines, referral services, and programs brought close to home via distance learning activities, demand is likely to increase. Some communities are finding ways to expand services by involving community resources that can provide technology assistance, often by enlisting the aid of local businesses. Others are tapping into existing public programs like Head Start or public welfare agencies and working with them to offer instruction in these settings (e.g., setting up computer-assisted learning laboratories in daycare centers or in the welfare office—see chapter 4, box 4-E) or through local public broadcasting stations to

²¹ Providing childcare or offering programs where parents and children attend classes at the same site improves student retention rates, but requires more money, staff, and space—features many programs lack.

²² Massachusetts recently took this approach. Murphy, op. cit., footnote 3.

²³ A recent evaluation of adult education programs found waiting lists in 19 percent of local programs. National Evaluation Of Adult Education Programs, Bulletin No. 2, January 1991.

²⁴ The Department of Education estimates that on average 6 percent of those in need are being served. Ron Pugsley, U.S. Department of Education, Division of Adult Education and Literacy, Office of Vocational and Adult Education, unpublished data, October 1992. For example, the Massachusetts Department of Education reports serving about 3 percent of those eligible. OTA site visit, January 1992. See also Robert A. Silvanik, *Toward Integrated Adult Learning Systems: The Status of State Literacy Efforts* (Washington, DC: National Governors' Association 1991).

²⁵ For further analysis of this issue, see chapter 5. Or a discussion of targeted populations.

²⁶ Some local programs report long waiting lists among limited-English-proficient adults not eligible for special programs such as State Legalization Impact Assistance Grants (SLIAG). The Community Learning Center in Cambridge, MA, reports an ESL waiting list of 400, and at the Somerville Center for Adult Learning, the average wait for regular ESL is 18 months. OTA site visit, January 1992.

²⁷ Avi Dogim, "The Workplace in the ESL Class: Unintegrated Approach to Job Readiness," *Literacy Harvest: The Journal of the Literacy Assistance Center*, vol. 2, No. 1, winter 1993, p. 6.

provide televised literacy instruction learners can watch at home. These models to “transform the service delivery system via technology” are encouraging, but still limited; most programs facing increasing demand still continue to try to do more of the same, using existing approaches that are already overburdened and limited in their success.

INSTRUCTIONAL ISSUES

At the heart of every adult literacy program are three central issues: what is taught, who teaches it, and how progress is measured. Concerns with each of these are shared across programs of all types.

Curriculum: What Works?

Although the instructional goals for ESL, ABE, GED, and high school completion programs are similar across programs, adult literacy programs use a variety of instructional approaches and materials. Some espouse structured phonetics-based approaches while others prefer whole language materials for beginning readers. Many create materials relevant for their own learners, attempting to “use whatever seems to work,” but then find that what works for some students may not work for others.²⁸ Many programs have the desirable goal of creating individualized instructional plans for each student; however, these must be developed around the philosophy of the program, the time and talents of staff, time available for instruction, and resources (e.g., books, hardware, and software) at hand. Compounding this difficulty is the fact that the student clientele keeps changing. And, while many of the teacher-developed curriculum materials are good and could be shared or replicated, there have not been, until recently, any formal mechanisms to share, evaluate, or disseminate locally developed materials.



Houston READ Commission

Effective instruction is built around a learner's interests. These ESL students celebrate Cinco de Mayo in their Hispanic heritage project.

Furthermore, while there is considerable evidence of what works, the information is not systematically made available to practitioners as a basis for effective practice. Even large curriculum development projects have no system for broad distribution. For example, over a decade ago a California adult literacy curriculum support project led to the development of the Comprehensive Adult Student Assessment System (CASAS). It was designed to provide accurate placement of students in education programs from beginning through advanced levels of ABE, ESL, and preemployment training, and to establish a uniform method for reporting progress, while providing linkages to competency-based instructional materials and instruction. Since 1983, CASAS has been validated by the U.S. Department of Education as an exemplary program for national dissemination through the National Diffusion Network, and agencies implementing CASAS report significant gains in student retention. It has been used effectively in a range of agencies—community colleges, school programs, correctional institutions, and Job Training Partnership

²⁸ Renee S. Lerch, *Effective Adult Literacy Programs: A Practitioner's Guide* (New York, NY: Cambridge Book Co., 1985), p. 101.

Act (JTPA) programs-throughout California and several other States.²⁹ However, because of the diversity of programs and lack of systematic information-sharing, CASAS and other effective programs are not known by practitioners apart from those directly involved with them.³⁰

The problem is repeated as adult literacy programs seek information on effective ways of teaching with technology. The most common software information resource is word-of-mouth, particularly recommendations from other technology-using teachers.³¹ While sources for evaluation do exist,³² more than 60 percent of organizations contacted in a recent survey never consult these sources; most did not even know that these sources were available.³³ If a State or region has an agency that provides information on technology for adult literacy, most computer-using provider organizations in the area will take advantage of its services.³⁴ However, these State and regional resources are limited.

A promising resource is California's Outreach and Technical Assistance Network (OTAN) (see figure 6-2). OTAN combines a computerized communications system with regional resource libraries that disseminate commercial and teacher-made materials, including training packets with accompanying videotapes, resource documents, and public domain software. OTAN is both an electronic archive and a distribution source for materials, reports, and studies. Several States have signed on to OTAN, hoping to tap into its

base of materials and expertise; however, since much of the material is geared to the California curricula, its use is limited in programs that take a different, less structured approach. Nevertheless, OTAN is seen by some as a model for other State information and dissemination systems, and as a resource for teacher training, the area discussed below.

Helping Teachers, Administrators, and Volunteers Do Their Jobs

It is difficult to define adult education as a profession when most teachers and instructors are part time, certification is rarely required, and no career ladder exists for moving ahead in the field. Furthermore, university programs for specializing in adult literacy are limited, with little agreement or research base specifying what kind of training is needed.

There is a critical need for professional development, both for teachers and for volunteers in adult literacy programs. Teaching adults demands a different set of skills and sensitivities than those required for teaching children. These take time and training to develop, but the transition is often assumed to be automatic. Furthermore, even those with experience teaching adults in community colleges or workplace training programs may not be familiar with the special challenges of teaching adults with low literacy skills. Staff development for ESL instructors appears to be an even greater problem, since many may not be

²⁹ For example, Maryland undertook a review of curricula used in adult literacy programs throughout the State and found content varied enormously, with **instruction** and materials based on what was available in a center and the background of the instructors. The State director described the situation as a "hodgepodge." Maryland used **CASAS** as a model for a **competency-based** curriculum but localized content for **Maryland**: questions deal with Maryland geography, industries, and other locally relevant topics. Chuck **Talbert**, director of Adult and Community Education **Branch**, Maryland Department of **Education**, personal communication September 1992.

³⁰ **Paul Delker**, consultant, personal communication, April 1992.

³¹ Jay **Sivin-Kachala** and Ellen **Bialo**, **Interactive Educational Systems Design, Inc.**, "Software for **Adult Literacy**," **OTA** contractor report, June 1992, p. 66.

³² **Software guides include: Guide to Recommended Literacy Software (Adult Literacy and Technology Project); the Oregon/Washington Adult Basic Skills Technology Consortium Software Buyers Guide, Educational Software Selector (EPIE Institute), and manufacturers guides and catalogues**, as well as online services. Ibid., p. 68.

³³ Ibid., p. 68.

³⁴ Ibid., p. 71.

trained in the complexities of second language acquisition and may lack the ability to work with culturally diverse groups and their special needs.³⁵ Even when programs strive to provide training for their staff and volunteers, they are constrained by a number of factors:

- Minimal State and local policies and certification requirements;
- Limited inservice training requirements;
- The part-time nature of adult education teachers and volunteer instructors;
- The high rate of staff turnover;
- The lack of a unified research base on best practices; and
- Limited financial resources for training.³⁶

Most States do not require special certification in adult education for those who teach in literacy programs.³⁷ Some require an elementary or secondary teaching degree only, some require a few hours of additional coursework or experience, and almost one-half of all States have no certification requirements for adult educators (see figure 6-3). While it is true that some districts and local programs may impose more stringent requirements on teaching staff, it must be said that statewide teaching requirements for adult literacy instructors are less stringent than requirements for K-12 educators. It is ironic that those with the least professional background are asked to help those who need the most help—those for

whom our past education efforts were not successful.

Although inservice training and staff development programs might provide satisfactory alternatives to ABE certification, only 12 States require some type of inservice training.³⁸ The range of training required is enormous: from 4 hours of preservice and 4 hours of inservice training, to 50 hours of staff development annually.³⁹ Many local ABE and ESL programs have more stringent staff development requirements than the States, however.

ABE and ESL teachers tend to be part-time employees of adult education programs; 90 percent are paid on an hourly basis and do not receive benefits.⁴⁰ Volunteers account for between 25 and 75 percent of total adult education staff members in each State, and these numbers exclude volunteers working in noninstructional activities.⁴¹ This dependence on volunteers and noncertified, part-time instructors keeps program costs down and reduces incentives to increase funding levels. It may also be responsible for the comparatively low salary levels and status of adult educators.

Since so many adult education staff are school teachers during the day and adult education instructors after hours, they have very little time for training, unless weekends or summer vacations are sacrificed. There is little incentive to participate in training, especially since most of the inservice training and staff development activities are undertaken on the instructors' own

³⁵ Pelavin Associates, Inc. et al., "Study of ABE/ESL Instructor Training Approaches: Phase I Technical Report," prepared for the U.S. Department of Education, Office of Vocational and Adult Education, February 1992, p. 12.

³⁶ Ibid., pp. 11-12.

³⁷ Pelavin Associates, Inc. et al., "Study of ABE/ESL Instructor Training Approaches: State Profiles Report," prepared for the U.S. Department of Education, Office of Vocational and Adult Education, February 1991.

³⁸ Pelavin Associates, Inc. et al., "Study of ABE/ESL Instructor Training Approaches: The Delivery and Content of Training for Adult Education Teachers and Volunteer Instructors," prepared for the U.S. Department of Education, Office of Vocational and Adult Education, July 1991, pp. 8-9.

³⁹ Ibid., p. 8.

⁴⁰ For example, in a 1988 report on ABE in North Carolina, 65 percent of programs surveyed reported having no full-time teachers or their staff; Hawaii funded its first full-time ABE staff position in 1989. Ibid., p. 5.

⁴¹ U.S. Department of Education, Office of Vocational and Adult Education, *Exemplary Adult Education Services: Highlights Of the Secretary's Award Program Finalists* (Washington, DC: 1988).

Figure 6-2-Outreach and Technical Assistance Network (OTAN)

OTAN provides training, technical assistance, information, and communication links for adult literacy staff. The range of services on the OTAN forum is shown in the menu below. In its first year of operation, the OTAN forum received more than 11,000 queries.

MENU	
 <p>About the OTAN Forum has a general explanation of the OTAN project and a detailed description of the electronic communication system.</p>	<p>Lesson Plans area is under construction. You will find sample lesson plans which you can adapt to fit the needs of your students.</p>
 <p>The Master Calendar will display the latest information on what events are happening in Adult Education.</p>	 <p>Public Domain Software is free to be downloaded and used at your agency.</p>
 <p>Who's who is a directory containing people information: subscribers, 321 agencies, adult school directors, and u.s. state directors of adult education.</p>	 <p>Demo Software maintains a library of demonstration software from commercial sources. Again, you may download and use at your agency.</p>
 <p>CDE Info is reformation from the California Department of Education.</p>	 <p>Legislative Information offers up-to-date legislative information as it relates to adult education.</p>
 <p>OTAN Resource Centers are located throughout California and provide inservice activities and have resource libraries.</p>	 <p>Reference Materials contains bibliographies of reference information, research reports, lists of library materials to borrow, and actual documents of "hot topics." A full adult education library at your fingertips.</p>
 <p>Current Articles contain unpublished articles of current interest to Adult Education.</p>	 <p>Educational Grants contains information about funding opportunities available to adult service providers and educators.</p>
 <p>Course Outlines represent the ten adult education funded areas of adult school instruction. They include: goals, purpose, objectives, instructional strategies, times of instruction, evaluation, and repetition components.</p>	<p>Want Ad users can post/review ads related to job opportunities in education.</p>
 <p>Curricula Resources list various instructional materials in print, video, or software format. Free instructional materials are also posted.</p>	 <p>The Round Table is the online discussion area. Users can post or respond to others.</p>
	 <p>Upload Area is where users can place files that they want to share online.</p>

Using the OTAN Forum: One Example-Here a teacher chooses "lesson plans" from the Forum, then selects a particular example from the file. The teacher can preview and print the entire lesson plan, which contains objectives, materials, preparation time, exercises, and assessment suggestions.

The screenshot shows the OTAN Forum web interface. The main menu includes links to: About the OTAN Forum, Master Calendar, who's who, CDE Info, OTAN Resource Centers, Current Articles, Course Outlines, Curricula Resources, Lesson Plans, Public Domain Software, Demo Software, Legislative Information, Reference Materials, Educational Grants, Want Ads, Round Table, and Upload Area.

The "Table of Contents - 'Lesson Plans'" window is open, showing a list of lesson plans. The selected lesson plan is "ESL Lesson Plan #6" by LLWEST, dated Dec 6 90. The lesson plan is titled "TOPIC: Giving/Asking for Directions".

ESL LESSON PLAN #6
TOPIC: Giving/Asking for Directions

LIFE SKILL OBJECTIVES:

Students will be able to:

1. generate verbal directions, utilizing simple directional vocabulary.
2. respond physically (moving to directions given them in a visual format).
3. increase their verbal confidence.

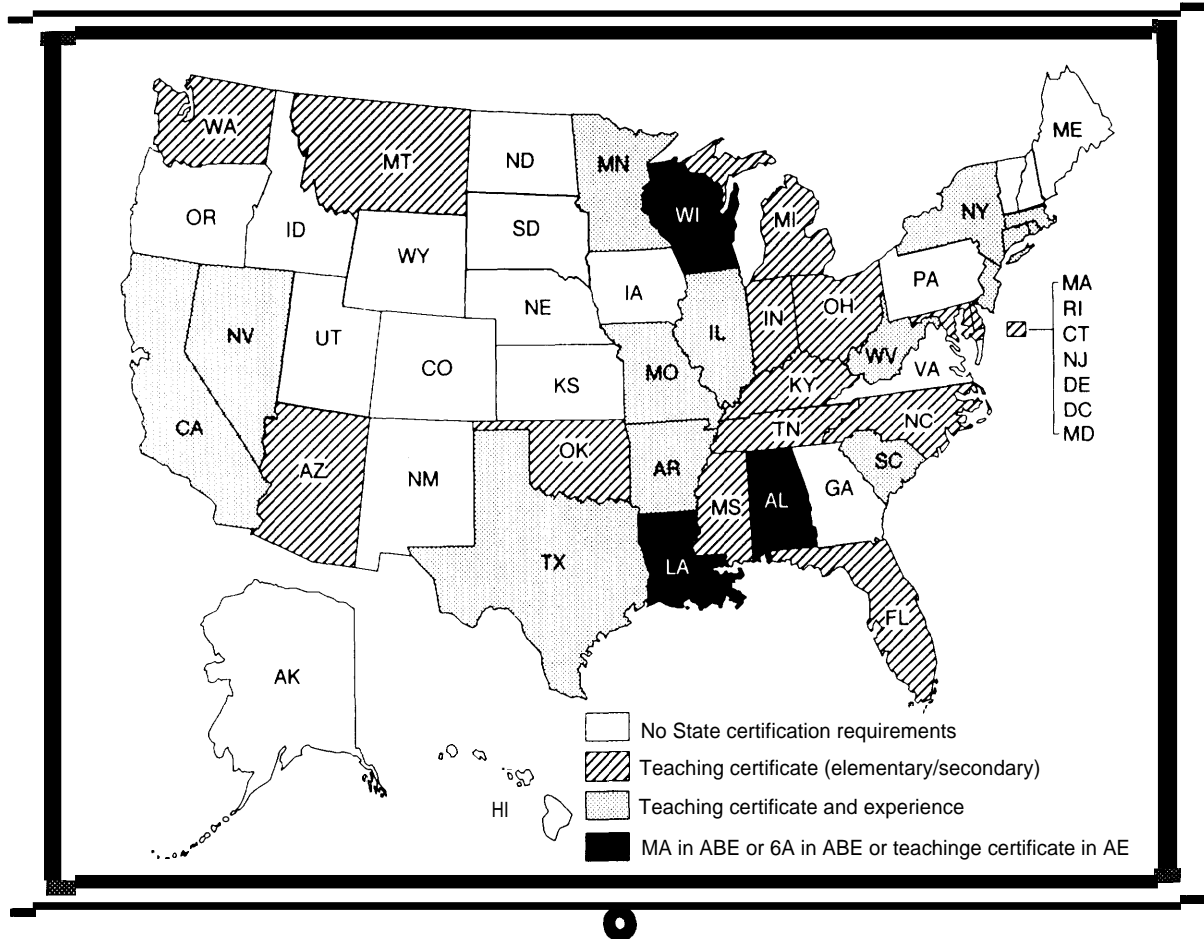
WARM-UP/REVIEW

Step 1:
 Teacher reviews community flashcards of drawings of : hospital, grocery store, post office, police station, pharmacy, bank, school, restaurant, library, hardware, laundromat, and movie theater. (see drawings Attachment #1) Teacher asks for the name of the place along with associated vocabulary. Teacher writes the name on the board and calls for specific names of it and writes them under the general name.
 The board is as follows:

GROCERY STORE / HOSPITAL
 Lucky / O'Connor Hospital
 Frys / San Jose Medical Center
 Food Villa / Valley Medical
 Safeway / Good Samaritan

SOURCE: Outreach and Technical Assistance Network, City of Industry, CA, 1992.

Figure 6-3-State Certification Requirements for Adult Basic Education Teachers



KEY: ABE = adult basic education; AE, adult education; BA - Bachelor of Arts; MA, Master of Arts.

SOURCE: Office of Technology Assessment, 1993, based on Pelavin Associates, Inc. et al., "Study of ABE/ESL Instructors Training Approaches: State Profiles Report," prepared for the U.S. Department of Education, Office of Vocational and Adult Education, February 1991.

time and personal expense.⁴² The contrast with K-12 or community college staff development—where teachers are given release time, travel funds, and substitute teachers—is striking.

The high rate of staff turnover also makes training a continuing burden to programs. Nation-

wide, comprehensive data on staff turnover is not available, but the experience of one State is indicative of more general problems. The Adult Education Unit of the California Department of Education estimates that it experiences a one-third annual turnover⁴³ among its adult education

⁴² Susan E. Foster, "Upgrading the Skills of Literacy Professionals," *Leadership for Literacy: The Agenda for the 1990s*, Forrest P. Chisman and Associates (eds.) (San Francisco, CA: Jossey-Bass, 1990), p. 75.

⁴³ The scope of training needed is staggering. In 1988-89, approximately 10,000 or more staff needed basic-level inservice training. Cuba Miller, California Department of Education, "Program and Staff Development Support: Working Paper on Strategic Recommendation 9," advisory review draft, Aug. 22, 1990, p. 66.

instructors. When turnover is high, programs are encumbered with the need to provide introductory staff training almost continually.

While there is a clear need for training adult educators in the theory and practice of adult learning, the research base is limited.⁴⁴ The intellectual underpinnings for adult learning theory are diverse and multifaceted.⁴⁵ Woven within the theoretical base are many strands: theories of cognition, which are themselves far from consistent; understandings derived from developmental and educational psychology; theories of second language learning; and a social science focus that suggests adult learners can only be understood in the socioeconomic and cultural context of their lives and experience. In addition, there are conflicting views as to the appropriate way to teach reading. Finally, there are also diverse views and approaches to instructional management—including conflicting views regarding group instruction versus one-on-one instruction, social interaction versus private time spent alone at a computer terminal, networking across distances via technology versus social contact in a school setting. Perhaps most significant is the concern that, as one practitioner noted:

Research has shown that some of the most successful teaching has occurred among those who are willing to abandon traditional teaching methods and to adopt **methods** and materials that are relevant to the learners. Yet we persist in assuming for a major part of our adult literacy system that adequate preparation for adult literacy instructors or facilitators consists of traditional teacher training.⁴⁶

Because there are few State and local policies and guidelines regarding certification, it is difficult for programs to know what adult literacy teachers



KET, The Kentucky Network

Good teaching is both art and science. In a televised lesson, this teacher uses real life applications to make math exciting for his students watching all around the country.

should be expected to know, and to develop appropriate training programs.

Finally, very limited funding is available for training adult education personnel. The major Federal source of support for adult literacy staff development is Section 353 of the Adult Education Act (AEA), which authorizes States to set aside at least 10 percent of their basic grants for training teachers, volunteers, and administrators, or for special projects. In fiscal year 1990, States spent a total of \$15.8 million under Section 353. The National Literacy Act increased the set-aside

⁴⁴ Pelavin Associates, Inc. et al., op. cit., footnote 35, p. 43.

⁴⁵ U.S. Department of Education, "Design Conference for Program Effectiveness Studies in Adult Education," unpublished papers, March 1992.

⁴⁶ Foster, op. cit., footnote 42, p. 74.



Training adult literacy staff is a major problem. Technology offers a resource for sharing promising practices.

for special projects to 15 percent and specified that at least two-thirds of the set-aside must be devoted to staff development. Even with this increase, the amount spent for adult education training will still be limited; it is estimated that less than \$3 million per State will be devoted to training adult literacy personnel.⁴⁷

Technology offers both short- and long-term solutions to the problem of training adult literacy teachers and volunteers. Several media suggest themselves. As video cameras and VCRs become more common, training videos can be taken home for viewing and then discussed in group training sessions. Workshops can be taped for viewing by absentees or new employees. Exemplary teaching models or sample lessons can be demonstrated in

videos or live over interactive telecommunications networks. As a part of the selection of new teaching staff, applicants can be taped presenting a demonstration lesson. Current staff can submit videos to demonstrate their competence as a means of improving program evaluation.

Computer networks like OTAN (see above) can be used to help teachers, administrators, and volunteers share information, techniques, and curriculum. Some groups have used telecommunications for live interactive teleconferences on topics of common interest to adult literacy teachers and volunteers across the country. For example, the American Correctional Education Association, Literacy Volunteers of America, and the Public Broadcasting System jointly sponsored a series of teleconferences on the topic of literacy instruction in jails and prisons. Because prisons are often located in isolated settings, personnel who teach in these settings are particularly cut off from traditional professional development opportunities. In another example of distance learning applications, the Los Angeles County Education Department uses its satellite educational telecommunications network (ETN) to reach adult educators on a regular basis.⁴⁸ “The Adult Learners Channel” on ETN broadcasts programs of interest to adult learners, teachers, and administrators. California plans to use ETN to train all the ESL adult literacy teachers in the State through ESL Teacher Institute training modules. Recent programs and series for the ESL staff development series include the “ESL Tool Box” and “Adult Life Skills ESL Starter Kits” for teachers, programs for vocational ESL instructors, a series for volunteer ESL tutors, and activities for develop-

⁴⁷ Pelavin Associates, Inc. et al., op. cit., footnote 35, p. 11. This figure may be optimistic. New York State gets the second highest AEA grant, approximately \$17 million, and 10 percent of that would be \$1.7 million. Forty-eight States will have lesser amounts. Murphy, op. cit., footnote 3.

⁴⁸ ETN is a FCC-licensed satellite broadcasting network owned and operated by the Los Angeles County Office of Education. Courses for teachers, students, administrators, and parents are transmitted to the 95 districts in the 4,083 square-mile area of Los Angeles County, but any site in California or other States capable of receiving the Ku-band satellite system can participate in the live programs. Viewers can telephone studio presenters for immediate discussion and questioning, or telecasts may be interrupted by taping programs for later viewing, allowing participants to discuss ideas and issues among themselves. Los Angeles County Office of Education, Downey, CA, Educational Telecommunications Network brochures, 1992.

ing adult ESL mentor teachers. Other programs for adult education administrators cover topics such as recruitment and retention strategies and new statewide standards and frameworks.⁴⁹

Evaluation and Assessment

State and local literacy practitioners seem far from satisfied with current instruments for both student assessment and program evaluation and are concerned about their being used inappropriately to judge people and programs.⁵⁰ Assessments of student progress and evaluations of program success are often used interchangeably, but they are not the same.

Most programs evaluate effectiveness by assessing academic progress (e.g., how many students move to higher levels or the grade-level gains they make on test scores). Effectiveness is also measured by how many acquire a high school diploma or pass the GED. Other indicators of effectiveness vary for specific programs. For example, workplace literacy programs may measure success by reduced employee absenteeism and turnover, by higher productivity and safety records, and by lower product defect and error rates. Prison literacy programs consider long-term improvements in postrelease employment, parole, and recidivism as overall measures of success. Many programs also consider program effectiveness in terms of significant changes in lifestyle, such as the number of students moving off the welfare rolls and into jobs.

Federal program evaluation procedures are changing as programs receiving Federal funds must set up systematic evaluation procedures

showing effectiveness. Counting numbers of those who come and go, or using school-based models of grade-level gains, will no longer suffice. As the goals of programs change, the methods of evaluating success will also need to change. Moving from a 3rd- to a 4th-grade reading level may not be as important to the learner, or the sponsoring agency, as being able to fill out a driver's license application or planning a week's worth of balanced meals on a budget. As one administrator noted: "It's just as legitimate to help people meet short-term goals, such as filling out a job application, as it is to enroll them in a long-term program and measure success by whether they got a high school diploma or advanced so many grade levels."⁵¹

In compliance with the National Literacy Act, the Department of Education developed model indicators of program quality that will influence adult literacy programs of all types (see table 6-1).

Beyond the question of program evaluation is the issue of individual student assessment. Students are tested when they first enter programs, as a basis for placement; they may or may not be tested when leaving programs. For many, testing is a stressful event, reminding them of past school failures; for others, it is enough to keep them out of programs in the first place. Yet those who enter and exit programs several times often have to repeat the same tests time and again. Some systems have moved to credit-card sized "smart-cards," that store a student's test results and educational program information, enabling the learner to pickup where he or she left off without repeated testing when reentering literacy programs.⁵²

⁴⁹ Los Angeles County Office of Education, "ETN Times," a monthly program directory, October 1992.

⁵⁰ U.S. Department of Education, *A Summary Report: National Forums on the Adult Education Delivery System* (Washington, DC: U.S. Government Printing Office, 1991), p. 8.

⁵¹ Terrilyn Turner, quoted in Business Council for Effective Literacy, "Talking Heads: Issues & Challenges in Adult Literacy," newsletter, No. 30, January 1992, p. 1.

⁵² The State of California has 2,000 "Educards" for adult learners. Data on student test scores, certification, and other materials are stored on the cards, which cost \$4 each, can store approximately two pages worth of typewritten information, and are read by computers using a \$100 scanner. John Fleishman and Gerald Kilbert, "Adult Education Technology in the Golden State," *Adult Learning*, vol. 4, No. 3, January/February 1993, p. 15.

Table 6-I-Model Indicators of Program Quality for Adult Education Programs

Topic	Indicators of program quality	Sample measures
<i>Program planning</i>	Program has a planning process that is ongoing and participatory, guided by evaluation, and based on a written plan that considers community demographics, needs, resources, and economic and technological trends, and is implemented to the fullest extent.	<ul style="list-style-type: none"> • Planning document that specifies program goals and objectives and is regularly reviewed and revised. • Openness to community input via advisory board, staff meetings, student questionnaires, or public hearings; and frequency of consultation with them. • Use of data on community needs (e.g., census data, needs assessments). • Plan matches community needs regarding class location, content, and program services. • Program evaluation component and evidence that evaluation feeds into the planning process. • Congruence between planned and actual activities.
<i>Recruitment</i>	Program successfully recruits the population in the community identified in the Adult Education Act as needing literacy services.	<ul style="list-style-type: none"> • Types of recruitment activities. • Percent of target population enrolled compared with State demographics. • Percent of students enrolled having specific characteristics compared with the target population having these characteristics in the service area. • Percent of target population enrolled compared with State average.
<i>Retention</i>	Students remain in the program long enough to meet their educational needs.	<ul style="list-style-type: none"> • Hours in program by type of program and learning gains achieved as measured by student progress. • Percent of students returning to the program within specified time period.
<i>Curriculum and Instruction</i>	Program has curriculum and instruction geared to individual student learning styles and levels of student needs.	<ul style="list-style-type: none"> • Use of student assessment information to inform the instructional progress. • Student goal-setting process linked to decisions on instructional materials, approaches, and strategies. • Instructional content addresses educational needs of individual students. • Instructional strategies used and frequency measured through observation or self-report.
<i>Educational gains</i>	Learners demonstrate progress toward attainment of basic skills and competencies that support their educational needs.	<ul style="list-style-type: none"> • Gains in standardized or competency-based test scores. • Teacher reports of student gains or improvements. • Alternative assessment methods.
	Learners advance in the instructional program or complete program educational requirements that allow them to continue their education or training.	<ul style="list-style-type: none"> • Rate of student advancement to a higher level of skill or competency. • Attainment of a competency certificate, GED, or high school diploma. • Percent of students referred to or entering other education or training programs.
<i>Support services</i>	Program identifies students' needs for support services and makes services available to students directly or through referral to other educational and service agencies with which the program coordinates.	<ul style="list-style-type: none"> • Process for identifying student support service needs. • Agreements or linkages with childcare and transportation providers. • Number and type of support services provided or to which students are referred. • Percent of students obtaining specific needed services through the program or through referral.
<i>Staff development</i>	Program has an ongoing staff development process that considers the specific needs of its staff, offers training in the skills necessary to provide quality instruction, and includes opportunities for practice and systematic followup.	<ul style="list-style-type: none"> • Presence of preservice and inservice staff development opportunities and average hours of staff development training received by staff. • Process for identifying staff development needs. • Staff development based on promising practices. • Effective staff performance as measured by student ratings or observations of staff. • Percent of staff needs met through training activities.

SOURCE: U.S. Department of Education, Office of Vocational and Adult Education, *Model Indicators of Program Quality for Adult Education Programs* (Washington, DC: July 1992).

Testing has a positive side as well—it is important to learners to know they are making progress, even if the steps forward are small and slow. One of the appeals of computer-based programs is the reinforcement given when learners succeed. For example, in most computer-based instructional programs, when a certain number of correct responses are given, the student is automatically presented more challenging material. In this context, tests are not so much anxiety-provoking events as ongoing checks on one's understanding. Integrated learning systems (ILSs), with their comprehensive instructional and management software packages, are attractive to some literacy programs because of this capability to blend instruction with assessment on a regular basis, and maintain up-to-date records of progress and areas where more help is needed as guides to both instructors and learners. The volume of curricular materials stored in ILS programs can accommodate learners at many levels, allowing students to move ahead in a systematic fashion. Reports on student progress can be accessed immediately and compiled easily for overall program evaluation purposes.⁵³

There is some concern among practitioners whether existing assessment tools—multiple-choice paper-and-pencil tests or their computer-based equivalents with their grade-level equivalency mindset—are adequate to meet the demands of new outcome-based assessment systems. Performance measures fit more appropriately with competency-based approaches to instruction, as learners demonstrate learning in the context of such goals as interpreting documents, filling out forms, solving work-related problems, or preparing their own written or video reports.⁵⁴ Some programs are using performance assessments, such as portfolio collections of student

work illustrating progress over time. As with all performance assessments, concerns are raised about aggregating data and the reliability and validity of these measures. Nonetheless, educators and learners alike are excited about the impact new forms of testing have on teaching and learning.

ADMINISTRATIVE ISSUES

Programs of all types are coping with the central issues of how to provide better service in light of problems with funding, requirements for serving more learners through mandated programs, and issues of coordination.

Funding

Limited funding for literacy programs is in some ways the most critical crosscutting issue, because it constrains everything else that happens in literacy programs—staff training, intensity of services, availability of technology, innovative assessment, and other issues. Further, limited funding severely restricts the vision of all involved—administrators, policymakers, instructors, and students. Why recruit more adults if you cannot serve them? Why enroll in a program that puts you on a long waiting list? Why advance teachers' training if you cannot pay them a competitive salary when they finish? Why learn about technology if your program cannot afford it? Why enact a comprehensive Federal program if appropriations will never be provided?

Public support for adult literacy has been adversely affected by the downturn in the economy, as fiscal belt-tightening continues at every level—Federal, State, and local. Support from the private sector—an important resource for many programs, especially community-based programs—is also soft. Literacy has to fight hard to win its

⁵³ Some of these systems are correlated with the two of the most common tests used for placement: the Test of Adult Basic Education (TABE) and CASAS, sometimes making it unnecessary for a student to take the paper-and-pencil tests.

⁵⁴ U.S. Congress, Office of Technology Assessment, *Testing in American Schools: Asking & Right Questions*, OTA-SET-519 (Washington, DC: U.S. Government Printing Office, March 1992). Although this study deals primarily with testing issues in K-12 education, the alternative testing approaches discussed in the report have particular relevance to adult literacy programs.

share of the corporate and philanthropic pie. Although corporations and businesses may support local literacy efforts in the communities where they are located, only a few large foundations provide significant funding for literacy efforts throughout the country.⁵⁵ Furthermore, private sector support for adult literacy is uncertain as foundations and businesses change their funding priorities and targets of support from year to year.

Ironically, although technology is expensive, some programs have used it as a magnet for additional funding. In some cases it can be easier to get grants and special donations of technology than support for overall program operation. However, many programs will not spend their own limited resources on technology unless the State or some funding agency makes it a priority.⁵⁶ Even those who are informed about technology's potential for adult literacy and eager to use it as a resource for instruction and management are hobbled by the reality of the cost factors associated with technology: the costs of purchasing enough updated hardware and software, the ongoing expense associated with maintenance, and the time and resources necessary to train teachers and volunteers to work with technology as a teaching tool.

Mandated Programs

Recent Federal and State legislation requires certain groups of learners to attend literacy programs—generally welfare recipients and inmates meeting certain educational criteria. These mandated activities affect programs in a number of ways. Since the learners who must attend programs differ from those who enter voluntarily—they tend to have lower average academic achievement on entering, greater need for support ser-

vices, a higher incidence of personal problems, and, by the nature of their required attendance, a different set of motivational factors—programs must tailor their services to these learners. First, more intense service is required of the provider. Rather than 1 or 2 hours of literacy classes a week, participants attend daily classes of several hours. Services such as childcare and transportation must usually be provided. More intensive programs are more expensive, thus making less funding available to support those who come on a voluntary basis.

Programs often must engage in more comprehensive counseling or case management for students entering from welfare programs. These additional costs are sometimes covered by schools' administrative overhead, sometimes by a share of increased revenues for serving welfare recipients, and sometimes by reimbursement directly from welfare departments.⁵⁷ Often the programs are paid based on the number of students and hours spent in a program, which affects recordkeeping and attendance policies. Monitoring attendance on a more rigorous basis means that adult literacy programs are pressed to increase the accuracy and verifiability of attendance data to meet the needs of the welfare programs and to stand up to court challenges.⁵⁸ The relationship between teacher and student changes, as does student motivation; rules for attendance and testing for progress are no longer optional.

In Wisconsin, some of the larger school districts have developed computer-matching systems to identify welfare recipients in the districts' data systems and track their attendance. But monitoring has, in general, become a burden for many programs, and teachers especially find it unpleasant to act as "cops" to adult students,

⁵⁵ For a listing of several foundations supporting adult literacy, see ch. 4, table 4-2.

⁵⁶ Nancy Kober, "How States and Local Service Providers Respond to Multiple Federal Literacy Program: Massachusetts and Texas," OTA draft contractor report, Feb. 10, 1992.

⁵⁷ Pauly et al., *op. cit.*, footnote 19, p. 15.

⁵⁸ *Ibid.*, p. 17.

whose benefit checks may be reduced for poor attendance. Added to this is the difficulty and sensitivity of monitoring some, but not all participants, when some students' attendance is mandated and others' is voluntary.⁵⁹ This has been a particular problem in community colleges, night schools and GED programs, and community programs, where students work on individualized programs and detailed attendance and recordkeeping may not be a normal practice. It makes it more likely that welfare recipients will be directed to school-based programs, with their more orderly tradition of attendance and recordkeeping, and less to community-based programs that have a more informal, open approach to attendance.

Other problems in the mandated welfare programs have been created by having to deal with participants who have already initiated education programs on their own-yet now are forced into programs requiring attendance and different arrangements. An important issue for self-initiated participants is their use of proprietary schools. State welfare agencies may be reluctant to accept these programs when they have higher tuition costs and less well-regulated educational offerings.⁶⁰ Also at issue is how to measure "satisfactory progress," which in turn affects testing policies that may impact all students in a program.

Lack of Central Focus and Problems of Coordination

The education of America's children has a clearly defined tradition of control by the State education agencies and local school districts, with some assistance from the Federal Government in clearly defined areas. In contrast, adult education has no comparable comprehensive administrative system for organizing thousands of public and

private programs in communities across the Nation.

Is diversity an advantage or a problem? On the one hand, the cornucopia of adult literacy programs and providers enriches the field with a multiplicity of resources, approaches, and techniques. On the other hand, this potentially rich resource is squandered without a system that makes it possible to share what works and avoid what does not, that fills in gaps and avoids duplication. A complicated web of service providers makes it difficult for policymakers to see the whole picture, define problems, and identify pressure points where long-term change can be instituted. There are also considerable "turf" battles that can stand in the way of creating effective partnerships.

Furthermore, many literacy program sponsors have other goals and responsibilities that often make literacy service a secondary, rather than primary, goal. Literacy is a means to an end in many of the programs that have the greatest potential for serving learners: in jobs programs, prisons, Head Start programs, workplace programs, and so on. When funding is tight, literacy efforts may be considered expendable. Literacy languishes at the margins.

Federal coordination mandates and incentives for partnerships are producing some positive results, but they are still far from a comprehensive solution. It is too soon to know if the National Institute for Literacy will be able to take on the role of stimulating cooperation and fostering partnerships.⁶¹ Many States and local service providers have gone beyond what is required by law and developed their own approaches for improving coordination of adult literacy pro-

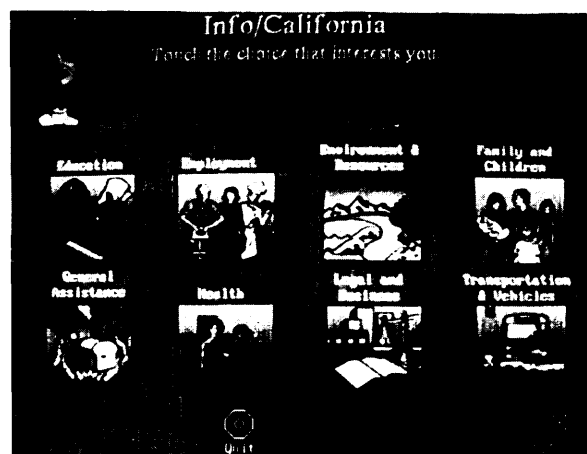
⁵⁹ Ibid.

⁶⁰ "Some JOBS program operators' views of proprietary schools may lead them to disapprove self-initiated participation in those schools' programs. California, Florida, and Oklahoma are beginning to cleat with this issue, which promises to be a complex and conflict-filled one." Ibid., p. 24.

⁶¹ The National Institute for Literacy has had an acting director since its creation in 1991. With the appointment of 9 of the IO board members, the search for a permanent director is now under way.



North Communications, Santa Monica, CA



Fred Wood, OTA

The State of California has supported the development of a multimedia 'kiosk that provides information on public services (see left). Kiosks like the one above "have been placed in shopping malls and libraries as part of an experimental project.

grams with each other and with human service agencies and education and training programs.

State Coordination

At the State level, coordination of human service programs has been a front-burner issue for several years, producing a variety of models.⁶² In fact, most States have undertaken some sort of initiative to "... bring coherence to the fragmented array of programs and providers that make up the current delivery system for adult literacy and basic skills services." Even so, "... much work remains to be done."⁶³

The nature, extent, and success of State literacy coordination efforts vary widely, with some States already into their second generation of

initiatives.⁶⁴ Among the most common State coordination mechanisms are:

- New State agencies with broad education and training or human service functions;
- Coordinating bodies and councils;
- Formal and informal interagency agreements or working arrangements among relevant State agencies;
- Jointly funded programs or funding contingent on interagency involvement;
- Incentives, set-asides, or demonstration grants for local coordination, using State funding or discretionary Federal dollars;
- Common program definitions and assessment procedures;

⁶² See Judith K. Chynoweth, *Enhancing Literacy for Jobs and Productivity* (Washington, DC: The Council of State Policy and Planning Agencies, 1989); U.S. Department of Education, *Making the Connection: Coordinating Education and Training for a Skilled Workforce* (Washington, DC: 1992); Judith A. Alamprese et al., *Patterns of Promise: State and Local Strategies for Improving Coordination in Adult Education Programs* (Washington DC: Cosmos Corp., 1992); and Silvanik, op. cit., footnote 24.

⁶³ Silvanik, op. cit., footnote 24, p. viii.

⁶⁴ Atelia A. Melaville with Martin J. Blank, *What It Takes: Structuring Interagency Partnerships to Connect Children and Families With Comprehensive Services* (Washington, DC: Education and Human Services Consortium, 1991), p. 19.

- Joint databases to exchange resources and information; and
- Programs that provide technical assistance and training on coordination to State staff and substate entities.

Some of these State mechanisms affect only State agencies, while others seek to foster coordination at the local level.

Perhaps the most prevalent mechanism is the State-level coordinating body. In 1990,⁶⁵ 40 States had a coordinating body for adult literacy. These bodies differed significantly in terms of membership, breadth and authority, funding sources, staffing structures, and relationships with local entities. A primary activity of these groups was to raise public awareness about literacy issues. Some groups had broader responsibilities, including directly funding literacy projects, helping States develop policy, providing training and technical assistance, or establishing new initiatives to improve literacy services.⁶⁶ Several State umbrella groups have a scope that extends beyond literacy, addressing coordination of workforce development or human service programs.⁶⁷

While having a State-level mechanism is an important first step, it does not guarantee that a coordinated system will naturally evolve.⁶⁸ These bodies must also be given the tools to do their job—the power to mandate interagency agreements and collaborative planning, the authority to forge meaningful relationships with local delivery systems, and permission to manage funds from several sources.⁶⁹ (See box 6-B.)

Several coordinating groups have begun by identifying all Federal and State resources or

programs relevant to the coordination process—a sort of interagency matrix—then developing broad policy statements or strategic planning agendas, and creating interagency agreements to carry out specific components of these agendas.

Some States have given teeth to their agreements and plans by enacting State legislation, providing “carrots” such as State incentive grants for certain types of coordination or “sticks” such as State mandates for coordination. From 1986 to 1990, 30 States enacted some form of literacy-specific legislation, in most cases providing State funds or authorizing new State agencies for adult literacy.⁷⁰

As several recent experiences demonstrate, State coordination efforts are fragile creatures, sensitive to changes in political climate, funding, and key staff. Governors’ initiatives are among the most vulnerable. In at least three States—Massachusetts, Michigan, and Mississippi—a major literacy council or initiative was discontinued or downgraded following a change of Governors.⁷¹ Reductions in Federal or State funding can also negatively affect coordination; staff are cut and forced to try to do more with less money, coordinating bodies lose funding or members, and State agencies guard the dollars they have more carefully. There is concern that coordinating bodies not become yet another State agency or service provider, losing their special neutral character and competing with other State or local entities in an already complex field.

Local Coordination

How do local literacy providers respond to multiple Federal, State, local, and private pro-

⁶⁵ Silvanik, *op. cit.*, footnote 24, p. 5. (It is likely that the number has decreased since this survey, with some States disbanding their coordinating bodies due to changes in governors or other circumstances.)

⁶⁶ *Ibid.*

⁶⁷ Alamprese et al., *op. cit.*, footnote 62, p. 51.

⁶⁸ Silvanik, *op. cit.*, footnote 24, p. 5.

⁶⁹ For specific examples of State and local literacy program coordination, see Alamprese et al., *op. cit.*, footnote 62.

⁷⁰ Silvanik, *op. cit.*, footnote 24, p. 9.

⁷¹ For information on the Michigan experience, see Alamprese et al., *op. cit.*, footnote 62, pp. 71-80.

Box 6-B—Coordinating Literacy Funding: New York State's Approach

One of the most difficult aspects of coordinating social services at the State level is finding ways to merge funding from different sources. The New York State Education Department and the Department of Social Services have jointly developed Adult Centers for Comprehensive Education and Support Services (ACCESS) to deal with this problem. The State's 16 ACCESS centers offer integrated services for adults at each location, including adult basic education and general equivalency diploma (GED) education, English as a second language (ESL), occupational training, life-skills instruction, case management, childcare, assessment and counseling, and other support services. To support the initiative, New York integrates funds from several Federal sources—Adult Education Act basic grants and special experimental grants, Perkins vocational education funding, the Job Training Partnership Act 8-percent set-aside, and Job Opportunities and Basic Skills (JOBS) funding—and from several State programs. The State has overcome the obstacle of different eligibility requirements through a series of interagency agreements transferring funds to the Bureau of Continuing Education Field Services under the Education Department. Based on the types of clients and services addressed by each center or site, the bureau then develops a funding package for each ACCESS grant.

For example, the Board of Cooperative Education Services (BOCES) for Dutchess County has been designated as one of the State ACCESS centers. Using a team leadership approach, the program collaborates with 15 State and local agencies, including Social Services, Labor, Vocational and Educational Services for Individuals With Disabilities, and Probation to offer a wide range of comprehensive services. Among the program goals are the creation of a "one-stop shopping" concept providing a welfare education program for JOBS clients, an early childhood program for infants, toddlers, and preschoolers, and a program for multihandicapped adults all under one roof. Many other target populations are served through the ACCESS program as well.

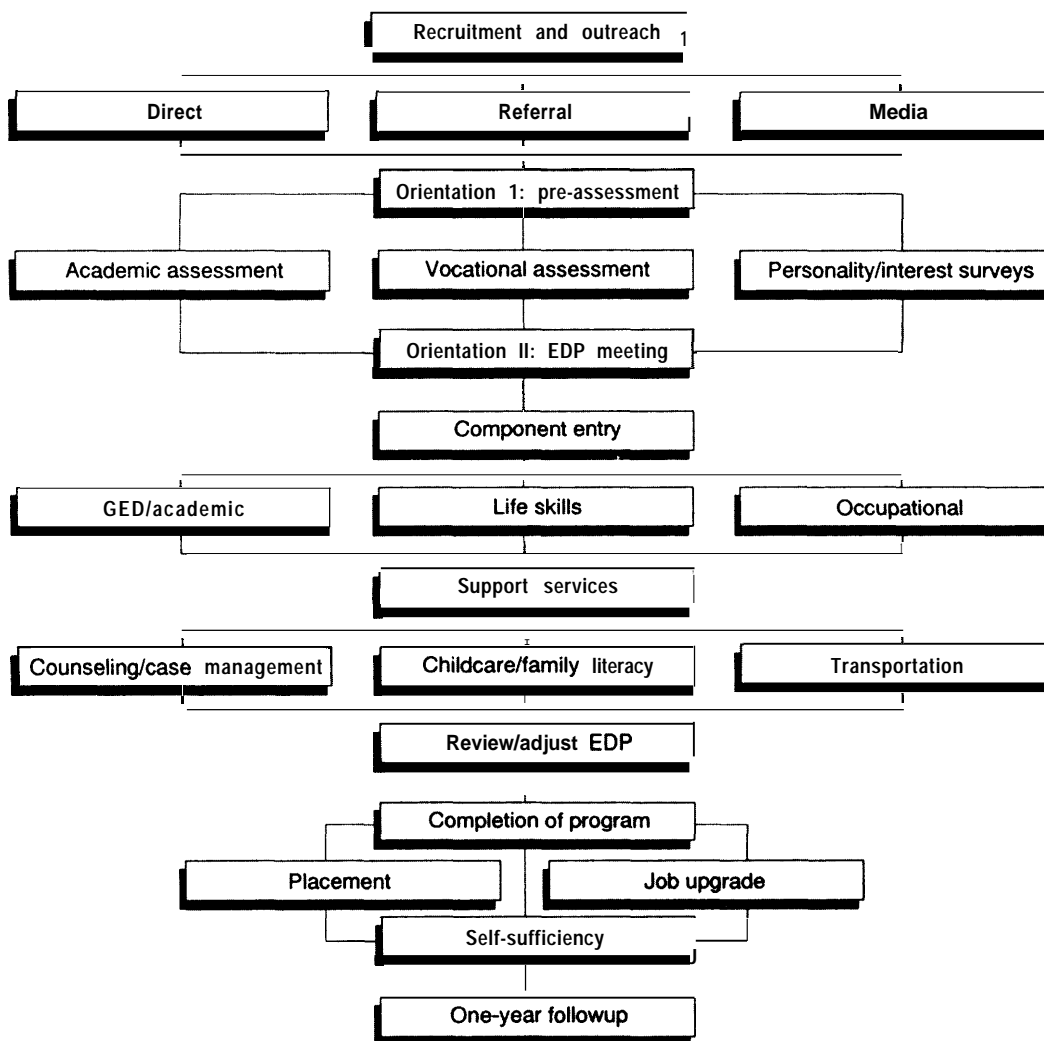
Clients are referred by the participating agencies or recruited via direct mailings. (The figure at right illustrates how a client moves through the system.) Students typically attend 6 hours per day, taking a combination of academic courses (basic skills, ESL, GED, and life management), occupational courses (integrated into the high school occupational curriculum), and family literacy courses. They can take advantage of transportation provided to and from the centers, job development and family counseling, and early childhood education onsite. Additional specialized occupational training courses are offered in the evening in areas such as medical secretary, accounting for computers, cabinetmaking, or blueprint reading to add an area of specialization to the skills clients have gained in the daytime programs.

Among the benefits of comprehensive services, the program lists:

- Expanding fragmented services offered at several locations into a more comprehensive program;
- Increasing the cost-effectiveness of programming by coordinating grants and utilizing existing facilities;
- Increasing collaboration and linkages with business, industry, and human resource agencies;
- In the occupational training program, integrating adults and secondary high school students to the benefit of both populations;
- Providing client-centered support services that remove barriers that in the past prevented clients from entering programs (e.g., transportation and onsite childcare); and
- Planning for the future through the initiation of milestones for program operation that are goal-oriented, and provide direction for meeting the needs of the community.

SOURCES: The University of the State of New York, State Education Department, *Adult Literacy: The Key to Lifelong Learning* (Albany, NY: 1992), p. 26; Gary R. Brady, supervisor of Adult and Continuing Education, BOCES, personal communication, March 1993; and Garrett Murphy, director, Division of Continuing Education Planning and Development, New York State Education Department, personal communication, March 1993.

Services to Clients at the Dutchess County ACCESS Center



KEY: EDP = employability development plan; GED = general equivalency diploma.

Box 6-C—Cambridge's Community Learning Center: Piecing Together Funding¹

The Community Learning Center (CLC) is a public agency under the Cambridge, Massachusetts government. For the last 21 years, it has provided literacy instruction to the city's most disadvantaged adults. With 18 full-time staff, 26 part-time staff, and 80 volunteers, the center runs classes from 9 am to 9:30 pm during the week, serving as many as 700 adults at any given time. The center offers regular adult basic education (ABE) classes, intensive 20-hour per week ABE classes, general equivalency diploma (GED) classes, adult diploma programs, seven levels of English as a second language (ESL), family literacy, and workplace education. Sixty-five percent of the students are in ESL classes; 75 to 80 percent are immigrants.

To support these classes, the center receives funding through 12 different grants and contracts, plus local funding from the city of Cambridge and several private sector funding sources. The grants and contracts come through four different State agencies, with funding from eight Federal programs and two State programs (see table at right).

How does CLC coordinate these complex and multiple funding sources? "Primarily by structuring the program around the student's instructional needs and then figuring out how to pay for it," according to the director.² A mid-level ESL class, for example, might include 15 students and be funded by State ABE, the Job Training Partnership Act (JTPA), State Legalization Impact Assistance Grants (SLIAG), and the Community Development Block Grant program. The center's 20-hour per-week intensive class is supported with a combination of Job Opportunities and Basic Skills (JOBS) funds, JTPA money, ABE funds, and private funding, as well as rehabilitation funds for one disabled student.

Sometimes it is difficult to maintain separate records and to measure student progress using different performance and evaluation standards. In other cases, the director must shift the funding source for an instructor's salary. And in certain situations, such as workplace literacy classes, which are held at the worksite, or Head Start family literacy programs, which involve children and parents, the Federal requirements necessitate a separate class.

With limited classroom space in its own building, CLC also holds classes in public libraries, in settlement houses and public housing projects, and in homeless shelters. CLC is also looking into the possibility of using a computer room in an elementary school after hours; the problem, however, is finding money for staff. To coordinate ancillary services for its large numbers of limited English proficient students, CLC also works with community-based organizations that serve Hispanic and Haitian families.

¹ Information based on OTA site visit, Jan. 28, 1992.

² Mina Reddy, CLC director, personal communication, January 1992.

grams? Some respond by treating each program separately. One study found that local adult education sites did not generally coordinate AEA-funded services with those supported by other adult education and training programs. "For example, a potential student entering . . . as a result of a JTPA recruitment or referral receives JTPA services. . . . No assessment is conducted to

determine if the individual might be better suited to receive Adult Education Act-funded services.' ⁷² According to this same study, Federal accountability and reporting requirements were largely responsible for these practices. "Local programs believed that they needed to operate the programs separately in order to ensure that they were complying fully with all Federal require-

⁷² Mark A. Kutner et al., *Adult Education Programs and Services: A View From Nine Programs* (Washington, DC: Pelavin Associates, Inc., 1990), p. iii.

Cambridge Community Learning Center, Fiscal Year 1992 Funding Sources

Source	Amount	Program	Funding cycle
City of Cambridge local public funds	\$277,500	ABE, ASE, ESL, adult diploma	Annual allotment
Mass Dept of Ed ABE instruction State funds	274,500	ABE, ASE, ESL, volunteer coordination	3-year grant
Mass Dept of Ed SLIAG Federal funds	25,000	ABE, ASE, ESL for immigrants in amnesty program	3-year grant
Mass Dept of Ed ABE for homeless Federal funds	44,000	ABE, ASE, ESL for homeless adults	Two 6-month grants
Mass Dept of Ed Workplace education Federal funds	60,000	ABE, ESL classes with workplace specific curriculum	18-month grant
Employment Resources, Inc. (Metro North SDA) Mass Dept of Ed State funds	18,060	ESL for residents of Metro North area	3-year grant
Employment Resources, Inc. Mass Dept of Public Welfare JTPA and JOBS Federal program funds	58,225	Intensive ABE for AFDC recipients and other low-income adults resid- ing in Metro North	1-year contract
Economic Development Industry Corp. (Boston SDA) Mass Dept of Public Welfare JOBS Federal program funds	37,494	Intensive ABE for welfare reci- pients in Boston	1-year contract
City of Cambridge Community Development Block Grant Federal funds	15,000	ESL for Cambridge residents	1-year grant
Massachusetts Rehabilitation Commission State vocational rehabilitation funds	2,100	Intensive ABE for one learning disabled student	Two 6-month contracts
Cambridge Head Start Federal funds	9,391	ESL, ABE, and GED for Head Start parents	1-year grant
The Cambridge Hospital local funds	15,563	Adult diploma program for employees	15-month grant
Neville Manor Nursing Home local funds	12,407	Adult diploma program for employees	8-month grant

KEY: ABE=adult basic education; AFDC=Aid for Families With Dependent Children; ASE=adult secondary education; ESL=English as a second language; GED=general equivalency diploma; JOBS=Job Opportunities and Basic Skills; JTPA=Job Training Partnership Act; Mass Dept of ED=Massachusetts Department of Education; SDA=service delivery area; SLIAG=State Legalization Impact Assistance Grants.



Coordination of literacy services requires leadership at all levels. Houston's Mayor Bob Lanier brought city leaders together and told his Commission on Literacy: "I will do whatever I can to help."

ments''⁷³—even when this degree of separation was not mandated by Federal law.

Other local providers use more creative approaches, such as channeling funds through a single fiscal agent who contracts with other community agencies, or combining funding from different programs to support a single class of learners (see box 6-C). However, coordinating funding from different sources does not necessarily reduce, and may actually increase, recordkeeping, management, and reporting burdens as local programs struggle to leave a clear accountability and audit trail. Technology can reduce some of this burden if agreement can be reached on developing common data elements, definitions, data collection procedures, and reporting formats.

Some Federal programs make local coordination difficult because of their requirements concerning location of classes, student eligibility, or intensity of service. Examples include workplace literacy programs that must be conducted at the job site, family literacy programs with strict eligibility as to the kinds of children and families that can be served, or Job Opportunities and Basic Skills programs requiring 20 hours of instruction per week, an almost impossible schedule for adults working full time.

A FINAL NOTE

As the above issues illustrate, all policies—whether at the Federal, State, or local level—have two interrelated goals: serving more learners with highquality programs that meet their educational goals, and operating programs more efficiently and effectively. The efforts of thousands of dedicated adult literacy volunteers and staff are especially impressive for their persistence in the face of severe constraints. But it is difficult to look at a system that, at best, may serve less than 10 percent of those in need and say it has come far enough. It is impossible to look at a system that has, at best, met the full *literacy* needs of fewer than one in 10 of these learners and say it is successful. The system as it stands cannot be expected to meet the current problems, much less ever increasing demands as the horizons of literacy continue to push forward. New approaches and solutions are required. Technology is increasingly being considered an engine for changing the ways adult learners can be served. This is discussed in greater detail in the next chapters.

⁷³ Ibid.