

STATE PLAN FOR TECHNOLOGY IN ADULT EDUCATION AND LITERACY

Executive Summary

The following **State Plan for Technology in Adult Education and Literacy** resulted from a Special Project of the Texas Education Agency's Division of Adult and Community Education and serves as a follow up to the State Board of Education's adopted policy document *Adult Literacy: A Texas Priority*. The plan contains a set of overarching recommendations as well as specific recommendations relating to seven key areas:

- Access and equity
- Funding
- Fragmentation of infrastructure
- Teacher training and professional development
- Educational applications
- Standards
- Collaborations

Watershed Developments

Two key developments serving as background for the plan include HB 2128 and the Internet. The passage of Texas HB 2128 created the Telecommunications Infrastructure Fund (TIF) which will contribute \$1.5 billion over 10 years to develop the technology infrastructure for education and telemedicine. The explosive development of the Internet/World Wide Web affords access to vast information resources such that while in 1992 Web users could tap into only a few websites for information, today people can access millions of web pages of information. Both developments have major implications for adult education and literacy. Uppermost among these is the question of the extent to which the field and the learners it serves will be full participants and partners in the development of the technology infrastructure, or be relegated to a permanent technology underclass.

General Recommendations

The primary general recommendations are threefold: a) develop a strategy to implement the State Plan for Technology in Adult Education and Literacy; b) establish a Texas Adult Literacy and Technology Team to implement the plan and to conduct the ongoing planning necessary in light of the volatile nature of technology development, and c) develop a public relations campaign to communicate with the adult population who would benefit from available technology based literacy and education programs.

Specific Recommendations

The **State Plan for Technology in Adult Education and Literacy** includes specific recommendations in the areas listed below made to the State Legislature, the State Board of Education, the Texas Education Agency, and local adult education and literacy providers.

Highlights of recommendations include:

Access and Equity. Adults estimated to be in need of adult literacy and education services in Texas number above 13 million. These adults must be targeted in the development of the technology infrastructure, equipment, wiring, and distance learning opportunities thus made possible so that these adults and their children are not relegated to a permanent technological underclass. The private sector must realize that undereducated adults constitute a vast potential untapped market for technology and information services.

Funding. Targeting technology infrastructure development funds, that is, monies from TIF towards adult education and literacy programs as well as towards collaborations involving adult education as a full partner can help alleviate the tremendous disparity in funding between adult learners and learners in the K-12 system of education.

Fragmentation of Infrastructure. Technology can play a significant role in mitigating the fragmentation of infrastructure which has long plagued adult education and literacy by virtue of its character as a patchwork of programs and services targeting different segments of the vast population of adults needing such interventions.

Teacher Training and Professional

Development. Just as adult learners represent a large underserved population in terms of availability of literacy and education programs and services, particularly those which are technology based and technology oriented, so too do adult educators represent a population of professionals and volunteers who often have been underserved in terms of professional development opportunities and choices. Technology based professional development opportunities have great potential to assist the further professionalization of the field of adult education.

In addition, recent research indicates that in the understandable rush to take advantage of the educational potential of technology, too little in the way of time and money has been directed at training teachers in the effective use of technology for well defined educational purposes. Adult education and literacy cannot afford similar neglect of training for its professional educators.

Educational Applications, Standards, and Collaborations.

Two overriding considerations surround the use of technology for educational applications. These include the need for applications which support engaged learning rather than passive approximations of learning and the need to have clearly defined learning purposes drive the use of technology rather than have technology drive what happens in learning settings. Related to the latter scenario is the need to develop standards for the use of instructional technology in adult education and literacy programs. Such standards should be on a par with both K-12 and national professional standards for effective use of educational technology.

In incorporating educational technology into adult education and literacy, adult education professionals should collaborate with K-12 professionals, educational technology experts and providers, literacy and education services providers from all sectors, employers, policy makers, and other stakeholders with an interest in facilitating the move toward effective and efficient technology use in education and training.

The current emphasis on infusing technology into education brought about by a combination of market forces as well as national and state technology policy developments in the form of the National Telecommunications Act and the

Telecommunications Infrastructure Fund, respectively, represent not to be missed opportunities for adult education. Now is the time to join the entire education community and its partners, business and local communities, to usher in a new era of access to technology based education and information resources for a vast population of heretofore largely underserved adult learners.

The Need for a Texas Adult Education and Literacy

Technology Team. If the promise of information age technology for adult education and literacy programs is to be realized, it will take ongoing work focused on this goal. Thus, it is incumbent that a commitment be made to establishing a group representing all stakeholders whose central mission is to develop the strategy for implementing this plan and to do the ongoing planning necessary to stay abreast of the rapid developments which are characteristic of technological applications.

Introduction: Purpose and Objectives

Recognizing the need to develop a long range plan for technology in adult education and literacy, the Texas Education Agency's Division of Adult and Community Education funded a special project, Adult Education and Literacy New Technologies. The document which follows represents the long range plan. The plan includes attention to the development of state and local service delivery models for the use of technology in comprehensive adult education and literacy programming, including financing technology

usage; b) development of models for delivery of high quality professional development; and c) the potential for interagency cooperation, including business, in technology planning and use.

In order to identify information and issues to support the development of the state plan and

its recommendations, four major sources of data were used:

1. a survey of innovative technology models;
2. a literature search;
3. collaborative discussions in the form of focus groups providing input from service providers and other agencies and entities which also serve the adult education client; and
4. the Texas Adult Education and Literacy New Technologies Conference Technology Summit which brought together voices from adult education, communities, and business.

These four sources of issues, information, and insight constituted a multi-pronged approach, as specified by project objectives, to the development of the state plan for technology in adult education and literacy.

The Innovative Technology Models Survey

The Innovative Technology Models Survey was designed to examine in combination state-of-

the-art use of technology in adult education and literacy as well as existing technology systems used in the provision for adult education services in Texas. In Texas the problem

of low literacy exists on a large scale reflective of demographics and related features of a state of its size. Technology represents an avenue of innovation to more effectively and efficiently meet literacy and related needs. Thus, the Innovative Technology Models Survey sought to find out what technology is being used and how, the specific reasons why programs were initiated, and the nature of existing collaborations in technology use. Using telephone interviews and surveys which were mailed, distributed at two state conferences, and posted on the Adult Literacy and New Technologies Web site, the survey

reached literacy providers throughout Texas including 1) state and federally funded programs; 2) library literacy programs; 3) JTPA (Job Training and Partnership Act) providers; 4) state corrections education; 5) affiliates of LVA (Literacy Volunteers of America) and Laubach; 6) family literacy programs; 7) community action programs; and 8)

Tech-Prep programs.

The survey's major findings related to technology use indicated that programs use technology for a) administration, b) staff development, and c) providing educational services to adult students. Types of technology included a range: a) videos and video series, including student-developed videos; b) videoconferencing primarily for professional development, and c) computer based instruction (CBI). **(See Appendix A for the complete survey report.)**

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Major conclusions from the survey include the observation that innovative technology models while they do exist are few in number. The limited number which do exist most typically include collaboration, suggesting that pooling of resources represents not only a viable but essential basis for implementation of technology in adult education.. Lessons learned from the survey, while often specific to particular programs, include the following:

1. communication, community building, and publicity are keys;
2. funding availability impacts the extent of innovation;
3. the need for staff training, including cross-training, assumes even greater importance in the context of technology use;
4. sufficient time must be allowed for technology implementation to occur; and
5. appropriate coordination and technical support must be high priorities.

The Literature Search

To examine the breadth and depth of issues in the use of technology in adult education and

literacy a literature search was conducted. In the process of the literature review, the following eight (8) distinct but overlapping domains emerged:

1. the need for literacy and technology use standards;
2. taking adult learner characteristics, including needs of special populations, into account in technology use;
3. literacy education and technology policy, programs, and resources, including ABE, ASE, and ESL programs encompassing corrections, community based, and workplace settings and issues;
4. technology use and innovation in adult literacy education, including program

- administration and service provision;
5. technology use in professional development;
 6. research using technology;
 7. limitations of technology; and
 8. future trends regarding technology use in adult literacy education.

(See Appendix B for the complete annotated bibliography resulting from the Literature Review.)

Collaborative Discussions: Stakeholder Focus Groups

A series of 11 Stakeholder Focus Groups were conducted for the Adult Education and Literacy New Technologies Project. A central aim was to receive input on adult education

and training needs and potential solutions, particularly those based on technology and collaboration, from stakeholders which included a) adult literacy and education providers, b) business leaders, c) local community action program providers, and d) federal and state

agencies serving adult education and literacy clients' related needs, such as job training. Participants were invited to take part on the basis of the target populations they served being from selected rural communities, of their interest in the economic health of both literacy program participants and local business, and of their knowledge about the community and its resources.

A protocol was developed for the focus groups data gathering and analysis. Focus group members provided insights into linking adult students and literacy instruction to technology, technology needs in the community, technology access and resources in the community, and collaboration potential among community stakeholders serving adult students. The perspectives of the focus groups were added to the other sources of information and issues in making the recommendations presented in the Adult Education and Literacy New Technologies Project. **(See Appendix C for the full report on Stakeholder Focus Groups.)**

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The Technology Summit Conference Panel

As a culmination of the Texas Adult Literacy and New Technologies Conference, a Summit

Panel was convened to offer perspectives from business and industry; research and development centers for technology, education, and community programs; the Texas Education Agency, and workforce development. Panel members' opening position statements served as the catalyst for dialogue with the Summit audience which included adult education service providers, policy makers, researchers, leading practitioners, and business and industry. Emerging from the Summit discussion were the following six (6) categories of issues and concerns:

1. access and equity, including special populations,
2. funding,
3. teacher training and professional development,
4. educational applications,
5. standards, and
6. collaborations: communities, individuals, business, and institutions.

(See Appendix D for the full transcript of the Technology Summit Conference Panel of the Texas Adult Literacy and New Technologies

Conference.)

From Perspectives into Plan

The following State Plan for Technology Use in Adult Literacy and Education was developed based on the data and issues which emerged and crystallized from the four sources of information and issues employed in the Adult Education and Literacy New Technologies Project, as described above, i.e., 1) a survey of innovative technology models; 2) a literature search; 3) collaborative discussions in the form of focus groups providing input from service providers and other agencies and entities which also serve the adult education client; and 4) the Texas Adult Education and Literacy New Technologies Conference Technology Summit which brought together voices from adult education, communities, and business. These sources, overlapping and summarizing as they do the issues prominent in the arena of technology use in adult literacy education, served as a framework for the plan document which follows.

Following a discussion of major issues are recommendations specific to each of these concerns. The plan ends with a general set of overarching recommendations related to the major objectives of the project: a) development of state and local service delivery models for the use of technology in comprehensive adult education and literacy programming, including financing technology usage, b) development of models for delivery of high quality professional development, and c) the potential for collaboration across agencies, including business in technology planning and use.

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Background: The Promise of Technology

Information technology holds promise for transforming adult education and literacy programs and services. While some urge cautious optimism based on unfulfilled claims about earlier technologies, increasingly, educators and other partners in adult programs believe as stated by the U.S. Congress Office of Technology Assessment (OTA) (1993) that "**Today's technology offers enormous potential for substantially changing the field of adult literacy.** It could provide an alternative to the labor-intensive,

tutorial-based teaching that makes up the bulk of today's literacy training" (p.

14). However, despite a wide array of available information technologies, including multi-media

technologies with speech, video, and graphics; computer-assisted instruction; hand-held electronics, such as pocket language translators; electronic networks; close captioning as a standard feature on broadcast or cable television; and interactive telecommunications networks, OTA asserted that "the full range of capabilities has hardly been touched [and] **that technology is not a central consideration for most literacy programs**"(p.15).

In order to take full advantage of the promise of technology, a coherent policy direction must be articulated for the use of technology in adult education and literacy. However, to move discussion forward about the application of technology in adult learning, a working definition of technology as used in this report must also be articulated.

Technology: A Working Definition

A variety of information age technologies continues to evolve and proliferate. These

include:

Compact discs and CD-ROMS. Hypertext. The Internet. Videodiscs.

Microcomputer-based laboratories. Virtual reality. Local and wide area networks.

Instructional software. Macs, PCs, laptops, notebooks. Educational television.

Voice mail and e-mail. Satellite communication. VCRs. Cable TV. Interactive

video. (Jones, Valdez, Nowakowski, & Rasmussen, 1995, p. 1)

Information age technologies can be contrasted with industrial age technologies, tools which have become such a familiar part of the landscape that they are invisible (Cite NASSP article, 1996). These older and taken-for-granted technologies include pencil and paper, the blackboard and eraser, and even the overhead projector and transparencies.

For the most part, examples of industrial age technology are also associated with a

factory

or industrial model of learning viewed as the transmission of information from the expert or

teacher to the novice or student. Information age technologies can also be used in service of the factory or transmission model of passive learning. This use occurs for instance in

computer assisted instruction whenever it is no more than electronic drill on isolated bits of

knowledge. It also occurs whenever higher end technologies such as two-way interactive television are used for traditional lecture style teaching with minimal active involvement of

students in the learning process.

However, for purposes of this report, and unless otherwise indicated, the term *technology* is used to refer to information age technologies which lend themselves and are used to support *engaged learning*.

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Teacher Training and Professional Development

It is an often noted irony within adult literacy efforts that primarily because of severe funding and infrastructure limitations those who are least professionally prepared for working with adults are expected to help learners with the greatest educational needs. While many adult educators in Texas hold master's and other advanced degrees, the majority meet only minimum requirements for the field. Instructors are required to hold only a bachelor's degree. Degrees in education or adult education are not required. Many adult education instructors are certified teachers. However, this certification is almost never for adult education.

Presently, adult education teaching staff are required to attend at least 12 hours of staff development annually. In addition to these 12 hours, persons with no valid Texas teaching

certificate must attend 12 additional hours of inservice training annually until these individuals have either completed six semester hours of adult education college credit courses or attained two years of adult education teaching experience. The Texas adult education program places a high emphasis on the quality of teacher preparation and thus

provides several hundred workshops and a number of institutes for administrators and teachers annually. However, technology can be used to support more efficient and effective professional development for practitioners whose needs and interests can vary considerably given the wide range of differences in adult education background of educators in the field.

Following a pattern that holds true for the nation, adult literacy in Texas is characterized by

a workforce of whom the majority of paid personnel are part-time. There is also heavy reliance on unpaid volunteers who are expected to carry a large burden of instruction. While dedication and caring are often hallmarks of the volunteer cadre in adult education which includes creative and gifted teachers, many come to the field with little of the grounding necessary for effective teaching.

Many part-time adult literacy instructors have other full time jobs teaching in K-12. Because compensation levels tend to be low and opportunities for advancement few or nonexistent, a high turnover rate continues among adult literacy and education instructors.

One example of the compensation and professional preparation problem is that there are seldom salary increases for adult educators who accumulate graduate credit or indeed graduate degrees in adult education. In contrast to the situation at the K-12 level, there is a

lack of nationwide agreement on what constitutes the proficiencies and level of education necessary for effective performance as an adult literacy and education instructor or administrator. Adult literacy does not have the well-developed infrastructure of the K-12 system for initial teacher preparation or ongoing professional development.

Lack of sufficient funding exacerbates current difficulties in developing and maintaining the

highest quality teaching force in adult education and literacy. Even though the National Literacy Act of 1991 caused Texas, under Section 353 of the Adult Education Act, to increase training and resource development from 10 to 15 percent, this level of funding is not enough to support the institutional infrastructure needed for adequate professional preparation and development of adult literacy educators.

As recommended in the report of the U.S. Office of Technology Assessment (1993), a multipronged approach to teacher training and professional development is needed whereby: a) continuing training for adult literacy educators is provided, b) curricula are developed and graduate level programs, in adult literacy programs in adult literacy are established, c) more rigorous standards and certification requirements are established, d) strategies are employed to recruit and retain highly qualified personnel to teach and operate

adult education programs. The professional development of teachers, administrators, and volunteers must be strengthened if the system of adult education is to improve.

Technology resources must be used to support not only professional development but also

the professionalization which the adult education needs in order to increase its viability as a

field.

The SBOE Task Force on Adult Literacy noted that professionalization refers to the

movement of any field towards some standards of educational preparation and competency

(Shanahan, Mehan, & Mogge, 1994 as cited by SBOE Report: Adult Literacy: A Texas Priority, 1995). The report further stated that professionalization is critical if adult literacy

education is to become a full-fledged field and if practice is to improve significantly.

Professionalization includes

- the need for flexible but standards based educational credentials,
- reduction of barriers to professionalization such as low pay,
- greater opportunities for full-time employment and pay commensurate with training and experience,
- diminishing frequent geographical and resultant professional isolation, 19
- increased funding and program resources relative to number of adults needing education and literacy services, and
- professional development which can be individual and collaborative, customized to meet the needs and respond to the questions and issues of the diverse workforce which constitutes adult educators.

Technology can provide an effective means for addressing these issues and overcoming current barriers to professionalization of the field.

Recommendations Regarding Teacher Training and Professional Development

For the State Legislature: 20

professionally and who have traditionally been underserved when it comes to an infrastructure supporting professional development.

For the State Board of Education:

Develop policies which provide for equitable support for the professionalization of the field of adult education and promote the use of technology in this endeavor.

For the Texas Education Agency:

Provide technical assistance regarding technology based and technology oriented professional development for adult educators.

For Local Adult Education and Literacy Providers:

Engage in dialogue concerning and plans for an appropriate system for the professionalization for adult educators supported by technology.

Educational Applications

In educational applications, technology should be the medium for instruction when it is the

most effective means of matching the needs of the student, the content, and the instructional setting.

When educational technology meets the needs of the student population, curriculum and materials should be available in formats appropriate for use with technology

When educational technology is the best medium and it meets the learning needs of the student population, instructional sites should be fully equipped and teaching staff should be

trained in the use of that technology.

While educational technology continues to be highly underutilized in adult literacy and education programs, the following vignettes describe national and Texas models of

effective technology use in adult education programs.

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Standards

Adult education professionals should begin the process of developing standards for the use

of instructional technology in adult basic education, adult secondary education, GED, ESL,

and literacy programs. This process should begin with an examination of current K-12 technology standards and potentially include the adoption and/or modification of those standards and/or the development of additional standards as needed. Standards should be prepared with input from experts from the content areas, educational technology experts, technology policy planners, and other stakeholders.

Standards for educational technology in adult education programs should address the specific learning needs of the population, including adult students' needs for personal and professional communication, access to information, professional development, and personal enrichment.

Standards for educational technology in adult education programs should, at a minimum, meet national and state standards being set for K-12 programs, university and college programs, and professional education and certification programs. Those standards should be informed by published content standards for English and reading (Standards for English

Language Arts, a project of International Reading Association and National Council of teachers of English) and for mathematics (Standards for Mathematics, a project of National

Council of Teachers of Mathematics), and other national standards projects appropriate for the adult education population.

Collaborations: Communities, Individuals, Business, and Institutions

In incorporating educational technology into adult education programs, adult education professionals should collaborate with K-12 professionals, educational technology experts, service providers, employers, stakeholders, policy makers, and other entities with an interest in facilitating the efficient and successful transition to the appropriate uses of technology in education. That collaboration should ensure that all participants have an equal opportunity to learn to use technology as well as equal access to technology.

Collaborating entities should determine the local need/demand for an adult population trained to use technology for academic, social, commercial, political, and personal communication and information access. Collaborating entities should develop a system for

reviewing the local or regional educational technology available to all students. The 24 cooperative plan should include equipment purchase and service as well as providing that equipment in conveniently located sites that will allow students maximum hours of access.

Finally, collaborating entities should develop a system for reviewing the local or regional educational plan and revising goals and strategies as the needs of the population change and

as technology advances.

Recommendations for Educational Applications, Standards, and Collaborations.

For the State Legislature

Fund adult education sufficiently to provide:

- educational technology hardware, educational materials, and technology training for all adult education instructional and administrative staff,
- ongoing research in the form of a state of the arts study into the standards in the use of technology in adult education and literacy programs,
- purchase and maintenance of educational technology equipment as addressed by standards for the use of educational technology in adult education programs,
- the cost of collaborations among educators, technology experts, students, service providers, employers, policy makers, and other interested entities,
- the cost of investigating the best practices in the use of technology in adult education.

For the State Board of Education and the Texas Education Agency

Incorporate the implementation of educational technology for adult education into the Texas

Education Agency's Long Range Plan and provide to adult education with access to the technology developed for the K-12 system.

Advocate for the acquisition of appropriate educational technology for adult education and literacy programs.

Articulate the need for standards in educational technology application in adult education programs.

Develop a network of K-12, Adult education and literacy, and family literacy program providers, along with agencies that work with JOBS clients, who would facilitate communication about the use of educational technology in programs for adult learners.

Assist in developing a network of K-12, adult education, adult literacy, school-to-work education, and family literacy program providers and other stakeholders who would facilitate communication about and collaboration in the uses of educational technology in programs administered by TEA.

Facilitate the development of procedures for researching, purchasing, and maintaining the most appropriate and current educational technology for all education programs serving adult learners.

For the Technology Infrastructure Fund Board

Address the needs of adult learners in the TIF Long Range Plan for Technology (check name of TIF draft document) as they relate to:

- assessment of the technology needs in educational programs for the full spectrum of adult learners from basic literacy through adult secondary education, 24 cooperative plan should include equipment purchase and service as well as providing that equipment in conveniently located sites that will allow students maximum hours of access.

Finally, collaborating entities should develop a system for reviewing the local or regional educational plan and revising goals and strategies as the needs of the population change and

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- assessment of the technology needs in educational programs for the full spectrum of adult learners from basic literacy through adult secondary education, 25
- assessment of the technology training needs of adult education instructors and program administrators,
- assessment of the technology training needs of adult education students who are preparing for employment in a workforce that requires an increasingly computer-literate worker,
- funding for current technology for instruction of adult learners in educational and workforce training programs,
- funding for current technology for instruction of adult education instructors and administrators,

- funding for maintenance of technology purchased for adult education programs and for continued needs for upgrading instructional technology.

Address the need for standards in all technology applications, including educational uses of

technology, by:

- initiating a needs assessment of standards for technology use,
- promoting an ongoing discussion of technology standards among participants and stakeholders,
- taking a leadership role in establishing standards for technology use in Texas.

Provide leadership by facilitating collaborative efforts among interested entities in the following ways:

- create an advisory committee made up of some or all of the following entities with the mandate to begin public discussion about the use of educational technology in education (educators, technology experts, students, service providers, employers, policy makers, and other interested stakeholders),
- provide the structure for the advisory committee to hold public forums on the topic of collaborating in the acquisition of technology for public access.

For Higher Education

Determine the technology needs of professionals who serve adult students in the full spectrum of programs available with regard to matching technology and instruction
Examine current technology training programs for K-12 professionals, and incorporate additional components to address the needs of adult learners,

Develop a specific, well-crafted pre- and in-service curriculum for training adult education

professionals in technology use.

Provide to adult education access to the technology resources available through post-secondary institutions.

Allocate time and resources for research into the need for and development of standards in

the area of educational technology in general.

Serve in a leadership role in articulating standards for educational technology use to future

adult educators (as well as K-12 teachers) by:

- becoming and remaining a source of information about current standards in the field,
- serving as an information dissemination source on the need for changes in standards as technology and instructional software advances, 26
- committing research funds for developing and evaluating models of collaboration in technology planning and implementation.

Serve in a leadership capacity by training educators in models of and procedures for establishing and maintaining collaborative partnerships among entities who have a stake in

the use of technology in education.

Develop a relationship with junior, community, and technical colleges to provide the standards, facilities, curriculum, training, and implementation for educational technology in

programs for adult education.

For Local Adult Education and Literacy Service Providers

Determine local technology needs of adult students, adult education instructors, and program administrators based on input from employers, stakeholders, students, instructors, and administrators.

Identify available technology resources through school districts, colleges, cable networks, businesses, education service centers, and seek access to these resources.

Develop procedures for researching, purchasing, and maintaining the most appropriate and

current educational hardware technology for all education programs serving adult learners.

Advocate for educational technology use in adult education programs by:

- assessing their own needs by engaging teachers and learners in discussions of ways to make technology accessible and meaningful,
- becoming informed users of technology in order to contribute to the discussion about standards for educational technology,
- becoming familiar and remaining conversant with current standards for the educational uses of technology,
- serving as an active participant in public forums on standards for the use of technology in education.

Advocate for collaboration in the purchase and use of educational technology by:

- initiating a local and/or regional search for individuals and groups who have a stake in infusing technology into adult education and literacy programs,
- engage interested individuals and groups in an ongoing discussion about collaborating on technology projects for adult students,
- determining which models of technology collaboration are effective and efficient for the

local/regional population and making the successes of those collaborative models known.

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General Recommendations

In addition to the specific recommendations to particular entities and agencies, focused around the seven issues which emerged as key areas of concern for all stakeholders in adult

literacy and education, three overarching recommendations are also being made:

- **develop a strategy to implement the State Plan for Technology in Adult Education and Literacy;**
- **develop a public relations campaign to communicate with the adult population who would benefit from available technology-based literacy and education programs; and**
- **establish a Texas Adult Literacy and Technology Team to implement the plan and to conduct the ongoing planning necessary in light of the volatile nature of technology development affecting education.**