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ABSTRACT

A recent survey of state directors of adult education reveals that 31 states include distance learning as either a current initiative, or in a future plan, to provide education delivery to adult learners. Distance learning modes employ technology in four categories: computer, video, audiographic, and telephone. Distance learning for adult learners is as effective as traditional classroom instruction when methods are appropriate to course objectives, interaction among students is built into the program, and there is ongoing teacher-student feedback through chats, bulletin boards, private mail, or a combination. Most successful distance learners are highly motivated and self-disciplined, know when to call upon instructors for assistance, and possess a serious commitment to learning, and a willingness to follow through. Policies to put a new infrastructure for distance learning into place need to address the following areas: (1) allocation of resources for developing and implementing distance education; (2) increased technology needs; (3) adjusted reporting structures for cost reimbursement and measuring student "attendance"; (4) effective models and program quality; (5) intensive training of staff; and (6) student recruitment. California and Delaware offer distance learning on a statewide level. California offers distance learning through several state Department of Education projects, including California Adult Education Distance Learning Project and the Outreach and Technical Assistance Network; Delaware offers distance learning through its virtual adult high school, Diploma-at-a-Distance. (Contains 23 references.) (YLB)

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National Institute for Literacy

State Policy Update

How States are Implementing Distance Education for Adult Learners

- February 14, 2000 -

A recent survey of state directors of adult education reveals that state leaders are increasingly viewing distance learning as a delivery mechanism that can reach adults who are unable to attend traditional adult education classes due to work or family commitments, lack of transportation, and other obligations. It can also help bring adult education to the millions of adults who are not currently involved in an adult education program.

Distance learning is a way to take advantage of new technology and to educate adult learners in its use. Nationally, less than 10 percent of adults without high school diplomas are enrolled in adult basic education programs. Thousands of these adults are being left behind in today's technologically based economy. Despite a significant growth in computer ownership and use among Americans, those without a high school diploma are much less likely to own a computer or have access to one at work or school. Thirty-six percent of all US households have personal computers, and adults with a high school diploma or GED are more than twice as likely to own a computer than those without a high school diploma (25.7% versus 10.9%).[1] *Distance learning can help bridge this "digital divide"—the gap between those who have access to computers and skills to use them, and those who do not.*

This State Policy Update *explains several of the major policy issues involved in offering distance learning, reviews the current status of state implementation of distance programs, and highlights the efforts of two states, California and Delaware, that offer distance learning on a statewide level.*

Distance learning is relatively new to adult education and literacy. As a result, there are only a few models and states that have well established distance learning programs. These states have incorporated changes in policy and

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practice to ensure effective distance learning delivery. The most pervasive use has been in postsecondary education, where effective models have been developed and policies instituted. Elements of postsecondary models and practices are being incorporated into distance education for adults and literacy programs.

Distance learning—instruction mediated by print or some form of technology that takes place when the teacher and learner are separated by space and/or time—is an emerging approach in adult education and literacy that opens learning opportunities to adults, enabling them to learn at a convenient place and time and in new ways.[2] Distance delivery takes many forms, from a stand-alone instructional program on television or online, to a set of videotapes that supplement or extend classroom learning. Adults can learn anytime, anywhere, and at their own pace by using electronic technologies or prepared print packets, and state leaders are recognizing distance learning as an effective method to make learning accessible to hard-to-reach populations.

The state director of adult education for every state and territory responded to a recent national survey revealing that literacy leaders view distance learning as a means of reaching adult learners unable to participate in classroom-based programs on a regular basis. The survey found that almost half the state directors of adult education perceive distance delivery as a means to help adult learners meet life demands, especially learners who are faced with work and family responsibilities, or who live in rural areas, and who cannot participate in traditional adult education programs.

The survey was conducted by Fran Tracy-Mumford, Delaware's Director of Adult Education, while she was a National Institute for Literacy Leadership Fellow from 1997 to 1998. Data were updated in 1999 through review of state plans for adult education and interviews with state directors. Dr. Tracy-Mumford examined the current state-level use, projected use, and issues in distance learning in adult education and literacy by surveying the state directors of adult education in all 50 states, the District of Columbia, and US territories. Her survey found that 31 states include distance learning as a current initiative or in a future plan to provide education delivery to adult learners.

What is Distance Learning?

There are several popularly used definitions of distance learning or distance education (the terms will be used interchangeably throughout this *Update*). While distance learning takes a wide variety of forms, all distance learning is characterized by:

- Separation of place and/or time between the learner and the instructor, among learners, and/or between learners and learning resources.
- Interaction between the learner and the instructor, among learners, and/or between learners and resources conducted through one or more media.

The learning environment for a majority of adult education and literacy students is time and place specific. Learning using a traditional classroom format has certain restrictions, such as time, physical distance from home or place of employment, or space limitations, and as a result, many adults cannot participate in adult education programs. Opening access and learning time requires changing ideas and expectations about the learning environment. The Council of Chief State School Officers[3] urges educational providers to find new approaches to learning to "prepare all Americans for the 21st century workplace." Distance learning is one such approach.

Distance Learning

Distance learning is the delivery of education or training through electronically mediated instruction including:

- **Satellite**
- **Video**
- **Audio Graphic**
- **Computer**
- **Multimedia Technology.**

Distance education refers to teaching and learning situations in which the instructor and the learner or learners are geographically separated and therefore rely on electronic devices and print materials for instructional delivery.

Source: The United States Distance Learning Association

Instruction using technology is a key component of distance learning. Learning opportunities for adults to access education anytime, anywhere through synchronous (real time) and asynchronous (delayed time between interactions) delivery are beginning to appear across the country. Most often delivery in audio and video-based instruction is synchronous and videotaped and computer based courses are asynchronous.[4]

How is Distance Education Delivered?

According to the 1997 National Center for Education Statistics survey *Distance Learning in Higher Education Institutions*, half of all distance learning opportunities (including higher education, adult education, and other programs) are directed to students in their homes. The other half takes place at a program or in the workplace.

Distance learning delivery modes employ technology in four categories:

- *Computer Technology*, such as the Internet. According to Dr. Tracy-Mumford's study, 36 states foresee using this technology, and one expects to use CD-ROM.
- *Video Technology*, such as videoconferencing, cable, satellite linkage, and videotapes. Forty-eight states foresee using television technology, 31 expect to use videotapes, and three expect to use compressed video (a two-way video that can be sent via telephone lines).

States with Distance Learning Delivery in Adult Education and Literacy

State/Territory	Field Testing	Implementing
Alaska	•	•
California	•	•
Colorado		•
Connecticut		•
Delaware		•
Florida	•	•
Georgia		•
Idaho		•
Illinois		•
Indiana	•	
Kentucky	•	•
Massachusetts	•	
Minnesota	•	
Mississippi		•
Missouri	•	
Nebraska		•
New Jersey	•	•
New York		•
North Carolina	•	•
North Dakota		•
Ohio	•	
Oregon	•	•
Pennsylvania	•	
South Carolina	•	
Utah		•
Vermont		•
Virginia	•	
Washington		•
West Virginia	•	
Wyoming	•	
Northern Mariana Islands	•	•

Source: *Survey of State Directors of Adult Education.* Tracy-Mumford, 1998.

- *Audiographic Technology*, such as radio and audiotapes. Four states expect to use the radio, and six expect to use audiotapes.
- *Telephone Technology*, such as teleconferencing. Four states expect to use the telephone as part of their primary delivery mode.

Researchers have consistently found that instructional television can motivate students, and stimulate an interest in the learning process.[5] Distance learning for adult education and literacy students has been predominantly delivered in the United States via one-way television. The most familiar distance delivery program is the Kentucky Educational Television (KET) program, GED on TV, which consists of numerous television programs and GED workbook lessons. GED on TV is supported by state directors of adult education in at least 35 states.

Crossroads Café, a video and print curriculum series designed for English as a Second Language (ESL) learners is also a popular national level program, appearing in more than 20 states. Developed by Intelecom, this multi-state collaboration is a video and workbook series designed for learners who are literate in their own language, but whose English skills range from beginning through intermediate levels.

LitLearner

Presented by PBS and the University of Pennsylvania, LitLearner and KET is an online collection of resources for adult learners, that is connected to video and print materials of LiteracyLink. These materials provide comprehensive instruction in Workplace Essential Skills (WES), the workplace readiness series of LiteracyLink.

Basic skills models have been initiated by nonprofits such as PBS, Intelecom, KET, the Adult Literacy Media Alliance (ALMA), universities, and state departments of education. (See recommended resources for how to contact the above programs.) Virtual high schools, or cyberhighs for adults, are emerging across the country, and are currently offered in at least seven states: Colorado, Delaware, Florida, Minnesota, Missouri, Nebraska, and Vermont.

The Tracy-Mumford survey found that 23 percent of the state directors of adult education believe that distance learning will be a stand-alone model in their state, and 17 percent plan to use it solely as a complement to classroom instruction, to extend learning that occurs in a classroom setting. Sixty percent of the states will implement both models.

Virginia, Ohio, and Florida are implementing distance delivery as an opportunity to decrease waiting lists. Virginia's goal is to provide access through classroom or virtual connection to every adult in need of basic skills or English language instruction. Massachusetts has created a statewide initiative designed to encourage distance delivery as a complement to classroom learning.

Target Populations of States Planning to Offer Distance Learning

Target Population	Number of States and Territories
ABE	33
ESL	32
GED	41
AHS	13
Prison	14

Source: *Tracy-Mumford Survey*, 1998.

Funding Sources

Federal resources are helping to build the capacity of the education community to make effective use of the information superhighway for instruction. The Technology Opportunities Program (formerly the Telecommunications and Information Infrastructure Assistance Program, or TIIAP), a US Department of Commerce program designed to set up an infrastructure of technology to offer instruction, provides federal resources. Star Schools, a US Department of Education funded network of school districts, state departments of education, telecommunications entities, universities, regional service centers, and others provides funds for capacity building. In addition, special state technology funding is spurring the development of distance learning in adult education and literacy.

Student Success using Distance Learning

Research suggests that distance learning for adult learners is as effective as traditional classroom instruction when the following conditions exist:

- methods are appropriate to course objectives
- interaction among students is built into the program
- there is ongoing teacher-student feedback through chats, bulletin boards, private mail, or a combination of these. [6]

Evaluations of all distance learners suggest that achievement on various tests administered by instructors tends to be higher for distant as opposed to traditional students.[7] This could be largely attributed to the fact that most distance learners possess characteristics that influence their success in the learning experience. Most distance learners:

- are highly motivated and self-disciplined
- know when to call upon instructors for assistance
- possess a serious commitment to learning and willingness to follow through.

Policy Considerations

Distance learning reverses the social dynamic by bringing education to the student, rather than sending the student to education. While distance delivery may appear to address many of the impediments adult learners face in traditional programs, such as transportation, program availability, and lack of child care, distance education has its own set of very real challenges for policy consideration. To provide this form of instruction, a new infrastructure is needed that will infuse distance learning into the overall state adult education and literacy program. Putting this infrastructure in place requires policies related to managing, supporting, and instructing learners in a distance format. These policies need to address:

- allocation of resources for developing and implementing distance education
- increased technology needs

- adjusted reporting structures for cost reimbursement and measuring student "attendance"
- effective models and program quality
- intensive training of staff (including effective distance education theory, methods, and strategies and how to support learners)
- student recruitment.

Allocation of Resources

The national survey of state directors of adult education found that 47 states provide state funding for distance learning efforts, though not all provide funding for adult education distance learning. Florida, California and New York provide the most funding for adult education distance learning, at more than one million dollars per state annually.

Implementation of distance education is resource intensive. One indicator of the cost of distance education is the continuously rising costs of television production. Local production in 1962 cost about $165 per 15-minute program. Today, the estimate for high-quality instructional television (ITV) programs is approximately $3,000 per minute.[8] Using federal and state resources to fund distance education initiatives, states are balancing delivery costs with fiscal accountability. While it costs twice as much to develop a distance learning program as a traditional classroom program, the potential of reaching more than double the population offsets initial development costs.

States are developing policies to determine the number of programs needed to

Who Provides Distance Learning?

Provider	Number of States and Territories
Community Colleges	17
School Districts	15
Television Stations	10
Universities	9
Non-profits	5
State Consortiums	3
Prisons	3
Library	2
Private	1
No Service Provided	15

(These numbers reflect duplicate providers in states.)

Source: *Tracy-Mumford Survey*, 1998.

provide televised and online services to their adult learners. Because delivery boundaries change with televised and online delivery, states are targeting development sites by geographic location, specific instructional levels, population groups, or a combination of factors. Delaware targeted the statewide high school population, PBS focused on a national workplace model, ALMA started with learners at the lowest skill level and delivers services over cable, and a consortium of states pooled funding and approached Intelecom to begin development on programming for students with limited English proficiency.

Kansas, Nevada, and Washington found that the cost for ITV access was too expensive for adult education to access. The cost of continued television programming posed a continuing hardship, especially during the broadcasting times most convenient for students. Rhode Island is searching for ways that a small state can address the ongoing commitment of funds for distance learning.

Concerns of State Leaders about Distance Learning

Concerns	Number of States and Territories
Maintaining Human Contact	21
How to Use it for Low Literacy Learners	13
Costs for Start-up and Delivery	13
Distance Learning Research/Models	10
Program Quality	8
Ability to Measure Learner Progress	3

(These numbers reflect duplicate states.)

Source: *Tracy-Mumford Survey*, 1998.

Maine has found it expensive to use the interactive TV delivery system that links all its community colleges and the university. Sustained financial support is needed. New York created special state funding to develop distance programming, enabling it to address the development costs in a research and development mode.

Technology Issues

Keeping Pace with Technology: The rapid pace of development of technologies

that deliver instruction at a distance poses a unique challenge. Gordon Moore, former president of Intel, states that computing power has been doubling every 18 months. This growth often results in a scarcity of current technology available or a mismatch between technology used to develop instruction and technology available to deliver instruction.

Partnering Adult Educators with Technology Specialists: Technology specialists developing distance learning programs may not take into account adult learner needs, or issues of access and cost. Although technology is an integral part of many distance education systems, policy must focus on the instructional needs of the learners as the main issue, rather than technology delivery.

Access to Support of Technology: Technology varies depending upon the type of distance delivery, but virtually all distance learning programs require some kind of technology to deliver instruction. Students must have access to appropriate technology in distance delivery, but technology costs associated with distance learning add to program delivery expenses. Ongoing access costs include Internet access, computer hardware, technical support, and continuous upgrading of hardware and software.

States must ensure there is sufficient technology and knowledge of technology application to support a distance learning system. Texas reports that, while it has a state fiber optic system that has two-way communication, there are still technology obstacles to overcome, such as a scarcity of Internet access at local centers and community based organizations that lack the technology to access the fiber optic system.

Colorado found that major obstacles to the implementation of distance learning were the lack of funds for hardware, lack of knowledge about use of hardware, and limited understanding of the use of technology. Nevada has struggled with the overwhelming array of equipment and level of technical knowledge needed in developing distance learning. Arkansas established the Leaders Project, which is desktop video conferencing, and had a technical advisory committee and computer literacy curriculum that helped the project to be successful.

Scheduling: Washington State, Maine, and the Virgin Islands found that program scheduling and matching content with technology are important, but securing time in students' schedules and coordinating content with instructional technology can be a challenge to arrange.

Materials

Current instructional materials require retrofitting to be used in a distance learning program. Converting to a distance delivery mode, developing study guides, and laying out lessons and assignments are upfront considerations. North Dakota found that materials development for distance delivery is very time consuming. Limited materials for distance delivery is a concern of Pennsylvania's. Several states are waiting for materials to be developed before implementing distance education.

The US Department of Education, Division of Adult Education and Literacy (DAEL) is working with Virginia, Illinois, Florida, California, Massachusetts, New York, and Pennsylvania to develop a family literacy program via videotapes with Intelecom. Following the Crossroads Café model, this development process is working well for the participating states.

Learner Support

Support for learners is a crucial element to successful distance learning experiences. Learner support takes two forms: help with content, and assistance with technology. There are many ways to support learners. Half the states report telephone and online assistance as the main support mechanism they provide or plan to provide. Six states (Alaska, California, Delaware, Georgia, Massachusetts, and West Virginia) provide in-home assistance with technology problems.

Academic Content Support for Distance Learners

Type of Support	Number of States and Territories
Tutorial	28
Hotline	25
Study Guides	19
Advisement/Counseling	17
Peer Counseling	9
On-Site	6

Source: *Tracy-Mumford Survey*, 1998.

Teacher-student interaction and support may be provided asynchronously. Students may email or fax questions to their instructors or fellow students, or post them on electronic bulletin boards, allowing teachers and students to respond at their convenience. Two virtual high school initiatives Minnesota's Mindquest and Nebraska's Project CLASS, operate in this manner.

States Providing Technology Assistance to Learners

Type of Support	Number of States and Territories
Online assistance	12
Telephone Support	20
In-Home Assistance	7
On-Site (at program)	24
Mail	2
Special Equipment (such as loaned computers, etc.)	11

Source: *Tracy-Mumford Survey*, 1998.

Administrative support such as online registration, course syllabi, counseling, advising, tutorials, and study guides is also essential. Thirty-four states anticipate implementing a variety of methods of technical assistance for learners. Students need guidance in reaching their tutors, completing and submitting assignments, and charting their progress.[9] Arkansas developed additional study lessons and has telephone support for Arkansas students studying at home for the GED. Of the states offering distance learning opportunities, many are providing support services in more than one way.

Reporting Structure

Determining student participation and follow up can be difficult unless the program is structured to be able to gather and report this information. A significant policy issue faced by states is how to calculate student contact hours of instruction. The calculation of learning time, whether it is TV airtime or Internet access, needs to be modified for distance delivery reporting. Since students are not physically in a classroom, calculating attendance is a different paradigm.

North Carolina, along with several other states, has found that one of the barriers to providing distance learning is how to credit student contact hours. In Delaware, student contact hours are based on real and estimated hours, since courses are equated to

regular classroom delivery. In many states, policy does not allow for the estimation of student participation and contact hours. Adult education must find a way to fund programs beyond seat time.

The Virgin Islands uses the number of hours students view a program and the number of completed sessions, compared to the number of scheduled programs offered on television. Washington State reports grappling with how to monitor televised program participation and how to count hours of participation and report students' data and achievement. West Virginia looks at the program's ability to follow up with students and to have a manageable number of students. Idaho determines quality by retention of students, access, benefits, satisfaction with the programs, and learner gains. Other states are using measures such as the number of people using the system, number of students meeting goals, and number of completions. It becomes clear that distance learning program providers need to have follow up processes to gather pertinent information for the US Department of Education's National Reporting System.

Effective Models and Program Quality

Currently, distance education models can be found in England, Canada and Australia, but few exist in the United States, especially for beginning level learners. With limited programs serving the adult education and literacy population, policy must focus on the purpose of the program, effective distance learning program elements, and capacity of the provider.

Quality distance learning programs must comply with quality standards in the areas of curriculum and instruction, institutional context, policies, and practices; learner outcomes and evaluation; support services; materials; tools; and financial commitment. The American Council on Education's set of nationally accepted institutional principles and standards for distance learning are designed to insure quality distance education.

Professional Development

Another policy challenge is the new role teachers have in distance learning

instruction, which creates significant professional development needs. Teachers must be knowledgeable in content and trained in effective distance education strategies. They must be at ease with the technology and delivery techniques for distance learning. Teachers also need to know what constitutes a quality distance learning program.

Teachers require support when they are learning about new technology, regardless of their level of classroom experience. States are struggling to provide teachers intensive training in distance education. Connecticut views special training as a main element in the delivery of instruction.

Case Studies: California and Delaware

Several states are providing distance learning opportunities to adult learners, but only a few offer distance education on a statewide basis. What follows is a summary of the statewide efforts of California and Delaware: California offers distance learning through several state department of education projects, and Delaware offers distance learning through its virtual adult high school. Both states provide examples of how distance learning can be offered successfully on a statewide scale.

California

California has several statewide projects funded with US Department of Education, Division of Adult Education and Literacy (DAEL) dollars that provide distance learning to adult basic education students. Recent state legislation permits adult schools to use up to five percent of these state funds to experiment with flexible methods of delivering instruction. Creating innovative distance learning programs has been the main focus of this money.

California's state level distance learning projects include:

- California Adult Education Distance Learning Project (CDLP)
- Outreach and Technical Assistance Network (OTAN).

Created in 1995, CDLP offers new ways to provide instruction and learning services to adult education students in California. CDLP uses communication through computers as a vehicle for student and teacher interaction, in addition to the traditional video and television distance delivery. Sponsored by the state department of education, the goal of CDLP is to help lay the groundwork for a California adult basic education distance learning infrastructure and to expand learner access to adult education services in California. The California State University Institute is the lead agency for the CDLP.

OTAN provides communication linkages, information, and technical assistance to adult education providers. Created in 1989, it is a professional development project designed to provide technical assistance, electronic communication, and access to information for adult education providers in California. OTAN aims to address issues of equal access to communication, information, and training among support providers with the goals of making adult education more equitable and effective.

How Distance Learning Efforts Developed

In the 1980s, California districts offering distance learning were experiencing difficulty in meeting the needs of adult learners and in covering the costs of services. In 1989 the California Department of Education published *Adult Education for the 21st Century: Strategic Plan to Meet California's Long Term Adult Education Needs*, as part of an overarching strategic plan to improve adult education in California. The report included a recommendation that funding mechanisms in adult education should be reviewed and adjusted to encourage use of educational technologies. The recommendation also stated that funding mechanisms needed to be responsive to the diverse needs of educational clients and should encourage the development of alternative instructional methods.

In particular, an implementation paper reported that state funding should allow, and even encourage, flexibility in the timing of learning and the provision of instruction in a wide range of settings and media (e.g., work sites, mobile learning centers, TV courses, modem linked computer assisted instruction). Because of the enthusiastic

response of the field to these recommendations, the California Department of Education, in collaboration with several adult education professional organizations, decided to include a new project within the framework of three major adult education reform bills signed by the governor in 1992.

On July 1, 1993, the initiative became law, allowing adult programs, after approval by the California Department of Education, to use up to five percent of their block entitlement for innovative techniques, nontraditional instructional methods, and new technologies. Up to five percent of individual agency allocations can be utilized for the Funding for Innovation and Performance Projects. The total allocation for adult education in California is roughly half a billion dollars. The law authorizes the Superintendent of Public Instruction to approve plans for adult education innovation and alternative instructional delivery. School districts that apply and are granted approval, may use up to five percent of the district's adult education block grant for nontraditional instructional methods. Reimbursement for instruction through this option may be computed in ways other than seat time, such as fee for service or instructional value added. Proposals for what are referred to as 5% Projects must include a plan and process for program evaluation. By permitting alternatives to seat time, this legislation encouraged flexibility, which allowed districts to focus on distance learning initiatives.

California delivers distance learning through many agencies, most of which are primarily funded with state dollars, though most also receive federal ABE funds. Adult learners can access distance education through community colleges, adult education programs, community-based organizations, libraries, and volunteer literacy programs. The primary distance learning model in California is the "video check out" model, in which a student registers for a course over the phone or online, receives a series of videos and workbooks in the mail, and has some face-to-face contact as well as other support from the instructor. CDLP and OTAN staff report limited evaluation data so far on California distance learning projects.

Future California efforts will include Cyberstep, a three year project, addressing the challenge of creating and distributing multimedia learning materials for the hardest to serve adult learners. Cyberstep is designed to produce high-quality multimedia instructional materials targeted to adults with low literacy levels. The materials will support distance learning in nontraditional settings, including the home and workplace. Cyberstep is funded by the US Department of Education's Office of Vocational and Adult Education, and is a partnership of the California State University Institute, the Sacramento County Office of Education, the Los Angeles Unified School District, ALMA and Aguirre International (a consulting firm with experience in adult education research and minority populations).

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Delaware

The state of Delaware has a statewide virtual high school program, Diploma-At-A-Distance. Piloted in 1997, Diploma-At-A-Distance is serving more than 150 students in 1999-2000. The pilot was federally funded, but with support from the state legislature and other state policymakers, the program is now out of the pilot stage and is fully funded through state dollars, with limited federal funds to supplement specific elements of the program.

Delaware's Diploma-At-A-Distance is a virtual adult high school program, offering a full program of study for high school completion. Diploma-At-A-Distance is part of the state's James H. Groves Adult High School that serves about 3,000 students annually. Diploma-At-A-Distance courses are provided via distance learning through an online, flexible format that allows students to learn at home. Students earn credit by mastering content identical to content studied by students enrolled in any traditional class-based high school program in Delaware.

What is Groves Adult High School?

Delaware's James H. Groves Adult High School is a statewide secondary adult high school, created by the legislature in 1964 to provide employment opportunities for those who left school prior to graduation. It was accredited by Middle States Association of Colleges and Schools in 1984. Groves High School received the US Secretary of Education's Award in 1994.

Diploma-At-A-Distance was developed partly as a result of the over 150,000 adults in Delaware who do not have a high school diploma and do not enroll in adult education classes. In 1995, the Delaware Department of Education surveyed its adult education program regarding learner participation. They found that many adults were unable to attend classes due to personal, job, family, or scheduling conflicts. The survey also revealed that some adults preferred to learn and study more independently. Clearly, distance delivery was a way to reach many of these adults. The Groves Diploma-At-A-Distance program was introduced to ease scheduling conflicts, adapt to alternative learning styles, incorporate new technological opportunities, and reduce the waiting list.

The Delaware Office of Adult Education funded a pilot program using state adult high school funds and 353 Special Projects and Training funds under the Adult Education

Act. Twenty-six students participated during the program's 1997-1998 pilot year. Students ranged in age from 16 to 59, and lived in each of Delaware's counties. Five students graduated with a high school diploma from Diploma-At-A-Distance in the fall of 1998, and three of these students went on to college. Half the remaining class continued in the Diploma-At-A-Distance program, while several others entered more traditional adult education programs. Today, Diploma-At-A-Distance has tripled its enrollment and has a waiting list for those who need to borrow computers to be able to participate.

Format of Diploma-At-A-Distance Courses and Instructional Support

- **Videotape**
- **Computer CD-ROM**
- **Printed materials**
- **Study guides**
- **Internet**
- **Email**
- **Telephone**

Each Diploma-At-A-Distance course meets the state's content standards and requires the same level of proficiency as students in the traditional face-to-face format. The first required class in the program is on computer literacy, during which basic computer skills, searching the Internet, and using email, conferencing software, and automated library services are taught. Midterm and final exams are taken in the presence of a proctor, at adult education sites across the state. Many students use their own computer at home or study during their lunch hour at work, and Diploma-At-A-Distance loans computers to students without access to one. With funding for more computers, Diploma-At-A-Distance could serve students currently on a waiting list. To determine eligibility for enrollment, students complete a self-assessment to pinpoint how well they would do in a distance-based program, and are given placement tests in computer skills, reading, writing, and math. Students communicate with teachers through email and telephone. Diploma-At-A-Distance provides tutoring for enrolled students to help with the content of courses, but currently the program is not designed to teach pre-high school level skills.

Each Diploma-At-A-Distance course is developed to provide 120 hours of instruction in a 10-week block of time, with five enrollment periods during the year. Graduates are given a $100 scholarship for postsecondary study. In this way, Diploma-

At-A-Distance not only encourages further education, but program staff are able to track whether graduates continue their education, where they study, and what they are pursuing.

Professional development is emphasized in Diploma-At-A-Distance, with one full time program staff member devoted to program development, course improvement, and technology support. For example, the program provides specialized training in using First Class, the software program used to communicate with students and convey assignments. In addition, the program provided enrollment at Indiana University for a certificate course in distance learning for all staff when the program was initiated.

Who Participates in Diploma-At-A-Distance?

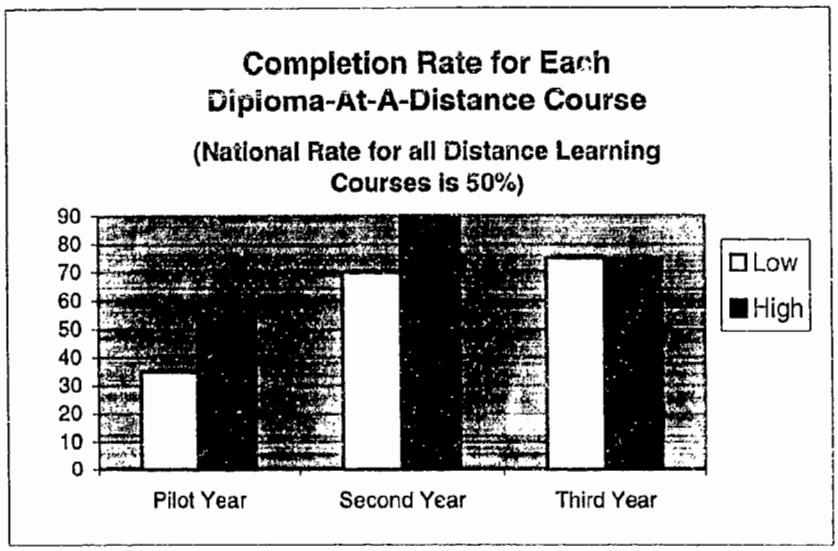
	Number of Students 1997-98	Number of Students 1998-99
Enrollment (unduplicated)	26	76
Enrollment (duplicated)	46	94
Graduates	5	17*
Under 21 years old	14	45
Over 21 years old	12	31
Person with a disability	1	2
Female	17	46
Male	9	30

*** Nine took courses through Diploma-At-A-Distance, but graduated from another adult education center.**

Student support has been built into Diploma-At-A-Distance. Working 16 hours a week, a career counselor provides academic guidance and advice to students online and via the telephone. The main lifeline of student support is through the office manager, who is the student's first contact with the program, and who maintains close contact with each student to answer questions about the program and arrange for proctored exams. A student support worker from the state's student organization, OAASIS (Organization of Adult and Alumni Students in Service), is also available to support learners.

How Diploma-At-A-Distance Developed

Diploma-At-A-Distance was established through Delaware's statewide high school model, the James H. Groves Adult High School. After exploring different distance delivery programs across the country, Groves leaders applied for federal ABE and state adult high school money, and were awarded $110,000 in August 1997, to begin the October 1997 pilot school year.



After the first semester, Diploma-At-A-Distance staff conducted an evaluation of the quantitative and qualitative results of the pilot. Lt. Governor Ruth Ann Minner, a GED graduate and a strong supporter of adult basic education, supported the Diploma-At-A-Distance program. A coalition of Diploma-At-A-Distance supporters, including the Groves leadership team; the adult learner organization OAASIS; the state's adult education professional association, Delaware Adult and Community Education (DAACE); and the Delaware Coalition for Literacy, strategized about ways to persuade the state legislature to appropriate permanent funding for Diploma-At-A-Distance. They lobbied the Chair of the Joint Finance Committee by meeting with him and presenting him with the evaluation report of the pilot program. Today, Diploma-At-A-Distance is funded by the state, with supplemental funding from Perkins Vocational Education federal dollars for a career counselor and Adult Education and Family Literacy Act (AEFLA) funds for computers. A School-to-Work grant is in the process of being approved, which will infuse career pathways into the program of study.

Successes of Diploma-At-A-Distance

- **Providing access for hard-to-reach populations, such as the homebound.**
- **Establishing equity in the completion rates of racial groups. In traditional classes there is usually a racial disparity.**
- **Developing student expertise in computer skills.**

Diploma-At-A-Distance used a community college distance learning program as a model. While Diploma-At-A-Distance supporters speak often of its replicability, they also mention that other states could create partnerships and tap into Delaware's existing efforts.

In this evolving program, student satisfaction surveys are completed at the end of every semester to provide feedback to teachers and program administrators. Each semester program administrators, teachers and students learn more about providing an effective adult high school program for students.

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Conclusion

It is no longer a question of whether distance learning will develop, but how fast it will occur. When states were surveyed about how distance learning would be included in their state's adult education structure a decade from now, over half reported that it would be a part of a comprehensive delivery system for adult literacy students, and accessible to adults in their homes.

Distance learning is a way to bridge the digital divide—a way to bridge the gap between those who are flourishing in today's technological society, and those who do not have knowledge of or access to technology. Through loaning computers, and teaching adults valuable skills such as how to use the Internet, and how to use a computer proficiently, distance learning helps adult learners cross the divide. And the potential of distance delivery to reach many more adult education students is enormous. Bob Purga of the New York Department of Education, compares the effects distance learning will have on adult education to the effect of the Industrial Revolution on business. While significant challenges exist in implementing distance delivery, its potential is becoming widely acknowledged among state literacy leaders. The survey conducted by Fran Tracy-Mumford found that 31 states and territories are field-testing and/or implementing distance learning efforts for adult learners.

Because many states report insufficient resources as a major barrier to developing a statewide initiative, literacy leaders need to consider the possibility of partnering with existing initiatives, such as a virtual high school, PBS LiteracyLink, ALMA, or other initiatives, in order to provide distance delivery to adult learners unable to attend traditional programs. States could also collaborate with other states to share information on development and implementation.

Responsibility for progress in developing distance learning initiatives does not rest with the state leadership alone. Literacy practitioners at the local and regional level

can actively support their states in strengthening existing activities and developing new efforts. Some examples are:

- Working to ensure that a comprehensive distance learning program is included in state plans.
- Holding policy forums at national and state levels to begin addressing the policy considerations included in this *State Policy Update.*
- Collaboratively developing distance learning programs within states or among states.
- Providing distance learning training opportunities to programs and staff about the potential of distance learning and effective models.
- Seeking the inclusion of adult education in state K-12 and/or higher education distance learning initiatives, or work with legislators and funders for resources to develop initiatives in adult education.
- Requesting assistance from nonprofits that offer distance learning programs in either adopting their models on a statewide basis or adapting their models to the needs of specific states.

It is our hope that this *State Policy Update* will provide state leaders and literacy practitioners with information about how to ensure that distance learning reaches many adult learners currently unable to participate in traditional adult education programs.

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Recommended Resources

GED on TV Internet: www.ket.org/education/ged Phone: 1 (800) 538-4433 (for Kentucky residents) *This program of Kentucky Educational Television, is for adults who would like to study for their GED at home. Many states broadcast the GED Series. Check with your local public television station.*	The Adult Literacy Media Alliance (ALMA) Internet: www.edc.org/ALMA/ Phone: (212) 807-4237 *This national television and video-based multimedia adult literacy service has designed a multimedia literacy project for adults including a series of literacy videos, accompanying print materials, and a website for adults at the pre-GED level who are in need of reading, writing, and mathematics skills.*
California Distance Learning Project Internet: www.otan.dni.us/cdlp/ *This project focuses on using communication through computers as a vehicle for student and teacher interaction.*	California 5 Percent Projects Internet: www.otan.dni.us/cdlp/cdlp2/5percentintro.html *Adult education programs in California may use up to 5% of their block entitlement for nontraditional instructional methods with new technologies. The 5 Percent Projects link is an alphabetic listing of all projects that have been state approved during this school year.*
Diploma-At-A-Distance Phone: 1 (888) 321-GRAD Internet: www.jhgroves.org/daad *This Delaware distance learning program offers the opportunity to complete course work leading to a high school diploma.*	Mindquest Internet: www.mindquest.org Phone: (612) 729-6044 *Part of the Bloomington, Minnesota public schools, this is an online program designed for adults who want to complete a high school diploma.*

Crossroads Café Internet: www.otan.dni.us/cdlp/cc/home.html *This video and print curriculum series is designed for ESL learners who are literate in their own language, but whose English skills range from beginning through intermediate levels.*	PBS LiteracyLink Internet: www.pbs.org/adultlearning/literacy/ *This online collection of learning activities and resources for adult learners is one of three adult education distance learning projects funded by the Star Schools Program.*
Intelecom Phone: (626) 796-7300 Internet: www.intelecom.org/ *Intelecom produces telecourses and works with a wide range of educational and research institutions, broadcast organizations, and publishers.*	National Institute for Literacy Technology Online Discussion Internet: www.nifl.gov/lincs/discussions/nifl-technology/technology_literacy.html *This electronic listserv provides a forum for online discussion about technology and literacy. Archives make previous discussions also available.*
US Department of Education Star Schools Internet: www.ed.gov/prog_info/StarSchools/ *This is one of the largest networks of public and private sector partners (schools, school districts, state departments of education, telecommunications entities, universities, regional service centers, etc.) helping to build the capacity of the education community to make effective use of the information superhighway.*	US Department of Education Community Technology Centers Internet: www.ed.gov/offices/OVAE/CTC/ *The Centers promote the development of model programs that demonstrate the educational effectiveness of technology in urban and rural areas and economically distressed communities.*

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Southern Regional Education Board Essential Elements for Web-Based Courses for High School Students Phone: (404) 875-9211 Internet: www.sreb.org/main/latestreports/tech/essential.htm *This set of basic assumptions provides a framework for consideration of instructional and managerial elements in the development and use of web-based courses. It is designed to help policymakers and managers think about specific policy and related issues.*	American Council on Education Guiding Principles for Distance Learning in a Learning Society (1996) Phone: (202) 939-9380 Internet: www.acenet.edu/bookstore *Developed by a national task force, these principles guide adult learners, providers of learning, and those responsible for overseeing learning quality and effectiveness. Recommendations are made with regard to learning design, learner support, learning outcomes, and technology. Price: $8.50.*

This *State Policy Update* was produced by the **National Institute for Literacy**, an independent federal organization that is leading the effort toward a fully literate America. By fostering collaboration and innovation, the Institute helps build and strengthen state, regional, and national literacy infrastructures, with the goal of ensuring that all Americans with literacy needs receive the high quality education and basic skills services necessary to achieve success in the workplace, family, and community.

For copies of this report, please call toll-free (877) 433-7827, or visit the NIFL website at www.nifl.gov/policy/distance.htm.

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