A project developed and conducted a summer institute to offer training, hands-on activities, and workshops addressing educational technology for adult basic education (ABE), General Educational Development (GED) and literacy education teachers, administrators, and staff. During the first phase of the project, the institute was designed as a 3-day intensive training session consisting of workshops, computer laboratory activities, and hands-on activities, and teachers were recruited. The second phase of the project was conducting the institute itself, in August 1996, for approximately 100 adult education practitioners. Topics covered during the institute included the following: instruction to technology for adult educators; introduction to the Macintosh environment; introduction to the PC environment; multimedia applications in ABE/GED/literacy classrooms; using technology to facilitate recordkeeping and reporting; navigating the Internet; evaluating software in adult education; distance education; incorporating technology into the ABE/GED curriculum; computerized reporting of student and staff data forms; designing a Web page; and technology applications for literacy programs. The institute was rated very highly in participant evaluations. The final phase of the project, extending through the next school year, included the following: evaluation, follow-up; additional training through the state's professional development centers, and creation of a final report. (KC)
Summer Institute:

Technology II

1996-1997 Special 353 Project #99-7008

$50,000

Debra G. Burrows, Project Director  Linda K. Hinman, Project Coordinator

Central Intermediate Unit #10
Development Center for Adults
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Table of Contents

Abstract ............................................. I
Introduction ......................................... 1
Final Report ......................................... 6
Conclusions ......................................... 9
Institute Evaluations .............................. Attachment A
Individual Session Evaluations .............. Attachment B
Institute Brochure and
Registration Materials ......................... Attachment C
Title: 1996 Summer Institute: *Technology II*

Project Number: 99-7008  
Address: Central Intermediate Unit #10  
Development Center for Adults  
110 East Bald Eagle Street  
Lock Haven, PA 17745  

Funding: $50,000  
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Purpose:  
1. To provide a summer institute on August 6, 7, 8, 1996 that offered training, hands on activities, and workshops addressing a wide range of applications for ABE/GED and literacy programs.  
2. To provide follow-up sessions on technology issues throughout the 1996/97 program year in conjunction with the Central Northeast Professional Development Center.

Procedures:  
The summer institute was held on August 6, 7, 8, 1996, on the campus of Lock Haven University and at the Clinton County Development Center for Adults in Lock Haven, Pennsylvania. Workshops, seminars, and "hands-on" training sessions addressed the following topics:

A. Introduction to Technology for Adult Educators  
B. Introduction to the Macintosh Environment  
C. Introduction to the PC Environment  
D. Multimedia Applications in ABE/GED/Literacy Classroom  
E. Using Technology to Facilitate Recordkeeping and Reporting  
F. ABLE Net Technology Mentors Meeting  
G. Navigating the Internet with Netscape  
H. Evaluating Software in Adult Education  
I. Distance Education  
J. Introduction to E-Mail for Educators  
K. Incorporating Technology into the ABE/GED Curriculum  
L. Technology Planning  
M. Funding Strategies for Technology Purchases  
N. Networks  
O. CD-ROM Overview  
P. Computerized Reporting of Student and Staff Data Forms  
Q. Designing Your Own Web Page  
R. Technology Applications for Literacy Programs  
S. PDE Reporting

The majority of sessions provided "hands-on" training to maximize effectiveness and were offered at varying levels to meet the needs of administrators, teachers, counselors, tutors, and clerical staff members.

Summary of Findings: The institute and follow-up activities were effective and very well received, as evidenced by participant evaluations.

Comments: The interest in technology and need for inservice training and support at the program level were, and continue to be, very high. Although the institute was planned to accommodate 100 attendees, a waiting list had to be instituted, since registrations exceeded capacity. Evaluations by participants indicated that the summer institute format of multiple "hands-on" training sessions, aimed specifically at the needs identified by practitioners and offered at various skill levels, was highly effective.
Introduction

1. Rationale and Objectives

The proposed summer institute: Technology II provided a wide range of technology training opportunities for adult basic education and literacy practitioners based upon the successful 1994 Summer Institute: Technology! Technology! Technology! Instructional, administrative and on-line applications of technology were addressed. These technologies hold significant promise for the field of adult basic education and literacy. "Adult educators around the country are increasingly using technology to improve access to programs, enhance the quality of instruction, and expand in-service activities for staff. For example, Illinois State Director Noreen Lopez is finding that 'The use of technology in adult education has proven effective for improved attendance, increased learning gains and student motivation. It has also proven to be an especially effective approach to teaching the learning disabled.' Gerald Kilbert, State Director of adult education in California, paints the challenge this way: Technology is only a tool to assist the learner and the teacher. Adult educators must use that tool in every manner currently known and envision futures full of new uses of these tools. We must envision a future in which learners use technology so that they can learn at any time and any place" (A.L.L. Points Bulletin, February 1994). Potential benefits to both instructional and administrative functions stand to be realized through the use of new technologies. *Adult Literacy and New Technologies* identified the following advantages of technology for adult learners:

**Reaching Learners Outside of Classrooms**
* With portable technology, adults can learn almost anywhere, any time, and can use small parcels of time more efficiently.
* Technology can carry instruction to nonschool settings--workplaces, homes, prisons, or the community.
* Adults can be served who would otherwise be left out because of barriers such as inconvenient class scheduling or lack of child care or transportation.
* Learning at home can be more convenient and private for those who would feel stigmatized by attending a literacy program.

**Using Learning Time Efficiently**
* Learners can move at their own pace, have greater control over their own learning, and make better use of their learning time.
* Learners can handle some routine tasks more quickly through such processes as computer spell checking.
* Many learners advance more quickly with computers or interactive videodiscs than with conventional teaching methods.

**Sustaining Motivation**
* Novelty factor can be a "drawing card."
* Technology can be more engaging, can add interest to repetitive learning tasks.
* Importance of computers in society can enhance the status of literacy instruction.
* Privacy and confidentiality are added to the learning environment, reducing embarrassment adults often experience.
* Technology-based learning environments do not resemble those of past school failures.
* Intense, nonjudgmental drill-and-practice is available for those who need it.
* Instantaneous feedback and assessment are provided.
Individualizing Instruction
* Computers can serve as “personal tutors”--instruction and scheduling can be individualized without one-on-one staffing; suitable for open-entry, open-exit programs.
* Materials and presentation formats can be customized to suit different learning styles, interests, or workplace needs.
* Images and sound can help some adults learn better, especially those who cannot read text well.
* Computers with digitized and synthesized speech can help with pronunciation and vocabulary.
* Adults with learning disabilities and certain physical disabilities can be accommodated.

Providing Access to Information Tools
* Adults need to learn to use today's electronic tools for accessing information.
* Adults believe familiarity with computers will make them more employable.

Adult Literacy and New Technologies goes on to describe program benefits such as:

Recruiting and Retaining Learners
* Technology can be a magnet, attracting learners.
* More learners can be served and teachers used more productively.
* Programs can broaden their reach, serving those in remote locations.
* Teachers and counselors can maintain regular contact with learners.

Improving Curriculum
* Teachers can create individualized, engaging instructional materials related to learners' needs and interests.
* Programs can share “what works” in terms of instructional materials and techniques.

Meeting Staff Development Challenges
* Teachers, volunteers, and administrators can be trained via video, distance learning, and self-study computer modules.
* Career ladders can be developed and information about vacancies can be posted nationwide.
* Staff can collaborate with their peers across town or country about problems, solutions, resources, and opportunities.

Enhancing Assessment and Evaluation
* Technology can track student progress continually, minimizing the need for “high anxiety” testing.
* Technology can provide diagnostic assistance for the teacher.
* Video and audiotape records, portfolio collections of writings, and other performance assessment measures can give more complete evidence of student progress.
* Program evaluation can be simplified by more systematic evaluation procedures and common data elements.

Streamlining Administration and Management
* Technology can more efficiently handle routing administrative tasks, freeing staff for instruction and providing comprehensive services to clients.
Computer-based systems provide more efficient, accessible records on attendance, scheduling, personnel, budgeting, evaluation, and client tracking.

**Augmenting Funding and Coordination**

- Technology can serve as a magnet for fundraising and business contributions.
- Programs can pool resources and coordinate services, including social services, to serve learners better and avoid duplication of effort.
- Programs can share and access experts, databases, curriculum, public access software, government information, and national pools of literacy expertise.

In order to take advantage of these benefits, adult educators need technology training. "At present, the major problems with technology appear to be the lack of an adequate experience base about how to make the best use of computer systems as well as the lack of any good way for teachers and program managers to evaluate the many different learning systems that are coming onto the market" (Chisman, 1989). Levels of technological expertise among adult education providers vary widely across the Commonwealth. Some programs are already using varying levels of technology in their classrooms and offices. Such programs do not need introductory training, but their staff and volunteers do need an opportunity to learn about new instructional activities and applications, on-line opportunities, business office applications and approaches that have been utilized successfully elsewhere. Other programs have not had any experience with technology and therefore need basic training for staff and volunteers. Still other programs fall somewhere in between. Many programs are just beginning to experiment with joining the on-line community and need assistance in learning to utilize on-line capabilities.

This project proposed to conduct a three day summer institute offering a variety of technology based training and workshop opportunities geared to varying levels of practitioner expertise.

1. To provide a summer institute on August 6, 7, 8, 1996 that offered training, hands on activities, and workshops addressing a wide range of applications for ABE/GED and literacy programs.

2. To provide follow-up sessions on technology issues throughout the 1996/97 program year in conjunction with the Central Northeast Professional Development Center.

2. **Time Frame**

The Summer Institute: *Technology II* was conducted on August 6, 7, 8, 1996, on the campus of Lock Haven University and at the Clinton County Development Center for Adults in Lock Haven. Follow-up activities were conducted during the 1996-1997 program year.
3. Personnel

The project director, Debra G. Burrows has 15 years of professional experience in the field of adult education as well as a strong background in educational technology. She has been employed by the Central Intermediate Unit Development Center for Adults since 1982 and has served in the capacity of ABE/GED teacher/counselor, Pennsylvania Adult Literacy coordinator, and workforce education/computer literacy instructor. Ms. Burrows earned a B.S. in Mathematics from Westminster College where she studied computer programming and applications. She holds an M.Ed. in Educational Administration from the Pennsylvania State University and is pursuing a D.Ed. in Adult Education at Penn State. Ms. Burrows has done graduate level work in instructional systems and microcomputer applications in educational administration. She has made presentations at conferences such as the Adult Literacy and Technology Conference in Philadelphia in 1995 and the 1991 Conference on State Literacy Initiatives in Harrisburg as well as annual PAACE Mid Winter Conference presentations. Ms. Burrows has authored a manual which identifies computer assisted instructional activities using the Internet, CD-ROM, and various applications that facilitate critical thinking and enhance adult student empowerment while improving basic skills. She designed and developed the successful 1994 Summer Institute: Technology! Technology! Technology!

Linda Hinman, the project coordinator, has been employed by the Central Intermediate Unit Development Center for Adults since 1987. Ms. Hinman was previously employed in adult education with Intermediate Unit #13 from 1978-1985. She has served in the capacity of ABE/GED teacher/counselor, Pennsylvania Adult Literacy teacher/coordinator, Workforce Education teacher and project director for the New Choices single parent/displaced homemaker program. Ms. Hinman holds a B.S. in Secondary Education from Lock Haven State College and Pennsylvania teaching certification in Mathematics and Special Education. Her computer experience includes computer science courses at both an undergraduate and graduate level and teaching computer literacy classes for adults. Ms. Hinman has been responsible for developing conference program schedules and making lodging arrangements for several Development Center for Adults sponsored conferences including the annual Expanding Your Horizons Conference on the Lock Haven University campus and exemplary program inservice training sessions for Bureau of Vocational Technical Education New Choices Project Directors. She was instrumental in coordinating arrangements for the 1994 Summer Institute: Technology! Technology! Technology!
An undergraduate student intern, assigned through the Lock Haven University Literacy Corps Program, assisted with project activities at no charge to the project.

4. Audience

This report has been prepared for use by adult basic education and literacy practitioners who are interested in staff development models for the delivery of inservice technology training.

Copies of this report are on file with the Pennsylvania Department of Education, Division of Adult Basic and Literacy Education Programs, and AdvancE at 333 Market Street, Harrisburg, PA 17126-0333. Copies are also on file with the Western Pennsylvania Adult Literacy Resource Center, 5347 William Flynn Highway, Route 8, Gibsonia, PA 15044-9644.
Final Report

This project proposed to address the technology training and information needs of ABE/GED/literacy practitioners by conducting a three day long summer institute offering a variety of technology based training and workshop opportunities geared to varying levels of practitioner expertise. Specific goals were:

1. To provide a summer institute on August 6, 7, 8, 1996 that offered training, hands on activities, and workshops addressing a wide range of applications for ABE/GED and literacy programs.

2. To provide follow-up sessions on technology issues throughout the 1996/97 program year in conjunction with the Central Northeast Professional Development Center.

These goals were met and exceeded.

The summer institute was held August 6, 7, 8, 1997 on the campus of Lock Haven University in Lock Haven, Pennsylvania with 99 of 100 registrants in attendance. The institute began at noon on Tuesday with an opening luncheon and Keynote address given by Robert O. Little, Director of the Computing Center at Lock Haven University. Workshops, seminars, and "hands-on" training sessions scheduled throughout the three day period addressed the following topics:

A. Introduction to Technology for Adult Educators
B. Introduction to the Macintosh Environment
C. Introduction to the PC Environment
D. Multimedia Applications in ABE/GED/Literacy Classroom
E. Using Technology to Facilitate Recordkeeping and Reporting
F. ABLE Net Technology Mentors Meeting
G. Navigating the Internet with Netscape
H. Evaluating Software in Adult Education
I. Distance Education
J. Introduction to E-Mail for Educators
K. Incorporating Technology into the ABE/GED Curriculum
L. Technology Planning
M. Funding Strategies for Technology Purchases
N. Networks
O. CD-ROM Overview
P. Computerized Reporting of Student and Staff Data Forms
Q. Designing Your Own Web Page
R. Technology Applications for Literacy Programs
S. PDE Reporting

Detailed descriptions of concurrent sessions are included as Attachment D. Special sessions for ABLE Net mentors were also held.
The majority of sessions provided "hands-on" training to maximize effectiveness. A variety of staff training opportunities were offered at varying levels to meet the needs of administrators, teachers, counselors, tutors, and clerical staff members. On Tuesday and Wednesday, computer labs at the Development Center for Adults were opened and participants had an opportunity to sample software and classroom applications. The summer institute was advertised and promoted throughout Pennsylvania via What's the Buzz, through professional development centers, via e-mail and appropriate listservs, and through direct mailings to ABE/GED and literacy providers. Copies of the institute brochure and concurrent session descriptions are included as Attachments C and D.

![Joan Schneider, West Branch Technology Center Instructor conducts a PC lab session.](image)

The institute schedule featured an ice cream social held on Tuesday evening to give participants a chance to interact. A Hawaiian luau was held under a tent on the lawn at the University on Wednesday evening, with entertainment provided by local musicians. Arrangements were made with the Millbrook Playhouse, a summer barn theatre, to offer special ticket prices to summer institute participants, which many chose to accept. These events provided balance to the Institute's intensive training schedule.

![Hawaiian luau on the lawn of Lock Haven University](image)

In order to maximize opportunities for hands-on training and activities, all four computer labs and various classroom, dining and conference facilities at Lock Haven University were utilized, as were labs at the Development Center for Adults. Evening activities were conducted at the Development Center for Adults West Branch Technology Center, which offers two PC and one Macintosh Lab, as well as full Internet access. Lock Haven is located in the geographic center of the state of Pennsylvania and is easily accessible via major highways, such as Interstate 80 and
U.S. Route 220. Lodging and accommodations were very reasonably priced compared to rates prevalent in suburban and urban areas, enabling the project to devote resources to expanding program content and training opportunities.

Participants received a $150 stipend to offset the cost of attendance at the conference. Lodging and meals were provided at no charge to participants. Project staff assisted conference registrants with making lodging and travel arrangements.

The Development Center for Adults drew on the experience of its West Branch Technology Center staff for many presentations. In addition, speakers and presenters were booked, on a contracted services basis, to conduct sessions and activities. Speakers and presenters were carefully chosen using the following criteria:

A. Topical expertise  
B. Ability to communicate information  
C. Adaptability to audience’s level of expertise  
D. Technological expertise  
E. Familiarity with adult education environment

Summer institute participants were asked to evaluate individual presentations at the conclusion of each session and to evaluate the overall conference as well. They were also asked to complete exit questionnaires identifying additional technology-related in-servicing needs. Evaluations were tabulated and results are included as Attachments B and C.

Follow up activities included a series of training sessions coordinated with C-NEPDC held at the CIU West Branch Technology Center in Lock Haven as listed below:

I. **December 13th Workshop**

   A. The Internet  
      - Introduction to the Internet using Netscape  
      - Using listserves  
      - Using chatrooms

   B. Using Computers for Productivity  
      - Basics of Microsoft Word  
      - Basics of Microsoft Access  
      - Basics of Microsoft Excel

II. **February 20th and 21st Workshop**

   A. Using Software in the Classroom

   B. Windows 95

   C. Macintosh Operating System

III. **March 14th Workshop**

   A. Windows 95

   B. Macintosh Operating System

   C. Classroom Software Applications
IV. May 16th Workshop

A. Technology Planning and Funding

B. Using Technology in Day-to-Day Program Operations

The project time line was as follows:

July
Publicize summer institute, solicit registrations. Book presenters, plan three day summer institute schedule, make conference and meeting room arrangements, confirm lodging/travel arrangements.

August

September - May
Develop and provide follow-up activities in conjunction with C-NEPDC.

June
Prepare final report.

Results

All project objectives were met or exceeded.

Conclusions

Response to the institute indicated that interest in technology and need for ongoing inservice training and support at the program level were, and continue to be, very high. Although the institute was planned to accommodate 100 attendees, a waiting list had to be utilized, since registrations exceeded capacity. Evaluations by participants indicated that the Summer Institute format of “hands-on” training sessions aimed specifically at the needs identified by practitioners and offered at various skill levels, was highly effective. In particular, respondents indicated that the practical nature of sessions gave them the opportunity to see and experience technology applications that could be utilized in their programs. Because instruction was “hands-on”, they could experiment with what they were learning and thereby increase practical understanding. Participants also indicated a desire for additional technology training opportunities, and these were provided through a series of workshops during the 1996-1997 program year.
**Title:** Summer Institute: Technology II  
**Author(s):** Debra G. Burrouws  
**Corporate Source:** Central Intermediate Unit #10  
**Publication Date:** June 1997

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