The Self-Directed Workplace Literacy Distance Learning Project demonstrated a model workplace literacy program that helped direct care workers in state-operated developmental disabilities facilities improve their literacy skills for a changing workplace. During the project, 268 New York State Office of Mental Retardation and Developmental Disabilities employees who aspired to developmental aide jobs spent 4 hours weekly over 24 weeks in self-directed, self-paced instruction at the workplace on released time. The instructional model combined print, video, electronic mail, computer-assisted learning, videoconferencing, and self-directed study methods. Workers determined, in consultation with their supervisors, how they would spend their weekly study periods. The instructor used e-mail to provide workers with feedback on their work and guidance on independent study habits. The majority of participants were productive in the self-directed learning environment; however, even those who functioned well within the model emphasized that weekly communication with the instructor was critical to the program's success. (Appendices constituting nearly 50% of this document contain the following: participant feedback; guidelines for technology implementation in a workplace distance learning project; guidelines for staff development in a workplace distance learning project; results of the site visit data analysis; supplemental questionnaires; and information about changes in key personnel.) (MN)
SELF-DIRECTED WORKPLACE LITERACY DISTANCE LEARNING FOR DEVELOPMENTAL DISTABILITIES WORKERS

FINAL REPORT

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Center for Advanced Study in Education
The Graduate School and University Center
of the City University of New York

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SELF-DIRECTED WORKPLACE LITERACY DISTANCE LEARNING FOR
DEVELOPMENTAL DISABILITIES WORKERS

I. PROJECT OVERVIEW

This project demonstrated a model workplace literacy program that helped direct care
workers in state-operated developmental disabilities facilities improve their literacy skills for a
changing workplace. Literacy training in reading, writing, math, and problem-solving skills was
provided through a distance learning model to geographically disparate workplaces in urban,
suburban and rural areas. Using a contextualized curriculum, workers selected from a variety of
print and educational technology options to build their literacy skills while at the same time
becoming self-directed learners. While distance learning has been found highly effective in other
educational settings, it has rarely been used in the literacy field. This project extended this
approach to workplace literacy training.

The overall goals of the project were: (1) to implement a workplace literacy partnership
between a labor organization and an institution of higher education, and (2) to demonstrate,
evaluate and promote the institutionalization of a workplace literacy training model that combines
print, video, electronic mail, computer-assisted-learning, videoconferencing, and self-directed
learning methods for direct care workers in the field of developmental disabilities.

The participants were Developmental Aides, and other employees who aspired to
Developmental Aide jobs, who worked in facilities operated by the New York State Office of
Mental Retardation and Developmental Disabilities (OMRDD). Developmental Aides are
paraprofessional staff who provide direct care to persons with developmental disabilities and/or
mental retardation. The Developmental Aides were represented by a labor organization, Civil Service Employees Association, Inc. (CSEA), which work in partnership with the Center for Advanced Study in Education of the City University of New York Graduate School (CASE/CUNY) to provide distance learning.

In the past, OMRDD provided care for all consumers in developmental centers. After developing smaller, more homelike community residences in the 1970s, the agency made a formal decision in 1991 to shift its priorities towards providing individualized services in the community, resulting in different job responsibilities leading in turn to increased literacy demands for Developmental Aides. The workers now have primary responsibility for planning and managing the consumers' daily living, and responding independently to problems that need quick action. The six major categories of the Developmental Aide's duties are: participating on a team, providing a safe and clean environment, managing activities of daily living, maintaining health, organizing leisure and recreation activities, and maintaining operations. Embedded in these job functions is a wide variety of skills.

The project was very successful in recruiting 268 developmental aide workers for workplace literacy training provided at the worksite on released time. All activities were conducted as planned, and were on schedule in each category. The worksite, OMRDD, one of the helping organizations, was committed to our project and its implementation, and wanted to explore the eventual roll-out with the direct care workers it employs. OMRDD's support became especially important as during the life of the grant the agency was faced with extensive downsizing and budget cuts.

1 Consumer is a term used in the field for the individuals who are developmentally disabled and are served by the Direct Care Workers.
The project was steered through a central advisory committee, referred to as the Central Guidance Team (CGT), by a workplace literacy partnership consisting of the following organizations: The Center for Advanced Study in Education (CASE) of the City University of New York Graduate School (CASE/CUNY); The Civil Service Employees’ Association (CSEA); The New York State Office of Mental Retardation and Developmental Disabilities (OMRDD, the employer); and the New York State Governor’s Office of Employee Relations (GOER). This mechanism allowed all agencies to play an important role in project implementation.

The CGT was chaired by the Project Director and was made up of CSEA, OMRDD, and GOER representatives, along with the project Educational Coordinators and Educational Technology Specialist. The Central Guidance Team handled such issues as assessment procedures, recruitment, retention, partner roles, supervisory support, dissemination, institutionalization and evaluation.

Local teams, chaired by a local program coordinator, in each of the geographical areas, recruited participants, facilitated the dissemination and collection of assessment materials to the participants, and addressed problems in their areas as they arose. A joint meeting with the program coordinators, members of local teams, and the Central Guidance Team was held towards the end of each cycle to review progress in the previous cycle, to discuss any changes in the model that were needed for more effective delivery, and to plan recruitment for the next cycle.

The workplace literacy training model provided for each participant to engage in 96 hours of self-directed, self-paced instruction at the workplace on release time. A curriculum was developed during Cycles 1 and 2 consisting of videos, print materials, and supporting reference guides and books. The learning took place during four hours per week over a 24-week period. Workers determined, in consultation with their supervisors, how the four hours would be
scheduled during the week.

This self-paced, self-directed program was facilitated by an instructor at a distance. Participants received a phone call once a week from their instructor at the workplace. In addition, the instructor communicated with students via e-mail. The instructor provided feedback on work, guidance on independent study habits, and reviewed assignments with students. The instructor’s interaction with the participant was crucial to the success of the program. They functioned as “coach” and facilitator of learning.

The role of the instructor appears to be as significant a factor in distance learning as it is in the traditional classroom model. In distance learning, the instructor appeared to become the "life-line" for the participant. The instructor may even have had greater weight than in the traditional model where peers and other faculty are available.

While the majority of participants were productive in the self-directed learning environment, some of them felt they would have fared better in a traditional class environment with the ongoing guidance and structure of the instructor. Even those participants who functioned well within this model suggested that without the weekly communication with the instructor, they would not have progressed as they did.

In addition to the instructor, CSEA provided educational counseling to all participants. Standing appointments were made for students to talk with a counselor bimonthly.

The workplace literacy model provided workers with a choice of learning modalities. At a distance, workers could learn to use e-mail, print, videotapes and videoconferences. Not all workers had the same extent of access to or interest in using e-mail. E-mail use was greatest in those regions where staff had easy computer access, training and experience prior to the project, staff support, and consistent equipment maintenance.
A math computer software program was written into the curriculum for those students who wished to use it. In addition, a typing tutor was available to the program. Only participants who had access to free standing PCs could use this optional software. When these programs were made available, they were popular with participants. However, although these two programs are relatively "user friendly," they are not completely simple to use for first time computer users. Most students needed hands-on help in order to access and use them.

All students were assigned "e-mail partners" to correspond with during the course of the program. This was an important way to reduce feelings of isolation often felt by distance learners and to encourage e-mail use.

Three video conferences were conducted during the project period for the purpose of providing instruction and for facilitating discussion between the instructors and participants. Through the videoconference, participants experienced an additional learning modality of teacher presentation. The videoconference session, moderated by a project Educational Coordinator, was a one-way video, two-way audio format. Video broadcasts of the teacher presentation were transmitted to video monitors at receiving sites and participants spoke with the presenters by telephone.

Participants reported that receiving instruction via the videoconference was a positive experience. They enjoyed receiving instruction via a teacher as a means of reinforcing what they had been learning independently. Both participants and instructors expressed an interest to meet and see each other. They wanted to "place a face with the voice." The videoconference provided an opportunity to see the people they had been talking to on the phone and to discuss their experiences regarding the Project.
II. GOALS AND OBJECTIVES

The overall goals of the project were:

- To implement a workplace literacy partnership between a labor organization and an institution of higher education;
- To demonstrate, evaluate and promote the institutionalization of a workplace literacy training model that combines print, videotapes, electronic mail, computer assisted learning, teleconferencing, and self-directed learning methods for direct care workers in the field of developmental disabilities.

Process objectives were:

- To produce a workplace literacy curriculum contextualized in developmental disabilities jobs;
- To train project staff to deliver workplace literacy training and educational counseling at geographically distant workplaces;
- To provide 96 hours of workplace literacy training to 426 developmental disabilities workers in 80 different workplaces (77 community residences and 3 developmental centers) in seven different regions in New York State;
- To develop and administer a variety of workplace literacy assessment measures;
- To disseminate the curriculum, practices, assessment measures, and results of the training model.

Outcome objectives were:

- To raise workplace reading, writing, math, problem solving, reasoning skills and self-efficacy;
- To raise productivity in community-based direct care job tasks that have literacy...
demands;

- To improve job attendance;
- To help workers advance their careers by moving within the direct care job series or into direct care jobs;
- To help the workers maintain motivation for the workplace literacy training;
- To help the workers gain access to additional career-related educational opportunities.

III. ACCOMPLISHMENTS

Implementation of a Workplace Literacy Partnership

From the beginning, the Distance Learning Project (DLP) was conceived as a four-way partnership between an educational institution (the Center for Advanced Study in Education of the City University of New York Graduate School [CASE/CUNY]), a labor union (the Civil Service Employees Association [CSEA] representing New York State employees), an executive employee relations office (New York State Governor’s Office of Employee Relations [GOER]), and a state agency involved in health care delivery (the New York State Office of Mental Retardation and Developmental Disabilities [OMRDD]).

The team consisted of nine seasoned professionals from varied fields (labor, management, and education). Members came from varying levels of administration within their own organizations. The team met bimonthly for two and a half years to oversee the implementation of the project. The aspects of the team experience that seemed to contribute most significantly to success are as follows:
Everyone Contributes: Every team member's voice was considered essential to the team process.

Appreciation and Acknowledgement: There seemed to be an unusually high degree of appreciation and acknowledgement shown to each other for new ideas and tasks well-done.

Commitment to the Project: The rate of attendance at team meetings averaged 95%, despite other job related responsibilities and significant travel time.

Minimum of Self-Interest: The lack of individual or agency self-interest among team members was particularly noticeable over the three-year project period. While various internal changes were occurring in each of the partner's organizations, the team members were able to sustain their focus on the common goals of this partnership.

Time for Enjoyment: An effort was made to make meetings enjoyable. There was always time for humor and casual conversation, even while adhering to the agenda.

A High Level of Personal Satisfaction: Each member experienced a high level of personal satisfaction in the project, as a result of feeling a strong sense of ownership for the Distance Learning Program and a certain pride at having been associated with it and each other.

The Use of Partnership Techniques: Using a variety of quality meeting techniques was found to be highly effective in conducting productive and efficient meetings.

Use of Technology by the Partnership: This project was conducted at a distance, not only for the participants and the instructors in the program, but each team member and the agencies represented were located at a distance from one another. The nine members of the Distance Learning Central Guidance Team worked in a total of five different locations. Consequently, in order to maintain constant contact with each other as the program required, use was made of all the means of communication at the team's disposal.
Technology to Facilitate Group Meetings: The CGT experimented at various points during the course of this project with innovative technologies in lieu of face-to-face meetings to bridge the distance gap. Teleconferencing was used in a variety of ways as follows:

- To include an absentee member
- "All-telephone" meeting via multi-line conference connection
- Sub-grouping at 2 or 3 central locations, where TV equipment was available, to allow for the physical presence of at least some of the other team members, allowing a certain, though limited, amount of visual cueing.

Technology for Day-to-Day Contact: We were able to remain in constant contact, on a day-to-day basis, above and beyond our regularly held meetings as follows:

- The telephone and its accompanying voice mail services.
- E-mail services: provided the advantage of being able to address copies of correspondence to the entire group.
- Transfer of information among software applications: A database of information on program participants was maintained (except for text scores, which were recorded anonymously in a separate database); reports produced by this database software could easily be cut and pasted into or attached to e-mail messages.
The role of the CGT became more important as it became evident that the changes in OMRDD and fiscal constraints (reduction in administrative, technical and line staff, and consolidation of regions) were making it more difficult to implement the program. The CGT put at the forefront the issue of accountability as well as provided a forum where difficulties could be addressed.

A complete, detailed report on the partnership can be found in the CASE/CUNY publication that was written by CGT members referenced as follows: Huth, H; Denny, V; Nardino, C; Bailey, R; Street, D; Sinnott, J; Spector, H; Trolio, P; Dillman, J. "The Care and Feeding of a Successful Collaborative Partnership" Center for Advanced Study / The Graduate School and University Center of the City University of New York: February 1998.
The Workplace Literacy Training Model

This project successfully implemented a workplace literacy training model that combined print, videotape, electronic mail, computer assisted learning, videoconferencing and self-directed learning methods for direct care workers in the field of developmental disabilities. Although the number of students served was impacted by many factors as described in the Final Formative Evaluation Report, pages 19 and 20, the students who completed the program were able to take advantage of the program benefits described below:

Program Benefits

The project's formative evaluator for Cycles 1 and 2 identified the following program benefits:

- Opportunity to learn at the workplace enabled their participation in the program.
- Immediate on-site support from team leaders, training specialists, mentors.
- Motivating, positive, and encouraging instructors.
- "Door opener" by providing access to skill growth in writing.
- Created awareness of strengths not previously realized or developed.
- Build self-confidence and the feeling of "I can do."
- Overcame fear of writing.
- Nobody telling you that you are going to fail if you don't meet this deadline.
- Instruction showed interest in the growth as a person not just the assignments.
- Self-paced with some participants reporting two weeks to complete one lesson.
- Flexibility enabled participant to provide completed assignments through the regular mail or on the computer via e-mail, and communicate with the instructor through three modes: telephone, e-mail, regular mail.
- Focus on learning as opposed to doing it for the instructor or a grade.
- Learning styles are accommodated by this model.
- Dedicated and supportive instructor appears to be as significant a factor in distance learning as it is in the traditional classroom approach.
Profile of Participant Receiving Maximum Program Benefits

Upon completing interviews of a sample of participants across all regions, the formative evaluator described participants receiving maximum program benefits as follows:

- Strong desire to increase skills and improve abilities.
- Self-directed, self-motivated, although lacking self-confidence.
- Enthusiastic, works beyond required time.
- Has future career goals beyond working as a Developmental Aide such as obtaining an RN degree or working outside of their current career.
- Manages time well without supervision.
- Prefers self-paced approach since can spend as little or as much time as needed on a lesson.
- Did not feel comfortable in a regular classroom setting. Experienced reluctance to participate for fear of failure.
- Wanted to "make-up" lost time on learning not spent as a child in school.
- Discouraged by former teachers during normal schooling.
- Identified as learning disabled, experiencing frustration as a result.
- Finds classroom settings restrictive; afraid to make a mistake or "look stupid."
- Examples of participant feedback on the program can be found in Appendix A.
What We Have Learned

Here are some of the things we learned from our work on this project that may be useful to other programs implementing similar models:

Distance Learning Approaches Can Work with Adult Learners

The key is providing structure and on-going support. The curriculum provided structured learning for participants. Participants, in concert with their instruction, developed an individual educational plan (IEP) to map out an instructional program to match their learning style and literacy needs, as well as the job areas they wanted to focus on.

Support was provided to students through regular phone contact and ongoing e-mail communication. In addition, participants were assigned an e-mail partner to share pre-planned work activities or to call on for emotional support. In this program students were also assigned to a counselor who contacted participants on a bimonthly bases, to check on their progress, to address any problems or concerns, and to help them map out future educational plans.

Consider Participant’s Job Function and Situation Before Incorporating Workplace Distance Learning

Not all job titles work well for workplace distance learning. The developmental aide job, held by the participants in this program, required hands-on and often emergency care to the individuals they were responsible for. Often their study schedule or ability to take phone calls was impacted by an emergency situation at their site. Some participants reported that they “felt guilty” when they took release time on the job even though they knew that they were entitled to it. Because of major downsizing in the organization, no substitutes were provided for workers and colleagues, who were shorthanded already, and had to cover for the participant. Some motivated participants chose to do work at home on their own time to sidestep these concerns.
A Hybrid Model of Distance Learning May Work the Best

The project followed a pure distance learning model. Students worked on their own away from their instructors and never met face-to-face. However, our experience on this project suggests that a hybrid model, where a small portion of the time is spent in group orientation, small group follow-up, or classroom activities may be more effective. This would allow students an opportunity to meet and develop a rapport with their instructors. It also provides a setting for the administration of assessments (see evaluation section for further discussion of this). Students would meet other colleagues who are also enrolled in the program. Group time could be spent addressing procedural concerns or providing mini-lessons on topics of use to all participants.

In our program, students and instructors both felt isolated in the distance learning model. We addressed that in the following ways:

Videoconferencing

We modified our videoconference to serve an introductory role for the program. We moved the videoconference from the middle of the cycle to the beginning of the cycle. We encourage participants to come together in groups at down-link sites and participate in a prepared wrap-around session. Short clips and bios of the instructors and counselor were included in the program so participants could “meet” whom they were talking to. We went out into the field and took “home movies” of participants, interviewed them at their worksite and incorporated clippings in the videoconference. Participants called into the panel for learning activities and feedback.
Teacher Site Visits

Teacher site visits were introduced, in the downstate region, (sites were too far apart from each other upstate to implement this there) as a way to address the instructor's feeling of isolation and also to provide a way to increase our return of pre-assessment measures. Teachers went to a participant's site at the beginning of the cycle and again at the end. Both the teachers and students found this very useful.

Distance Learning is Most Successful When it Incorporates Many Different Approaches and Options for Learning

In our program students could choose to do their work by e-mail or by paper and pen (although we encouraged them to use e-mail). Software exercises were also provided in a paper format for those who did not have access to a stand-alone computer. On-going communication with an instructor could be by e-mail and/or the phone. Twenty percent of the units incorporated the use of videotapes as a stimulus for writing or reading comprehension exercises.

Depending on their learning style or what technology they felt most comfortable with, students could design an individualized educational plan that best met their needs. A curriculum was developed, "The Video Guide", that included just the video units from the larger curriculum for those participants who only wanted to use the video for their learning or who wanted to follow a shorter program.

Instructors Need Support and Training

Perhaps more so than in traditional educational environments, instructors need on-going support and training. Working "at a distance" is isolating. Often, because of varying schedules, our instructors were working in an office alone.

Instructors come to distance learning with a model in their head on what instruction
should be like based on their prior experience. They need guidance in adapting to the educational approaches that work best with distance education.

For example, in our program, part of the job was trying to reach workers who may not be available because of a change in their work shift or an emergency at their site. Also, a lot of "instructional" phone time is spent encouraging students to do their assignments or just lending an ear to the difficulties they may be facing on the job.

The educational program coordinators developed a dissemination pamphlet entitled Staff Development Guidelines. It appears in Appendix C.

**Keyboard Training Prior to Beginning a Computer Course is Essential**

The design of our project called for all participants to receive training in keyboarding before they began the program. Because of constraints in the agency, mentioned previously in this report, this did not happen in most instances. The impacted on the amount of work produced. On site visits, the educational staff was aware of how much time workers who were not fluent in keyboarding spend on writing an e-mail message or completing an assignment using a word processing program. Other participants gave up in frustration and just completed all of their assignments by hand. This was unfortunate as they missed out on gaining facility with the agency's e-mail system, one of the major benefits of the program as reported by many participants.

In an ideal model, in addition to the initial training, there would be provisions for students to receive refresher instructions on computer skills at various points throughout the course.

**On-Site On-Going Technical Assistance is Mandatory**

Workers who are just beginning to use a computer need on-site support. The Education and Training Departments in the region were supposed to serve this function but with the agency downsizing they no longer had the personnel to do this effectively. The Educational Technology Grant Award # V198A40298 34
Specialist from the Project tried to serve this function as she made her downstate visits but she was not able to do as much as was needed. Other staff also tried to bridge this gap by lending a hand on monitoring visits. However, the project clearly felt the impact of the lack of technical support. For further information on the technology aspect of this project see Brockman, S. and Denny, V.H. “Technology and Workplace Literacy: A Distance Learning Model.” Literacy Harvest: The Journal of the Literacy Assistance Center. (Summer 1996: Volume 5, Number 1). Pages 14-17.

**Outcomes May Take Unexpected Forms**

The field is just beginning to explore what outcomes can be expected from non-traditional literacy training using computers and other technologies. Although one should go into a project knowing what outcomes are expected, it is important to be open to other possibilities. For example, standards, of what is meant by gains in computer use, for our program were different than we expected. For some students just turning on the computer, being exposed to the agency's e-mail system and performing elementary functions was useful. One student had not sent any mail to her instructor. Every time she tried to log onto the computer she would be clocked off because she was taking too long to enter her password. She was observed persistently tackling this task for twenty minutes during one of her study sessions. However, when she finally logged on she displayed a great sense of accomplishment.

**Rethink What Kinds of Assessments to Administer in a Distance Learning Program**

This is discussed in further detail in the evaluation section.
Distance Learning Can Be a Steppingstone to Further Education

We have found that participating in the Distance Learning Program gives many students the push they need to go onto other educational programs. For example, a surprising total of 38% of the students enrolled in Cycles 3 & 4 of our program are continuing with other educational plans such as taking college courses, taking adult basic education courses or taking non-credit courses such as LPN and computers. Students report that working on their own in the Distance Learning program made them realize that they can do classroom work and that they have the discipline to study.
IV. EVALUATION ACTIVITIES

A formative evaluation and a summative evaluation were conducted for this project. A complete description of the evaluation designs appear in Millsap R. External Summative Evaluation Design, CASE/CUNY 1995 and Markowsky, M. External Formative Evaluation Design, CASE/CUNY 1995.

Formative Evaluation

The Objective of the formative evaluation was to determine the effectiveness of the quality of the workplace literacy training and the implementation of the distance learning model. The objectives of the evaluation included:

- Determine the effectiveness of the operations process including recruitment process, program implementation, and staff problem solving procedures.
- Review curriculum to determine relevance to project goals.
- Assess the impact of instructors, release time, location of workplace (community vs. institutional facility), job duties of participant, and shift of participant.
- Assess the impact of various technologies such as computers, teleconferencing, and videos on distance learning.

Methods employed by the formative evaluator included:

- Site visits and observations
- In-depth on-site interviews of participants
- Interviews of local team members and program coordinator
- Interviews with key personnel and partners
- Observation of CGT meetings
- Review of curriculum and assessment material
- Review of other program correspondence and documents
For further details on the formative evaluation, the reader can refer to the formative evaluation reports: Markowsky, M. *Self Directed Workplace Literacy Distance Learning for Developmental Disabilities Workers: External Evaluation, Project Year 1.* CASE/CUNY, 1996 and Trommer, A. *External Formative Evaluation, Cycles 2 and 3.* CASE/CUNY, 1997.

**Summative Evaluation**

The goal of the summative evaluation was to document changes in literacy skills and other relevant variable over the course of the training and to link these changes to the training intervention. In addition, demographic data was collected through the NWILIS database.

The amount of work completed by the participant as well as the extent of contact between each participant and the instructor were included in the database. These "contact variables" included:

- Number of contact hours
- Number of e-mail contacts
- Number of regular mail contacts
- Number of units completed

Also, to provide additional information, teachers were asked to rate each participant's progress and longitudinal data was collected on 12 participants from Cycle I. (See Appendix D for the Teachers Rating Scale and Longitudinal Questionnaire).

Pretest and Post-test measures were administered at the beginning and the end of the six month training period. All measures were customized to the job and were locally developed. The measures were as follows:

1. Job-Related Reading Comprehension
2. Writing Tasks: A direct writing assessment measure
3. Problem Solving Strategy Inventory: A test of problem-solving skills
4. Job Related Self–Efficacy Scale: Self-efficacy scale that concerned job-related competencies


One of the major difficulties faced by the project was how to administer assessment measures “at a distance.” This coupled with the downsizing and changes at the worksite agency that led to reduced localized support (described in other points throughout this document) resulted in the project’s difficulty in obtaining pre- and post-test data for participants and the control group. Nevertheless, enough complete participant data was collected to evaluate changes in literacy skills for participants following participation in the DLP. However, control group data collected was minimal; it cannot be determined if change resulted from participation.

The distance learning educational staff and the CGT worked vigilantly at trying to address assessment issues and increase the rate of return on pre- and post-test measures including: changing the way intake materials were distributed within the agency; making the testing packets more user-friendly (e.g. stapling into one packet, color-coding pre- and post-test); devising a system for students to pick their own proctor; tying assessment competition to the beginning and end of program (i.e. students cannot begin program until pre-assessments are completed, student will not receive certificate of completion until past assessments are completed); having program staff – the technology specialist or educational coordinator – administer test as they go out to sites for technical or monitoring visits.

Most effective was the implementation of teacher site visits at the beginning of Cycles 3 and 4 in the downstate regions. Teachers brought assessment instruments to the sites and, when feasible, served as proctors during their visit. “Testing at a distance” is an important issue that
needs to be face by all programs using this non-traditional approach to learning. How to assess gains needs to be approached non-traditionally, too.

Funding for this project required pre- and post-test data, but perhaps there would have been a better way to assess progress. Distance Learning administrators and practitioners might want to explore these alternate approaches to assessment:

- Administer group tests before the instruction starts: We chose to administer tests after instruction began, but early enough in the program so that we could still determine a baseline measure, based on research that showed that students, especially adult learners, are "turned off" to instruction when the pre-test is administered up front. However, this approach would allow for group proctoring, and depending on the worksite, it may be easier to bring staff together.

- Utilize a hybrid model for distance learning: If a portion of the time is spent in the classroom there is a natural setting for test administration. Even programs that use a complete distance learning approach could provide an orientation session or period at the beginning of instruction. The assessment could be administered during orientation.

- Use the computer for test administration: Many distance learning programs are experimenting with putting assessment tests “on-line” and having students complete the test at their computer either with a proctor present or self-proctored. Students would have to be fairly computer literate for this to work, otherwise their lack of computer expertise would affect their ability to display knowledge of the content area.
Summary of Summative Evaluation Results

There is evidence of some gain in performance on writing and problem solving. There was no evidence of increase in reading, but this may be the result of a number of factors: there may have been difficulty with the measure itself (a locally developed instrument), or there may have been a ceiling effect that prevented dramatic gains in performance (the pretest score level on reading was higher than on other literacy measures). Nevertheless, participants' feeling of self-efficacy in reading did increase following participation. Also, instructor ratings conclude that instructors believed that the average participant benefited from participation in the program.

Clear evidence of gains in participants' feelings of competence and self-efficacy were found, as statistically significant gains in all three of the self-efficacy measures were present. Regardless of the actual increase in skill levels, the participants felt more capable following participation in the program. These results are consistent with the participants' self-ratings and the ratings of the participants' supervisors, both of which showed significant gains from pre- to post-test. Supervisors felt that the employees did benefit from participation in the distance learning program.

Overall, participants in the Distance Learning Program benefited from the participation, either in terms of increased skill, or in terms of increased confidence and feelings of self-efficacy. For the complete analysis and further details, the reader can refer to the final report on the summative evaluation of the Distance Learning Project: Millsap, R. Final Evaluation Report on the Distance Learning Project, CASE/CUNY, 1998.
Results of Site Visit Data Analysis

To facilitate the collection of assessment data as well as to address the issue of isolation that instructors were feeling and to establish a relationship between instructor and students early in the program, teacher site visits were implemented downstate for Cycles 3 and 4. (A Complete description of this aspect of the DLP appears in the Accomplishment section). At the end of the cycles, teachers were given a questionnaire to fill out and students were interviewed to determine the impact of the teacher site visits. (Copies of the questionnaires for the site visits appear in Appendix D).

Teachers’ purposes for going on site visits included meeting the student, viewing workspace, learning more about job responsibility, providing orientation, helping students learn the e-mail system and administering the assessment inventory. Most teachers felt that their visits had an impact on students’ work. They felt that as a result of their visits there was a “bond between the teacher and student” and that the “student was more committed” to the program or was “trying harder” with “more work being produced.”

Students also felt that the visit made a difference in their studies. Students felt the visit “made me feel special” and that teachers were able to “help me understand the materials and the program.” The complete result of the Site Visit Data Analysis appears in Appendix E.
V. PRODUCTS DEVELOPED

Description of Evaluation Design

External Summative Evaluation Design

This document presents the external summative evaluation plan for the Self-Directed Workplace Distance Learning for Developmental Disabilities Workers Project (DLP). The goals of the research component of the DLP was to seek to document changes in literacy skills and other relevant variables over the course of training and to link these changes to the training intervention. The report is presented in three sections. The first section gives a general description of the research design. The second section describes the measures to be used in the study. The third section describes the methods of data analysis to be applied to the data that will emerge from the study.

External Formative Evaluation Design

This document presents the external formative evaluation plan for the Self-Directed Workplace Distance Learning for Developmental Disabilities Workers Project (DLP). The formative evaluation study serves the following purposes: to provide timely feedback regarding the effectiveness of course materials and to identify necessary revisions; evaluate curriculum objectives; evaluate effectiveness of operations processes; provide evaluation on the implementation of distance learning educational technology; and evaluate the implementation of the teleconference component.

Curriculum Materials

Communication Skills for OMRDD Direct Care Workers: Distance Learning Study Guide

The Distance Learning Study Guide is the student manual for the Distance Learning Program (DLP). The Study Guide is divided into 12 theme areas related to the job responsibilities of Direct Care Workers, such as Incident Reports, Medications, the Individualized Planning Process, Managing Daily Living Activities. Each theme area consists of seven to fourteen units for a total of 105 units in the Study Guide. Each unit is composed of different learning activities. The learning activities utilize the different technologies incorporated in the program: e-mail, video-computer assisted instruction, word processing, telephone, as well as pen and paper activities.
Communication Skills for OMRDD Direct Care Workers: Instructor's Manual

This is the Teachers' Guide for the Study Guide described above.

Videotape Segments for Communication Skills for OMRDD Direct Care Workers: Distance Learning Study Guide, Tapes 1-4

This series of videotapes consists of an orientation videotape which describes the Distance Learning Program in detail and three videotapes to accompany the Study Guide. The videotapes were produced from raw footage of direct care workers on the job. The videotapes are used as a stimulus for reading, writing and other literary activities.

Communication Skills for OMRDD Direct Care Workers: Video Guide

The video units from the complete DLP Study Guide were repackaged into the Video Guide. The Video Guide is for students who want to complete all of their learning using the video medium only. The Video Guide covers all of the topics in the complete Study Guide but there are fewer units for each theme area. Therefore the program would be for students who want to finish the program in a shorter amount of time.

How to Study and Manage Your Time Effectively When Working on the Distance Learning Program

This booklet introduces to students the difference between distance learning and the traditional classroom model of learning. It provides pointers for studying independently. Topics include "Getting Started and Being Prepared", "Discipline", "Identifying Your Learning Style", "Setting Study Goals", "Improving Your Concentration", "Managing Your Time".

Computer Reference Guide for Using E-mail, NEWS, and other Applications

This computer reference guide is specific to the All-In-One e-mail system as utilized by the NYS Office of Mental Retardation and Developmental Disabilities.

Discs for all print materials above
Student Brochure

This brochure was used for recruiting direct care workers at OMRDD. It succinctly describes the program and provides contact information for registration.

Guidelines for Technology Implementation in a Workplace Distance Learning Project

This concise booklet provides guidelines for designs of projects which involve any combination of a workplace setting and implementation, inexperienced technology users, a distance learning model or project format, and/or limited budget for technology resources and training. The following areas are discussed: hardware and equipment, software, and training.

Staff Development Guidelines

This booklet discusses issues around staff development in a distance learning model and the use of technology in an educational setting.

Packet of Assessment Materials

This packet consists of locally developed measures for the Distance Learning Program. It consists of the following pre- and post- tests:

- **Participant Self-Report**: worker assesses how well s/he is able to complete job tasks that require reading, writing, math, and problem solving skills.
- **Supervisor Report**: worker's supervisor assesses how well the worker is able to complete job tasks that require reading, writing, math, and problem solving skills.
- **Job-Related Self-Efficacy Scale**: to find out how sure workers feel about their job-related reading, writing, math, and problem solving skills.
- **Job-Related Reading Comprehension**
- **Writing Tasks**
- **Problem Solving Strategy Inventory**

Packet of Forms Used in Distance Learning Project

This packet consists of forms used in the Distance Learning Project. It includes Registration Forms, Contact Forms, Instructor Logs, Site Visit Logs, and a sample of the Certificate of Completion.
Videoconference Tapes

These tapes are the proceedings of the videoconferences held for Cycles 1, 2 and 3. Students "met" the instructors, counselors, and administrators that they were working with at a distance; they participated in a short learning activity; and they provided feedback during a phone-in segment.

Final Products

The Care and Feeding of a Successful Collaborative Partnership:

A journal article about the experiences of the four Distance Learning Partners. It discusses why this partnership worked and how the use of technology enhanced the partnership process.

Final Evaluation Reports

Summative Evaluator's Final Project Report
Formative Evaluator's Final Project Reports

Final Performance Report
VI. INSTITUTIONALIZATION ACTIVITIES

The Distance Learning Model is appropriate for the larger number of workers across the country in workplaces with small numbers of staff, night shift workers, and urban, suburban and rural workers who are not moving into education because they find it too difficult or time-consuming to travel to educational sites. In addition, the technological aspect of the program, particularly the use of computers and e-mail, is appealing to workers in need of literacy training because they see computers as necessary to their professional and personal life and feel “out of the loop” if they don’t have computer skills. Therefore, as part of our institutionalization efforts we are exploring with other worksites, educational settings and funding sources as ways to extend and/or adapt this model. We have engaged in extensive dissemination activities to share our products and what we have learned with the greater workplace literacy and adult literacy community, and our product has been well received (See Section VIII).

Below are some examples of ways this model has been adapted to date:

- Distance Learning Secretarial Training Program: Enhancing Business Communication Skills Through Product Development – funded by the NYS Governor’s Office of Employee Relations: In this project secretaries who needed to enhance their business literacy skills participated in a hybrid distance learning project. Most of the work was done “at a distance” but students met periodically in a classroom setting. E-mail study groups were utilized for contextualized literacy activities, including product development.
• Simultaneous Enhancement of Literacy Competence and Computer Technology for New York State Workers: A Curriculum Development Project – funded by the NYS Governor's Office of Employee Relations: CASE/CUNY is developing a curriculum to teach computer skills and enhance literacy skills in the same class setting that will be piloted with CSEA union workers who need to improve their literacy skills. Many of the approaches and techniques from the DLP will be adapted for this program.

• Crossroads Café – The Project Director of the DLP presented the Distance Learning model at the training session for administrators and teachers of this project.

• Consortium For Worker Education Satellite Childcare Program – CASE/CUNY will be involved in the technological implementation for this project which involves childcare workers receiving supervision, job and literacy training, at a distance via computer.

The work site, OMRDD, as stated in their letter of support, planned to institutionalize the project, if they were satisfied with the results at the end of the grant period. For this reason the project was set up from the beginning to allow for an easy transfer of the project to OMRDD administration and staff.

Key to this was the formation of local advisory teams. These teams included the local union presidents, the head of the educational and training division, and a direct care worker, among others. The Central Guidance Team held regular meetings with Program Coordinators and Union representatives of the local advisory team for their advice and input to foster a sense of ownership.
Often a more efficient approach to a problem was sidestepped (e.g. having the CGT involved in an agency-wide recruitment model rather than leaving it to the local district) so that the local teams would be exposed to and have practice in implementing all aspects of the project. Unfortunately, during the course of the project there were major changes in the agency that made institutionalization at the participating worksite, OMRDD, difficult. Budget cuts, an offer of a staff buy-out and lay-offs decimated the local advisory teams. In some locations a team of one or two people replaced a committee of seven or eight. Those left on the job had greater responsibilities at OMRDD and could not devote as much time as previously to the DLP. In addition, districts were consolidated across the state resulting in a different configuration of the local agencies (Manhattan and the Bronx were merged, for example).

Nevertheless participating regions that had strong leadership and were able to address the internal issues while remaining strong and intact were able to take most advantage of the Distance Learning Program. Also, regions with equipped computer centers and training facilities were able to more easily incorporate the technological aspects of the program.

One region, Western New York, exemplified this. The Program Coordinator in this area used the DLP to complement his training program for new direct care workers. He established peer partnerships to provide additional support to distance learning students. He worked with his supervisors to ensure students received the release time they were entitled to. He hosted region wide recruitment efforts honoring past and soliciting future participants and increased the numbers of students enrolled beyond the numbers he had committed at the beginning of the project. Aspects of the DLP are continuing in his region. The curriculum is being used as supplemental training material. Also, workers who need to brush up on their workplace literacy...
skills are exposed to this program before they begin agency training.

As part of our institutionalization efforts, DLP staff met with non-participating OMRDD regions in New York State to describe the program as implements and to explore possible configurations for application and institutionalization at the local level. Meetings were set up with interested DDSO Education and Training Directors in three regions across New York State. Attending were Education and Training Directors and representatives of all non-participating DDSO, with the exception of Long Island and Staten Island, who did not express interest. All DDSO expressed interest in utilizing the DLP. The program was viewed as being especially useful for transitional workers. A complete set of materials were given to all regions for their use. Presentations were made by the Project Director and Labor Partner representatives as follows:

- Saratoga Springs, NY: Capital District DDSO, Sunmount DDSO
- Syracuse, NY: Broome DDSO, Central NY DDSO
- Wassaic, NY: Taconic DDSO, Letchworth DDSO
VII. DISSEMINATION ACTIVITIES

Presentations


- **November 29-December 2, 1995 – New Orleans, LA.** Presentation entitled “Studying Job Practices and Texts to Identify Literacy Objectives for Workplace Distance Learning Instruction” at the National Reading Conference, 45th Annual Meeting. Presented by Dolores Perin, Ph.D. of Teachers College, Columbia University.

- **December 6, 1995 – New York, NY.** Presentation entitled “A Distance Learning Workplace Literacy Project” at the Big Five Cities Administrators of Occupational and Adult Education. Presented by Verna Haskins Denny, Ph.D. of the Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York.


- **April 7-12, 1996 – New York, NY.** Presentation entitled “A Distance Learning Workplace Literacy Project” at The American Educational Research Association Conference. Presented by Verna Haskins Denny, Ph.D. of the Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York.


- **April 30, 1996 – Milwaukee, WI.** Roundtable Presentation entitled “A Distance Learning Workplace Literacy Project” at the Conference on Workplace Learning. Presented by Dolores Perin, Ph.D. of Teacher’s College, Columbia University and Verna Haskins Denny, Ph.D. of the Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York.

- **May 1-2, 1996 – Milwaukee, WI.** Presentation entitled “Technology and Workplace Literacy: A Distance Learning Model” at the U.S. Department of Education National Workplace Literacy Program Project Directors’ Conference. Presented by Verna Haskins Denny, Ph.D. (CASE), Harvey Huth (CSEA), and Harriet Spector (GOER).

- **May 1, 1996 – New York, NY.** Presentation entitled “OMRDD/REACH/CUNY Distance Learning Program” at the Young Adult Institute Conference. Presented by Carolyn W. Harris (OMRDD) and Jenny Dillman, Educational Coordinator.
- **August 1996 – Chicago, IL.** Presentation at the Adult Literacy and Technology Conference by Susan Brockman, Educational Technology Specialist.

- **October 1996 – Lake George, NY.** Presentation to the Continuing Education Association, by Charles Nardino, Educational Coordinator, along with other CGT members.

- **November 1, 1996 – Charlotte, NC.** Presentation entitled “Distance Learning for Workplace Literacy: Building Reading, Writing and Problem-Solving Skills at Work” at the American Association for Adult and Continuing Education. Presented by Dolores Perin, Ph.D. of Teachers College, Columbia University.

- **December 4 – 7, 1996 – Charleston, SC.** Presentation entitled “Use of Technology to Improve Workplace Literacy Skills” at the National Reading Conference, 46th Annual Meeting. Presented by Verna Haskins Denny, Ph.D. of the Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York.

- **May 4-9, 1997 – Atlanta, GA.** Presentation entitled “A Distance Learning Workplace Literacy Project” at the 42nd Annual Convention of the International Reading Association. Presented by Verna Haskins Denny, Ph.D. of the Center for Advanced Study in Education, The Graduate School and University Center of the City University of New York.

- **October 23 – 25, 1997 – Lake George, NY.** Presentation entitled “A Distance Learning Workplace Literacy Project” to the Continuing Education Association of New York. Presented by Carolyn Harris (OMDD), Charles Nardino (CASE/CUNY), and Harriet Spector (GOER).


**Publications**


- Denny, V.H.; Dillman, J.; Nardino, C. “The Loneliness of the Long Distance Teacher.” In development.

**Website**

A website for the Distance Learning Project has been developed and will be established and maintained on the CUNY Graduate School Website.
Awards

• Received the 1995-1996 James C. Hall Jr. Exemplary Programs Award in the category “Business/Industry Linkage” for the Self-Directed Workplace Literacy Distance Learning Program, awarded by The Continuing Education Association of New York.

Requests for Materials

• Cankdeska Community College, Workplace Literacy Program: Fort Totten, ND
• Capital District DDSO – Staff Development: Corinth, NY
• Community College of Denver: Denver, CO
• Community Development Agency: New York, NY
• Continuing Education Institute: Watertown, MA
• DesMoines Area Community College: Alkeny, IA
• Florida Adult Literacy Resource Center: Tallahassee, Fl
• Joblink: Costa Uresa, CA
• Literacy Assistance Center, Inc: New York, NY
• Maryland State Department of Education: Baltimore, MD
• Northern Illinois University, L.E.P.S: Dekalb, IL
• NYSED: Albany, NY
• Orangeburg-Calhoun Technical College, National Workplace Skills Project: Orangeburg, SC
• South Mississippi Regional Center: Long Beach, Mississippi
• Steelcase: Tusan, CA
• St. Cloud State University, Academic Learning Center: St. Cloud, MN
- University of Hawaii at Manoa, College of Education: Honolulu, Hawaii
- University of Southern Colorado, Productivity Training Project: Pueblo, CO
- Wayne State University, Instructional Technology: Detroit, MI
- Wayne-Finger Lakes BOCES, Adult & Continuing Education: Stanley, NY
APPENDIX A

PARTICIPANT FEEDBACK
Participant Feedback

E-Mail #1: Participant learned to use computer, to write incident reports and N27s better, to read, write and spell, and to voice her opinion.

E-Mail #2: Participant feels she has a new personality. She performs better on interviews and believes in herself. She can see clearly what she needs to focus on.

E-Mail #3: Program helped with spelling and math.

E-Mail #4: Participant enrolled in a community college.

E-Mail #5: Participant has enjoyed working with e-mail and being involved with learning. He feels it has helped him in thinking about his future and in building up his enthusiasm towards work.

E-Mail #6: Program has helped participant maintain interest in the workplace.

E-Mail #7: Participant is proud of the work she did in the program.

E-Mail #8: Participant feels she will be able to use the knowledge she gained in other parts of her life.

E-Mail #9: Although participant still needs a lot of work on her writing skills, writing sample is a marked improvement over participants writing at the beginning of the project.
12-20-95

Hi, Terry

How are you? I'm fine. Here is the thing I learned while taking my class.

I learned how to use a computer and its accessories. I learned to create and send messages. I learned to write a better accident report. I learned to do a N27 better and I learned to voice my opinion more through this course. I also learned to read, write, spell.

This was a very good class and I hope they offer it again when everybody have a chance to do it.

Thanks
I N T E R O F F I C E M E M O R A N D U M

Date: 14-Dec-1995 10:46am EST
From:
Dept: Bernard Fineson DDSO
Tel No: iVa 416

TO: Margaret Carson

Subject: long distance learning project progress

MY DEAR FRIEND MARGARET, 12/14/95.

IF I MAY CALL YOU THAT. I CANNOT BEGIN TO TELL YOU HOW IT FEELS TO BE ABLE TO COMMUNICATE WITH YOU THROUGH E-MAIL WHOLE! IT HAS BEEN SO LONG SINCE WE HAVE COMMUNICATED I DON'T KNOW WHAT TO SAY, OR HOW TO SAY IT. SO I WILL JUST SAY THANK YOU FOR BEING THERE FOR ME EACH AND EVERY WEEK, IT IS TRULY A FIRST FOR ME.

WHEN I THINK ABOUT THE TIME AND EFFORT THAT WAS SPENT PUTTING THIS PROGRAM TOGETHER, I CAN ONLY SAY IT WAS WELL WORTH THE TIME. I SEE A NEW PERSONALITY IN TERMS OF MY PRESENTING MYSELF ON AN INTERVIEW, AND REALLY BELIEVING WHAT I SAY ABOUT MYSELF.

TO ME THAT IS SO IMPORTANT!! I AM GLAD THAT I DID WELL ON THE VARIOUS SUBJECTS IN THE LONG DISTANCE PROGRAM. AS I HAVE SAID BEFORE, COMMUNICATION SKILLS ARE ONE OF, IF NOT THE MOST, IMPORTANT THINGS I FEEL SHOULD BE PERFECTED IN MY LIFE AT LEAST.

NEEDLESS TO SAY THIS PROGRAM HAS ENABLED ME TO SEE CLEARLY THE THINGS I NEED TO FOCUS ON INTO HELP ME ENJOY, AND UNDERSTAND THE WORK THAT I AM DOING. THANKS SO MUCH MARGARET.....
INTEROFFICE MEMORANDUM

Date: 17-Jun-1996 08:40pm EST
From: [Name Redacted]
Dept: Finger Lakes DDSO
Tel No: 716.237.6742

TO: Verna Denny
(DENNYVX)

Subject: DISTANCE LEARNING

DEAR Verna,

I wanted to thank you for the t-shirt. It was very thoughtful of you. I also would like to thank everyone who is involved in the distance learning program. I can't express how much I got out of that program. It has helped me greatly with my spelling and math. I do so much better at both.

Thank you,
INTEROFFICE MEMORANDUM

Date: 23-Apr-1996 12:52pm EST
From: Gladys Scott-Fuchs
        SCOTTGJ
Dept: Metro NY DDSO
Tel No: (212) 229-3382

TO: Charles Nardino
CC: Verna Denny

Subject: Cycle I student update-

I just spoke with [redacted], a Cycle I student, at Fineson and she had some very exciting news.

She is applying to Nassau Community College and she hopes to be accepted. Of course I wish her well and ask that she continues to stay in touch with me and Distance Learning.

[redacted] is a living success story and what "life-long learning and commitment" are all about.

If you get a chance send her a note of encouragement, it means so much to our students to know that we care!

Gladys

BEST COPY AVAILABLE
Dear Gladys

Just a few lines to let you know that it feels good to be working on e-mail. I just received the new package and will open it this evening when I get home to review it. It has been a joy to work with e-mail. It also has been good to freshen up on my reading and writing skills, it’s been such a long time since I had to hit the books. I would like to thank everybody that is involved with this program. It has been a great help towards my future, of which I haven’t decided what direction I’m going in. All I’m certain of is I will be dealing with some type of computer background. Thanks once again for helping me to build up my enthusiasm towards my work and e-mail.

Yours Truly

BEST COPY AVAILABLE
Subject: Thanks to All of You.

I would like to extend my heartfelt thanks to all of you who made this project available to me. I have found the program to be just the spark I needed to keep my interest in the work place. I am privileged to know you and to take part in the Distance Learning Project. Many thanks for all the help and work you have done for me.

Happy New Year and May God Bless,
INTEROFFICE MEMORANDUM

Date: 07-Oct-1996 05:25pm EST
From: [Redacted]
Dept: Finger Lakes DDSO
Tel No: 716-266-5266

TO: Eric Becker
   (BECKERC)
TO: Jenny Dillman
   (DILLMAJK)
TO: Susan Brockman
   (BROCKMSX)
TO: Marion Entress
   (ENTRESMX)

Subject: Certificate From The DLP.

Hello Everyone:

I want to say that I was truly a happy woman when I received my certificate from the DLP. I want to thank each one of you for your help and encouragement. I feel good that I completed the program. I will help others in the program. Dedication, and hard work pays off. I am truly proud.

Respectfully,

[Signature]

BEST COPY AVAILABLE

51
TO: Eric Becker

Subject: LAST E-MAIL MESSAGE FROM

Hi Eric,

I spoke to Jenny Dillman and she told me to do Unit 105. This way I’ll still get my shirt and certificate. If you need my address it’s

Thanks for all your help. I’m sure that no matter where I go I’ll be able to use all that knowledge I gained in one way or another.

Take Care,
TO: Jenny Dillman (DILLMAJK)

Subject: 

Hi Jenny

Here is a copy of the message sent me after I asked her to tell me how she benefitted from the program. I am so impressed by her work. I can actually read the email. Usually, her writing is so bad I cannot understand it. She had improved tremendously and is a success.

Terry

Date: 14-Dec-1995 10:32am EST
From: 
Dept: Finger Lakes DDSO
Tel No: 716-461-8999

TO: Theresa Swett (SWETTTC)

Subject: RE: Email

HELLO TERRY 12-14 95

PROJECT

I, M LEARNER IN THE PROGRAM BE MY SELF THIS PROGRAM WILL BE HELP ME IN MY FUTURE. I, M HAVE A DREAM I GOING TO MAKE CAN,T TRUE.

THIS PROGRAM HELP ME IN MY EDUCATION, I M IMPROVE IN MY READING WRITING AND SOCIAL LIVE AND IN MATH. NOW I, M WORK WITH MORE IN THE TYPING TO IMPROVE MY SKILL AND NOW DOING MORE COMPUTER TYPING.

THIS PROGRAM IS VERY GOOD. I, M LEARNER TO USED PERSONAL COMPUTER WITH MICROSOFT WINDOWS. THIS COUSER HELP ME TO DO WORK VERY GOOD. NOW I, M CAN,T WORK LIKE A PROFECIONAL. THIS COUSER HELP ME IN MY ENGLISH GRAMMAR TO WRITER LETTER TO MY COMWORKER.

TO UNDERSTEND AND USING MY SKILL NOW I, M CAN,T HAVE CONVENTION IN THE TELEPHONE NO AFRAIN TO TALK. TO WRITE AND TO READ.

TANKYOU TERRY FOR THE HELP YUO GIVE ME AND FOR THE UNDERSTANDING .TANKYOU MERRY CHIRSTMAS

BEST COPY AVAILABLE
APPENDIX B

GUIDELINES FOR TECHNOLOGY IMPLEMENTATION IN A WORKPLACE DISTANCE LEARNING PROJECT
These guidelines offer some general points of consideration for designers of projects which involve any combination of the following:

- a workplace setting and implementation;
- inexperienced technology users;
- a distance learning model or project format;
- limited budget for technology resources and training

A project which plans an information technology component as part of its design must consider adequate budget resources for the following basic areas:

I. Hardware and Equipment

II. Software

III. Training
I. Hardware and Equipment

Hardware resource issues fall into three main areas:
a) assessment of available equipment, whether to be purchased new for the project or allocated from existing resources;
b) maintenance of equipment once designated for project use; and
c) the location of equipment and problems of access by project participants.

Assessing Available Hardware: Project designers should keep in mind that decisions made early on in a project can determine much of the project's later success or failure. Equipment does not need to be elaborate in order to be functional; however, it must be sufficient to handle the project's educational goals. Designers should keep the following principles in mind when selecting and assessing equipment:

- consistency of set-ups is preferable;
- equipment should be made as fool-proof for users as possible;
- overall quality and reliability is a more important consideration than extra "bells and whistles" which, in inferior equipment, may lead to down-time.

Maintenance of Equipment: Adequate equipment maintenance is one of the most important considerations for any project design involving technology. More than time can be lost on account of poorly functioning equipment: momentum, confidence, and enthusiasm are easy casualties as well. Distance Learning projects should take into account:

- the geographical locations of participating sites;
- the number of users accessing equipment; and
- the general reliability and durability of the equipment provided.

On-site maintenance and repair should be anticipated and budgeted as amply as possible.

Location and Access: Location and accessibility of equipment is also an important issue for consideration. In workplace projects, issues such as locked staff offices, demands of other staff for equipment, and quality and completeness of overall set-ups should be taken into consideration when planning and designing.
II. Software

Selection of software will depend, to some degree, on the nature of the hardware resources available to a project. Some basic guidelines would include the following:

- Software should run well on the lowest level equipment used in the project;
- If more than one program is to be used, consistency of format is helpful in reinforcing learning.

Project directors should remember that shareware programs may be available which are adequate to the needs of a project, but some caution needs to be used when purchasing these programs. Because of their low cost and sometimes "home grown" quality, there may be hidden bugs or glitches in these programs which can prove frustrating down the line. They should be tested thoroughly before being purchased, and where possible, reviews should be checked. Site license agreements should be purchased and respected with shareware as with commercial software.

Older programs are not always to be avoided. Keep in mind that users who are new to computers may find older software both entertaining and eminently usable. A simple drill-and-practice program whose content is relevant to participants can work just as effectively as a more expensive, graphically complex program which may crash or run too slowly on the available equipment to be practical.

III. Training

Intensive initial training sessions should be provided for all participants before the expectation of any actual curricular work involving technology. Participants should also have access to ongoing support and training, preferably in-person and on-demand, such as at a Computer Learning Center, or in pre-planned group training sessions scheduled as follow-ups to initial training. It should not be assumed that participants will make use of telephone support until they are at a more advanced stage in their technology learning; most beginners are intimidated at first, and are unlikely to make use of this service.

Also, designers must take into consideration the fact that written documentation is virtually useless to those unfamiliar with computers, and to many who are familiar with them as well. The vast majority of computer users are not able to get a question answered by consulting a manual, regardless of their educational level. Telephone support is somewhat more efficacious, although new users will be reluctant to call a person they do not know personally.

1Note that most software today is shipped pre-loaded onto hard drives without written documentation included; on-line help functions and telephone support have become the industry standard.
GUIDELINES FOR STAFF DEVELOPMENT IN A WORKPLACE DISTANCE LEARNING PROJECT

by Jenny Dillman and Charles Nardino

These guidelines, for staff development of distance learning instructors, offer some general points of consideration for projects which involve:

- a workplace setting and implementation; and
- a distance learning model or project format.

This booklet will address the following basic areas:

I. Training of Administrative Staff
II. Orientation of Instructional Staff
III. On-the-Job Training
IV. Staff Meetings
V. Keeping Staff Up-to-Date
I. Training of Administrative Staff

The Educational Coordinators came to the Distance Learning Program (DLP) with experience in Adult Basic Education, workplace literacy, and knowledge of the worksite and population. Initial training consisted of readings on teaching literacy, reviewing the DLP proposal, and clarification and information from the Project Director.

Other training took the following form:
- satellite course and video conference
  - (1) SUNY course on adult literacy
  - (2) "What Works? Literacy Training in the Workplace" -- a videoconference providing a concise overview of workplace literacy programing
- attendance at pertinent conference and meetings, e.g., Workplace Education Collaborative
- informal contact with worksite training and staff development personnel
- site visits
- training through development of materials; i.e., extensive viewing of raw video footage for production of videotapes to accompany the Distance Learning Study Guide provided information about the worksite and how it operates, the students' work responsibilities and what the educational needs might be.
- e-mail training: formal presentations and application
- training course regarding the production of video-conferences

In addition, the administrative staff served on the Central Guidance Team, the advisory mechanism for the DLP program. In this capacity they helped design, shape, and formatively evaluate the start-up of the program, and in the process learned the guidelines for implementation.

II. Orientation of Instructional Staff

Teachers were provided with a 3-hour pre-start-up orientation that was followed by individualized training sessions as needed.

The Orientation took the following form:
- training on technological aspects of program, by Technology Specialist
- viewing of agency video film, "What It Takes," which provided examples of the duties and working conditions of the student population
- presentation by agency Training and Staff Development Director on literacy needs of participants
- review of study materials
III. On-the-Job Training

Instructors received extensive on-the-job one-on-one training, immediately following orientation, on the All-in-1 e-mail system, including hands-on practice; functions included logging on, creating passwords, creating and saving messages, and reading mail. The Educational Coordinators and the Technology Specialist made every possible effort to spend time with the teachers at their downstate and upstate offices, to help them master the e-mail system and to adjust to the requirements of distance learning and workplace literacy.

IV. Staff Meetings

Staff meetings were held approximately every six weeks downstate and every one to two weeks upstate. (Smaller staff size allowed for easier scheduling in the upstate region.) The primary purpose of these meetings was to keep staff informed of administrative developments. For example, one meeting was scheduled to explain and provide practice of the assessment scoring procedure; another was devoted to the issue of participants’ release-time and retention problems and how best to deal with them. The meetings also served to allow teachers to discuss and compare their experiences. This function was especially important for a distance learning program. At times it was frustrating for teachers to work at a distance from their students, especially during those times when student work wasn’t delivered as expected, or when it was difficult to establish phone or e-mail contact. Teachers felt less alone sharing their experience with each other and problem solving together.

V. Keeping Staff Up-to-Date

The Educational Coordinators downloaded, copied and distributed interesting and pertinent postings from several literacy-oriented "listservs," including the National Workforce Assistance Collaborative (NWAC), the National Institute for Literacy (NIFL) and the Workplace Education Collaborative (WEC). In addition, day-to-day communication between Educational Coordinators and instructional staff was maintained by extensive use of the e-mail system.

Two statewide staff meetings were conducted using a telephone conference format. This enabled both upstate instructors, downstate instructors, program administration, and the advisement coordinator to "meet" together despite the fact that participants were housed at four different locations. In addition, more informal meetings were held to foster connections. For example, one staff meeting was held at the home of the downstate Educational Coordinator to show teachers how to "surf" the web."
APPENDIX D

RESULTS OF SITE VISIT DATA ANALYSIS
Results of Site Visit Data Analyses

Teacher’s Site Visit

We have teacher site visit data on 25 students. The teachers were asked about the number of site visits made. Ten of the teachers visited once, 13 teachers visited twice, and two teachers visited three or four times. Twenty-two of the 25 teachers met with someone other than the student during the site visit. When asked with whom the teacher met, 20 teachers indicated "other Direct Care worker", 15 indicated "Supervisor", five indicated "consumer/client", 3 indicated "team member", two indicated "Program Coordinator", two indicated "R.N.", and one indicated "administrative staff".

Each teacher was asked about the purpose(s) of the site visit(s). The responses in order of highest to lowest frequency were:

Meet student 25 teachers
View workspace/situation 24
Learn more abt participant’s job responsibility 23
Describe program 22
Provide orientation 21
Help with All-in-One 18
Help with specific learning activities 17
Administer inventory 15
Develop IEP 8
Bring Study Guide 7
Supply exit forms 3
Supply grammar work 2
Supply student’s work 2
Supply worksheets 1

Teachers were asked whether their visit had an impact on the student’s work. Five teachers responded "yes, a lot", 12 teachers responded "yes", and seven teachers responded "no".
Those teachers who responded "yes" were asked about the way in which their visit affected the student’s work. Five teachers said that the visit helped "bond between teacher and student", four teachers said the "student felt more committed to the program", four teachers said the student "learned the computer/could now use the computer for work", three teachers said student "tried harder", two teachers said student "became a better student", and two teachers said "student changed approach to work". The teachers were also asked whether the site visit affected the teacher’s relations with the student. Seven teachers said "yes, a lot", 12 teachers said "yes", and five teachers said "no". Those teachers who responded "yes" were asked "in what way?" Four teachers said that "more work was produced", three teachers said the student "called more to ask for help/greater contact with", three teachers said that the "student was more committed to the program", two teachers said that the visit "broke the ice, less formal relationship", two teachers said that the visit "encouraged student’s future goals/more confident", one teacher said that the "student felt personal obligation to the teacher", and one teacher said the teacher’s "understanding of work situation/constraints improved".

Unfortunately, it is not possible to evaluate these 25 students on their gain scores for the test measures. None of the 25 students have both pre and posttest scores. I do have demographic data on most of the 25 students if you are interested in that (sex, race, etc.).

**Student Site Visit**

We have Site Visit Questionnaire data on 21 students. There is some overlap with the Teacher site visit data: 16 students have both Teacher and student site visit data. It is possible to link the two data sets because the student social security number was used to identify the records in both cases. Two of the 21 students indicated that they were never visited by their Distance Learning Instructor, and so the remaining questions on the Questionnaire have a maximum N of 19. When asked about how many times they were visited, three students said "once", eight students said "twice", five students said "3-4 times", and two students said "5 or more times". Eighteen of the students were visited at the "beginning of the program", 12 students were visited in the "middle of the program", and 12 students were visited at the "end of the program".

The students were asked how they felt about having the teacher visit the worksite. Eleven of the students said that they "enjoyed it/felt good", six students said it "helped me with work", four students said it "helped me be more responsible/had to get work done/encouraged me", four students said it was "nice of her to come/showed concern", and two students the visit "helped me with the computer". All other responses were given by only one student per response. Students were asked whether the teacher met anyone else during the visit. Three students said
"no", and 16 said "yes". For those teachers who did meet with someone else, ten met with the "Supervisor", 13 met with "Other Direct Care worker", eight met with "consumer/client", and one met with a "Team Member".

The student was asked about what activity was done with the instructor during the visit. The various responses, in order from highest to lowest frequency, were:

- Describe program: 18 students
- Learn more abt participant's job responsibility: 18 students
- View workspace/situation: 17 students
- Meet student: 17 students
- Help with specific learning activities: 16 students
- Provide orientation: 13 students
- Administer inventory: 10 students
- Help with All-in-one: 10 students
- Develop IEP: 9 students
- Bring study guide, tapes: 5 students

All other responses were given by no more than one student per response.

Students were asked whether the teacher's visit made a difference in how the student perceived his/her studies. Thirteen students said "yes, a big difference", four students said "yes, some difference", and two students said "no". Those students who responded "yes" were asked "in what way". Six students said the teacher "made me feel special/teacher showed interest", five students said "helped me understand materials/program", four students said teacher "gave me push I needed to get work done", two students said it was "good to have someone look over shoulder", two students said "gave me support/told me I did good", two students said teacher "gave me a mini lesson", and one student said the "teacher was able to get better sense of what I needed". When asked about what the student liked best about the site visit, five students said "tutorial; 1 to 1 component", three students said "teacher explained things well", two students said "meeting teacher", two students said "teacher showed interest", and all other responses were given by no more than one student per response.
Finally, students were asked how the site visit could be improved. Seven students said they wanted "more visits/longer visits", two students said they wanted "access to computer at the time of the visit", and all other responses were given by no more than one student per response. The last question asked for "other comments", and each response was given by one student.

Again, we have no complete gain score data on these 21 students. All of them are missing one or both scores (pretest and posttest). I do have demographic data on most of the 21 students.
APPENDIX E

SUPPLEMENTAL QUESTIONNAIRES
LONGITUDINAL QUESTIONNAIRE

Student ____________________________________________

Soc. Sec.# ___________________________ Cycle ______________

Say: We are contacting some of the workers who were participants in Cycle 1 and Cycle 2 of the Distance Learning Program. We want to see what impact participation in this program had on your job. It should take about 15 minutes to complete this questionnaire. Is this a good time to talk? (If not, make an appointment for when it would be a good time to call back.)

1. What was your job title when you began the course? ____________________________________________

2. Are you still in the same job title?

   Yes _____

   No _____ If "No," current job title: ____________________________________________

3. Have the responsibilities of your job changed since you were enrolled in the DLP?

   No _____

   Yes _____ If "Yes," in what ways? ____________________________________________

   ____________________________________________

   ____________________________________________
4. Have you enrolled in school or taken any classes since participating in the DLP?

   No _____
   Yes _____ If "Yes," describe program or list classes: __________________________
   __________________________
   __________________________
   __________________________

5. Have your career goals changed since you were in the DLP?

   No _____
   Yes _____ If "Yes":

   Goals before DLP __________________________
   __________________________
   __________________________
   Current career goals __________________________
   __________________________
   __________________________

6. What effect, if any, has the DLP had on your ability to do your job (e.g., write better incident reports)? Describe.

   __________________________
   __________________________
   __________________________
   __________________________
   __________________________
   __________________________
   __________________________
   __________________________
7. Other comments:

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________
TEACHER SITE VISIT QUESTIONNAIRE

Individual Participants

Please complete this form for each student you visited during Cycles 3 and 4.

1. Name of student ..................................................

2. Number of Visits ...............................................

3. Did you meet with anyone other than your student on your site visit(s)?
   No ________ Yes ________ If "Yes":
   _____Supervisor
   _____Program Coordinator
   _____Team Member
   _____Other Direct Care Worker
   _____Other (please describe) ______________________

4. What was the purpose of your site visit(s)? (Check all that apply.)
   _____View workspace/situation
   _____Meet student
   _____Describe program
   _____Learn more about participant's job responsibility
   _____Provide orientation
   _____Administer Inventory
Help with All-in-One

Help with specific learning activities

Help with specific learning activities

Develop IEP

Bring Materials:

Study Guide and/or tapes

Supply Materials (Describe: ____________________________

__________________________

__________________________

__________________________

Other (describe) ____________________________

__________________________

__________________________

5. Do you think your visit had an impact on your student's work?

Yes, a lot  Yes, somewhat  No, not at all

If "Yes," in what ways: ____________________________

__________________________

__________________________

__________________________

__________________________
6. Did your visit affect your relations with student?

[ ] Yes, a lot  [ ] Yes, somewhat  [ ] No, not at all

Did improved relations affect the work your student produced?

[ ] Yes  [ ] No

If "Yes" explain: ____________________________

______________________________

______________________________

______________________________

7. Other comments about site visits to this participant: (If you have a log of your visit, please attach.)

______________________________

______________________________

______________________________

______________________________

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STUDENT SITE VISIT QUESTIONNAIRE

Student ____________________________________________

Date Interviewed ______________________________________

Interviewed by _______________________________________

Say: I would like to ask you a few questions about the site visit your teacher in the Distance Learning Program made to your worksite. It should take about 10 minutes. Is this a good time to talk? (If not, make an appointment for when it would be convenient for you to call back.)

1. Did your Distance Learning Instructor visit your worksite during the time you were a participant in the program?
   Yes _____  No _____ (If no, end the interview here.)

2. How many times did your teacher visit you? __________

3. Was it at the _______ beginning of the program  (Check all that apply)
   _______ middle of the program -or-
   _______ end of the program

4. How did you feel about having your teacher come and visit you at your worksite? (Probe as needed)

   _____________________________________________

   _____________________________________________

   _____________________________________________

   _____________________________________________

   _____________________________________________

   _____________________________________________
5. Did your instructor meet anyone besides you during his or her site visit?

______ No

______ Yes -- If "Yes":

_____ Supervisor

_____ Team Member

_____ Other Direct Care Worker

_____ Other (please describe) ________________________________

6. What did your instructor do with you during his or her visit to your worksite?

(Check all that apply and add narrative below if necessary)

_____ View workspace/situation

_____ Meet student

_____ Describe program

_____ Learn more about participant's job responsibility

_____ Provide orientation

_____ Administer Inventory

_____ Help with All-in-One

_____ Help with specific learning activities

_____ Develop IEP

_____ Bring Materials:

_____ Study Guide and/or tapes

_____ Supply Materials (Describe: ____________________________

______________________________

______________________________

______________________________

______________________________

______________________________

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7. Did the fact that your teacher came to your worksite to visit you make a difference in how you perceived your studies?

_____ Yes, a big difference _____ Yes, some difference _____ No, no difference

If "Yes," in what ways: ________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

8. What did you like best about the site visit(s)? _______________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

9. How could the site visit(s) be improved? ________________________________

__________________________________________________________________________
10. Other comments:
APPENDIX F

CHANGES IN KEY PERSONNEL
Changes in Key Personnel

The Project Director, Dr. Dolores Perin, accepted a full-time faculty position at the end of Year 1. Therefore she reduced her time on the Project during Year 2. Dr. Verna Haskins Denny stepped in as co-director. The co-directorship structure ensured a smooth transition. Dr. Denny had good background and knowledge of the project as she had served as the curriculum developer and assessment specialist for the project. Dr. Denny took over full project directorship during Year 3.

We were required to reduce our budget 33% in Year 3. As a result we eliminated the Educational Technology Specialist line for the last year. It was felt that most of the technology issue would be addressed during the first two years. The Project Director and the downstate Educational Coordinator assumed the responsibilities connected with this position in Year 3.

The liaison to OMRDD, Ms. Carolyn Harris, Assistant Commissioner, was relieved of her responsibilities at her agency at the end of Year 2. She had been the major support person and advocate for the project within her agency. Her departure necessitated developing new linkages and information sources at OMRDD.
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