DOCUMENT RESUME

ED 384 743 CE 069 380

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TITLE Building Essential Skills for the Ohio Building and Construction Industry. Final Report.
INSTITUTION Ohio State Building and Construction Trades Council, Columbus.; Ohio State Univ., Columbus. Center on Education and Training for Employment.
SPONS AGENCY Office of Vocational and Adult Education (ED), Washington, DC. National Workplace Literacy Program.
PUB DATE Jul 95
NOTE 207p.; For a related external evaluation report, see CE 069 381.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS Adult Basic Education; Adult Literacy; Basic Skills; Classroom Techniques; *Construction Industry; Cooperative Planning; Curriculum Development; Delivery Systems; *Demonstration Programs; Educational Needs; Information Dissemination; *Literacy Education; Needs Assessment; Numeracy; Outcomes of Education; Partnerships in Education; Pretests Posttests; Program Development; *Program Effectiveness; Program Evaluation; Recruitment; School Business Relationship; Staff Development; *Statewide Planning; Task Analysis; Unions
IDENTIFIERS *Ohio; *Workplace Literacy

ABSTRACT

The Center on Education and Training for Employment (CETE) at the Ohio State University worked in partnership with the Ohio State Building and Construction Trades Council (OSB&CT) to develop and deliver customized workplace literacy services for local union members in six major Ohio cities (Columbus, Cleveland, Cincinnati, Toledo, Dayton, and Akron). A partnership board of OSB&CT and CETE staff was formed to oversee the following program activities: literacy skills assessment; development of an integrated two-strand basic skills curriculum that included literacy and numeracy strands and an instructor training program and the development of training materials; development/delivery of support services to reduce barriers to participation; participant recruitment; assessment of participants' needs; implementation and evaluation of the basic skills program; and dissemination of program information. Approximately 360 participants' received the job-specific basic skills required to be able to participate in union-sponsored technical skills enhancement training. Program instructors and participants alike were very enthusiastic about the program. (Appendixes constituting approximately 80% of this document contain the following: DACUM [Developing a Curriculum] Enhanced Literacy Task Analysis; job description for part-time instructor position; summary instructor/program information; participant information and pretest/posttest scores; reports for the spring and fall 1994 sessions and winter and spring 1995 sessions.) (MN)

Building Essential Skills for the Ohio Building and Construction Industry

Final Report

Center on Education and Training for Employment
The Ohio State University
and
Ohio State Building and Construction Trades Council

Building Essential Skills for the Ohio Building and Construction Industry

Final Report

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July 1995

FUNDING INFORMATION

Project Title: Workplace Literacy for World Class Manufacturing

Source of Contract: U.S. Department of Education
Office of Vocational and Adult Education
Washington, DC 20036

Contractor: College of Education
The Ohio State University
Columbus, Ohio 43210-1090

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Introduction

My hands are custodians of skills
a thousand generations old,
held in trust
for a thousand generations to come.

The mightiest skyscraper begins
with a stake I drive in the ground
and ends with the turn of the owner's key
in a lock I install.

The astronaut begins his probe of the heavens
from a launching pad I build.

I stand straight and walk proud,
because I know my contribution
is based on skill, not bluff;
on sweat, not sweet-talk;
on production, not press-agentry.

I am a building tradesman,
belonging to a building trades union.
Because I am,
I need truckle neither to king nor tycoon.

Peter Terzick
Former General Treasurer
United Brotherhood of Carpenters

This poem, written by a carpenter and union official, forcefully expresses the feelings of pride that members of the organized building and construction trades have in their work, and the knowledge that skill is the basis of their productive ability. The Ohio State Building and Construction Trades Council--193 local unions in 14 different crafts are affiliated with the Council on a statewide basis--are committed to helping the approximately 53,800 member union workers maintain and upgrade their skill levels so that they can, literally, continue to create the foundations of business and industry in spite of rapid technological changes in their crafts and the pressure of increased complexity and competition.

To meet the ongoing need for upskilling, the Council formed a partnership with the Center on Education and Training for Employment (CETE) of The Ohio State University's College of Education. CETE developed and provided craft-specific workplace literacy instruction in cooperation with the nonprofit training arm related to the Council. The program included (1) a DACUM Enhanced Literacy Task Analysis to confirm the skills and levels of skills needed, (2) development/adaptation of job-context instructional materials, and (3) provision of instruction through team teaching with individualized educational planning and support services. In the first phase, programs for three crafts were developed and implemented in cooperation with local unions in two major Ohio cities. In the second phase, these programs were provided in four more cities, building on first-phase experience.

The partnership's primary objective was to increase participating workers' job-specific basic skills to the levels required for technical skills enhancement training courses. The workplace literacy program, entitled "Building Essential Skills for the Ohio Building and Construction Industry," targeted construction industry jobs by offering basic skills instruction in three selected crafts. Carpenters, electricians, and sheetmetal workers were selected as the focus because the needs for upskilling in these craft areas were especially great in Ohio due to major technological change. These three crafts also met additional criteria established for selecting the initial crafts for the program: there was evidence that large numbers of craft members have insufficient basic skills to benefit from advanced technical training; each had a well-developed relationship with the Ohio State Building and Construction Trades Council; and each craft had an established national program for trainers, which indicates a commitment to training.

This last criterion is also important because it was planned that this project model could be transportable nationally via the crafts' national training program. Construction workers in Ohio have great needs, but these are reflected throughout the nation. It is especially important in the construction industry that the organized crafts work hard to provide training, because the contractors who provide employment are virtually all small businesses without a training capacity. Information from the Ohio State Building and Construction Trades Council reveals that in Ohio, 98.4% of all construction employers employ fewer than 50 workers, and 73.3% of all construction employees work for firms that have fewer than 50 employees.

Technology-driven changes will only accelerate in the future, having an even more profound impact on the employability of workers in an industry that is one of the country's largest employers and a major gauge of economic well-being for the entire United States. Construction represents a primary market for many other industries, including equipment manufacturing, lumber, and steel. Consequently, the economic health and stability of the construction industry impacts the nation disproportionately and amplifies the business cycle. It is imperative that issues concerning the skills of these workers be addressed constructively.

The Partnership Board

Partnerships played a pivotal role in the planning and implementation of the project. The partnership between the Ohio State Building and Construction Trades Council (OSB & CT) and the Center on Education and Training for Employment (CETE) of The Ohio State University's

College of Education was formed to plan and initiate the project. In conducting the project, CETE worked with the Ohio State Building and Construction Trades Training Foundation, Inc. (OSB & CT), an arm of the Council that sponsors training programs for workers in 17 crafts. Monthly meetings were held between CETE project staff and representatives of OSB & CT. The meetings were used to keep each partner apprised of various project activities, to move the project implementation forward as a team, to seek solutions to potential problems, and to keep open the lines of communication between CETE and OSB & CT. Although each partner was assigned the lead for specific project tasks, the monthly meetings provided a means for collaboration in implementing the tasks. For example, the OSB & CT worked with local unions to recruit learners, but CETE staff shared their ideas and experiences from a previous National Workplace Literacy Project. CETE had the responsibility for hiring the basic skills instructors, but OSB & CT personnel reviewed the resumes of potential candidates.

In addition to these monthly meetings, several meetings were held that included representatives from the local unions and the basic skills instructors. These meetings enhanced the partnership efforts by bringing to the planning table additional stakeholders. The meetings provided a forum for information sharing between and among the various groups involved in the project, i.e., instructors, union trainers, local union officials, and CETE and OSB & CT personnel.

The partnership that exists between the Council and the OSB & CT was also instrumental in the project's implementation. OSB & CT personnel kept the Council leadership apprised of the project and used both Council and local union meetings as an opportunity to facilitate project work. At each quarterly meeting of the Council a progress report was made to the 21 member executive board. Even though only 3 crafts participated in the project, the leaders of the other 14 crafts expressed a keen interest in the program. The two top officers of the Council also participated in semi-annual meetings with leaders from neighboring states and proudly reported on the implementation and progress of the project. Training coordinators from the selected sites who regularly exchange ideas and information were eager to discuss recruitment and implementation problems and solutions. Project staff from the Council's Training Foundation met with each training coordinator at each site before and after the training course.

A final partnership that was created as a part of the project was one between the basic skills instructors and the local unions. An important part of this partnership was the teaming of the

instructors with the local trainers. Although these partnerships were part of the umbrella partnership between CETE and OSB & CT, they were essential in the success of the project. The ability of the instructors to form successful linkages with the local unions was a key element in establishing and carrying out the classes.

In conclusion, the partnership board formed between CETE and OSB & CT created the ongoing relationship between the education and union partners. However, the other partnerships that developed during the project were also important to its successful implementation. All of these linkages have built a lasting relationship between CETE and OSB & CT. Both entities look forward to collaborating on future research and demonstration programs.

Literacy Skills Assessment

The basic skills program conducted by the partnership directly addressed the literacy requirements of the actual jobs available for properly trained journeypersons. The partners implemented an integrated two-strand basic skills curriculum—a literacy strand and a numeracy strand emphasizing critical thinking and problem solving--with the goal of not only upskilling the workers but also helping them learn how to learn. The needed skills were taught and learned within the context of their direct application to job tasks and the technical skills enhancement training courses offered by the craft unions. This functional-context approach not only built expertise by combining basic literacy with a metacognitive emphasis on problem solving, critical thinking, and decision making, but also provided the motivation of immediate relevance for learning. In the proposed project, this was reinforced because craft workers themselves had major input to the course. Also, adherence to the principles of individualized education contributed to a positive environment for learning.

It was known from two separate surveys prior to the project that the course needed to include reading of plans and specifications, manuals, and instructions; calculation related to measurement as well as geometry, algebra, and combinations of math skills.

The following comments of member union trainers documented the needs to be addressed:

- "Math has not been provided to our people while they were in school and **must** be provided by our industry. This is a serious problem."
- "These problems come to our attention in the classroom, through employer complaints, business agents' observation, and lack of job retention."

- "I have noticed several members asking for help in reading specs and blueprints. They pretend to want someone else's input, but really just need help reading."
- "Some members have great difficulty with common fractions and shy away from taking measurements on the job."

Specific content for the course was determined by a DACUM Enhanced Literacy Task Analysis (DELTA) that involved workers and their employers in systematically identifying the needs. (A detailed description of the DELTA process, developed by CETE, is provided in Appendix A.) A two-day DELTA session was held for each of the three crafts the second month of the project. (Fortunately, that was early April and the weather was not yet suitable for outdoor construction, so workers were available to participate.) The union in each of the six targeted Ohio cities was able to select one to two workers considered expert in the craft to serve on the DELTA panel.

The panelists gathered at CETE in central Ohio, and CETE staff facilitated the DELTA sessions. Because DELTA builds from a DACUM profile of job tasks that usually takes two days to develop by itself, the panelists were given some previously developed lists of job tasks to review (both DACUM profiles and Ohio Competency Analysis Profiles). Once consensus was reached about the tasks performed and these were posted systematically on cards on a wall, the tasks were individually discussed relative to the communications, mathematics, problem solving, and decision making necessary to their performance. In each case, workers were encouraged to be specific about the type and level of basic skill used, and consensus statements were posted to form a task-specific literacy analysis profile.

Aside from the DELTA profiles that resulted from the process, the time with the panelists was beneficial in building a sense of teamwork at the beginning of the project. It was clear to the workers that their needs and opinions were regarded as the ultimate determinants of the program content, and they took the responsibility seriously. The DELTA profiles, not entirely completed during the sessions, were sent out to the union leadership for verification and additional input. The leadership was asked to involve contractors as well, and to rate the tasks according to degree of importance and difficulty. The final outcome was used by the instructors as a basis for their courses.

At the same time, a variety of job aids and manuals used in the three crafts were being reviewed to determine the levels of reading and math required to use them. (Some of these

materials were also used to develop CLOZE passages, used both for assessment and instructional purposes.) For example, electricians must be able to follow fiber-optic installation directions. Carpenters must follow directions for the construction of nuclear plants, the application of high-tech adhesives, and the laying of foundations. Sheet metal/air conditioning workers must follow directions for such items as "Preparatory Work Before Balancing." An analysis of these directions revealed a 10th-to 12th-grade reading level for the electricians' and carpenters' material; the sheet metal and air conditioning workers' material tested at a minimum of grade 13.

Mathematics requirements have also advanced to the point where trigonometry, solid geometry, and even calculus are considered fundamental skills for these jobs and related job training programs. A CETE analysis of the apprentice training materials used by the National Training Fund (NTF) for the Sheet Metal and Air Conditioning Industry revealed a wide range of math skills required for successful completion of training. While the average level found throughout the workbooks was grade 8, an emphasis on algebraic concepts was prevalent later in the training, as were more complex (grade 12) applications requiring simultaneous use of geometry, algebra, and measurement.

The Training Program

Hiring Basic Skills Instructors

In preparation for hiring basic skills instructors, CETE project staff prepared a position description, a copy of which is included in Appendix B. The position description was distributed to a number of groups and individuals including the state and regional literacy resource centers, the Ohio Department of Education's Division of Adult Basic and Literacy Education, the Ohio State University's Graduate Program in Adult Education, Ohio Vocational Association, and a number of Ohio universities and technical or community colleges known to be conducting workplace literacy programs. In addition, project staff used the personal contact method and distributed the project description at meetings and to individuals in their networks who might be in contact with potential candidates.

Prior to Phase I, several potential candidates were identified and interviewed by CETE/OSU staff. Following the interviews, the top three candidates' resumes were reviewed and approved by OSB & CT personnel and these individuals were hired. Due to a number of unforeseen

circumstances, however, none of these three individuals was able to begin teaching after the initial training was completed, so the recruitment and hiring process began again. As it turned out, the nature of the project—including its length and geographic spread—created a need for ongoing recruitment and training of instructors. Fortunately, however, good candidates appeared at opportune moments so that throughout its duration, the project remained fully staffed with qualified basic skills instructors.

The following chart shows the names of instructors and the craft they taught.

Instructors

Carpentry	Sheet Metal	Electrical
Helen Friend	Martha Ghenne	Tina Barnette
Sandra Denny	Helen Friend	David Thieken
Anne Magruder	Melody Fitzpatrick-Parke	Sandra Beach

Scheduling

It became apparent early in the project period in discussions with the local union leadership that it would not be feasible to conduct the basic skills program during the spring and summer months of highest construction activity in Ohio, especially since an unexpected boom in construction hiring had just occurred. Even though the classes had been planned for Saturday mornings (4½ hours for 12 weeks, for a total of 54 hours) in an effort to avoid usual work hours, it was felt that, because workers have opportunities for overtime during those key months, they would be unlikely to opt into the courses.

The partnership applied for an eight month no-cost extension of the original project period, which was granted. That made it possible to spend the first summer on teacher training and preparation and to implement the first session of all three courses that fall. The following intended schedule was planned to maximize course time during the winter months and avoid major holiday weekends:

City	Dates
Columbus	September 18 - December 18, 1993
Toledo	January 8 - March 26, 1994
Cleveland	January 8 - March 26, 1994
Dayton	September 17 - December 10, 1994
Akron	January 28 - April 1, 1995
Cincinnati	January 28 - April 1, 1995

Columbus was selected as the first site simply because of proximity to the partners' offices; it was felt that it would be best to "pilot" the program close by to stay in touch with its progress and be able to troubleshoot as necessary. That decision turned out to be fortuitous when personal events and decisions resulted in a turnover of all three of the first-hired instructors. The carpenters' course was aborted and scheduled again on a later round, but the other two courses went forward, with newly-hired instructors receiving on-the-ground and as-possible training.

Flexibility was also required in some of the other scheduling. The union leadership was consulted as to timing preference, and choices were honored so far as could be done. In one city, a course had to be postponed for lack of a training site. In another city, a course was rescheduled because of an imminent transition in union leadership.

Further, it was not uncommon for the instructors and learners to elect to change the weekly schedule for the course, sometimes choosing to meet on a weekday evening instead of on Saturday morning, and sometimes meeting twice a week for a shorter period of time. The overriding consideration was convenience for those involved, given the fact that the union training facility could usually be rescheduled without difficulty.

Instructor Training

The Ohio State University project team has had long experience in working together to develop training materials for instructors of workplace literacy projects. The team members feel very strongly that the materials must reflect the "best and latest" knowledge in three major areas: adult education principles; literacy which includes communications literacy and numeracy; and the workplace technical environment which, for the team, means a functional context approach utilizing on-the-job basic skills in direct application to job tasks. For the instructors, this means training materials that reflect these major areas and that connect meaningfully with learning activities to be used in the classes. It also means that methods of instruction must be team-based, collaborative, and must emphasize working with the participants on learning how to learn, problem solving, critical thinking and decision making, all skills which are more and more needed in the trades.

Instructor training was initially carried out with the three original instructors hired by the project. However, the turnover among them resulted in subsequent training of the new

instructors being less intensive in terms of a time commitment. Yet, continuity of content and approaches was maintained as possible.

A typical training session or sessions included:

I. Conceptual strands:
   A. The workplace in general and in particular to the three crafts
   B. Adult education principles and practices
   C. Workplace basics—as foundations—includes communications, which is speaking and listening, reading and writing; numeracy
   D. Metacognition—learning to learn, problem solving, and teamwork

II. Assessment/Diagnosis procedures & instruments
   A. Test of Applied Literacy Skills (TALS)
   B. Cloze
   C. GAP
   D. Portfolios for participants
   E. Math ABLE
   F. Learning styles inventory
   G. Creating Individualized Educational Plans (IEPs)

III. Literacy Task Analyses
   A. DELTA procedures and results
   B. Literacy analyses of priority tasks
   C. Lesson Plans (based on results of literacy task analyses)

IV. Curriculum for courses
   A. Strategies/Processes
      1. Whole language
      2. Cooperative learning
      3. Reading strategies
      4. Writing strategies (including spelling)
      5. Oral communication strategies
      6. Math strategies
      7. Scenarios, role playing, demonstrations
   B. Materials
      1. Training course texts, other job-based materials
      2. Instructor-created materials
      3. Participant-created materials
      4. Other sources

This outline was created by the project team to deliver instructor training which would enable instructors for each of the three crafts to create and deliver a functional-context curriculum that was also participatory, collaborative, and effective.

At several intervals during the project, the instructors gathered in Columbus for continuing training, some of which emphasized communication skills, in particular reading, writing and spelling, as those had been identified as areas of major need by participants and the instructors for their own teaching skills. An example is that supplemental materials dealing with the identified needs and issues were utilized in one training session, which focused on working effectively with participants' difficulties with writing technical prose and with spelling.

Training Materials

Training materials were developed with adult education, literacy, and workplace components. These materials focused on the basic skills required for job tasks in each of the craft areas and were based on the results of the DACUM Enhanced Literacy Task Analysis (DELTA), which detailed workers' current basic skills in relation to the basic skill requirements of the workplace. Instructors were provided with a resource book of articles and other information to use in developing and/or adapting existing training materials for basic skill instruction. They also were given some materials for each of the literacy areas: the numeracy strand and the literacy strand.

Union technical training materials were also obtained and analyzed in terms of their relevance to basic skills instruction. Each craft within the union was contacted in order to obtain copies of the training materials they used in the technical skills enhancement training courses they offered. The project team obtained materials for the carpenters, the sheet metal workers, and the electricians.

In terms of utilizing the materials as part of the project's curriculum, it was important to determine the readability levels of the manuals and textbooks. The FORCAST readability index was utilized, as this index was created for use with technical materials for adults rather than for fiction or K-12 text. The electricians' texts used in the craft training courses tested at approximately the 11th grade reading level. The sheet metal workers' and the carpenters' materials also were written at approximately the 11th grade level. These levels indicated a strong need for reading instruction in the courses.

In addition to grounding the instruction in the DELTA analysis and in the technical materials of the craft areas, instructors were able to use and adapt materials drawn together in a resource center at CETE. These included the CETE-developed materials: ***English on the Job, Math on***

the Job, Reasoning Skills on the Job, and the ***Job-Related Basic Math Program***, all of which are applicable because they include construction jobs as a context. Other existing curricular materials such as ***Mathematics for Carpenters*** (Delmar 1975), ***Mathematics for Plumbers and Pipe Fitters*** (Delmar 1982), and the ***Paradigm Basic Skills Program*** (1991) were also available. Samples were provided of job-based scenarios with the idea that learners would be engaged in generating their own scenarios based on the pattern.

Although some of the above resources are available in a computer-based version, the use of computer-assisted instruction was stymied by the lack of available computers at the union training sites. At one site it appeared promising that computers could be purchased for learner use, but the financial resources could not be secured. The project team had also reviewed and hoped to provide menu-driven software designed to allow learners to develop scenarios and other materials. A recommendation for future programs is that computer availability be targeted as a need.

Support Services to Reduce Barriers to Participation

It has been well documented that adults' receptiveness to learning experiences is frequently highly influenced by their needs for related support services. For adults, a lack of transportation or child care can create deterrents to learning. The project planned to address such situational barriers by providing financial support on a case-by-case basis, but the need did not arise. Counseling services were integrated with instruction, beginning with the development of the workers' individual education plans (IEPs). In addition, referrals could also be made to appropriate community agencies for specialized counseling and related services. CETE is involved in projects forming linkage teams of such agencies throughout Ohio; these networks could be drawn upon. Perhaps because of the strong support systems traditional to the union environment, these services were not needed.

Participant Recruitment

Process

The cities targeted for recruitment for the basic skills program across the state were Columbus, Cleveland, Cincinnati, Toledo, Dayton, and Akron. Union locals from the three project crafts (electricians, carpenters, and sheet metal workers) in those cities expressed interest

in the program, seeing it as a means of upgrading their members' skills. Timing of training for the selected sites was based on the type of craft and on the number of workers recruited to the program.

Workers targeted for the program were those lacking the basic skills to get technical skills upgrades. Program promotion highlighted the benefits the program offered to adult local union workers—the potential for program participants to gain the skills needed to stay employed. Emphasis was placed on the fact that continued employment depends on the acquisition of advanced or changing technical skills and that the acquisition of technical skills requires adequate basic skills. At some sites, the workers enrolled because they were self-motivated. However, at most sites, the local union officials made it mandatory for certain workers to participate in the program, thus reflecting their commitment to the project and the formal adoption of the program by its 21 member executive board. This worked positively at all sites but one. In Columbus, the union recruited participants to the December 1993-January 1994 class by telling them they would get computers and learn Auto CAD. When this did not occur, participants dropped the class.

Strategies

Each of the crafts at the sites used various recruitment strategies based on the type of training program and their past successful experiences. Initially, all agreed that the use of the words "basic skills upgrading" would be the most effective for any recruiting strategy.

Newsletter Announcements. In Dayton, two announcements describing the course were placed in the quarterly bulletin published by the District Council and posted in the halls. The response to these announcements was poor, so individual calls were made to recruit participants. Newsletter announcements at other sites were also ineffective and needed some type of follow-up.

Direct Mailings. In Cleveland, direct mailings, targeted to newly-organized journeymen at all levels, were found to be the most effective strategy. Approximately 1600 letters were sent and over 200 people responded—enough people for two years of courses.

Mandatory Requirement. In Cincinnati and Cleveland, the union leader made the course mandatory. Non-union workers used this course as part of a larger union training effort.

Direct Calling. In Dayton and Cincinnati, direct calls were made to recruit participants. Those deemed as needing the most help were targeted for the calls. In describing the course, callers were careful to describe the benefits of participation, including the fact that participants would receive a certificate from The Ohio Sate University upon completion of the course. This was an effective strategy for recruitment, probably because of the personal contact and ability of the caller to reemphasize or expand upon the benefits.

Word of Mouth. Apprentices were used to recruit journeymen. The apprentices told the journeymen that the class could not be held unless journeymen enrolled. Good comments from people at the job sites who were already enrolled in the course were helpful in recruiting others. After the course, letters were sent to participants and the contractor (employer) thanking them for upgrading their skills.

Planning

The Ohio State Building and Construction Trades Council unveiled the program to its 21 member executive board representing 17 different trades (crafts) and 155 local unions. It was also announced that the three crafts chosen for the project would be the electricians, carpenters, and the sheet metal workers. The leaders of these three unions were asked to explain the project and recruit the joint apprenticeship training coordinators located at the six chosen sites.

In addition, a letter from the Secretary-Treasurer of the Ohio State Building and Construction Trades Council was sent to the selected training coordinators summarizing the project and inviting them to a planning meeting at CETE-OSU.

Because all the training coordinators from the three crafts at each of the sites were brought together in an initial project meeting, they knew each other and felt comfortable telephoning each other later to discuss recruitment strategies and plans. Monthly meetings called by the Ohio State Building and Construction Trades Council were held with the training coordinators to discuss recruiting strategies. These meetings, although initially designed to test various strategies to recruit different levels of the membership, were also conducted to integrate the new "basic skills' program into the Ohio State Building and Construction Trades Training Foundation's existing technical skills upgrading program.

Recommendations

Subsequent to the program, instructors/coordinators at each of the sites gathered to review the process and prepare recommendations. Their discussion was guided by the following question.

Recruitment. *Questions to guide discussion*: What strategies or methods did you use to recruit the participants? Which of the strategies seemed to work best? Why? Did you develop any materials for use in recruitment? If so, who took the responsibility for developing them? What recommendations would you made to others about recruiting participants for this type of course. *Whole group sharing*: Be prepared to list five recommendations that you would make to others about recruiting participants. Be prepared to list the top two recruitment methods that were used.

Assessment. *Questions to guide discussion*: How and when did you approach the necessity and purpose of assessment with your group? What were typical trainee reactions? To what extent did the assessment results help guide your course content? Did the results enable you to meet individual needs? (How) were you able to use the assessment as an instruction tool, or as a part of instruction? Do you have input about the usefulness of each of the specific assessment instruments? *Whole group sharing*: Be prepared to report your responses to the two questions on which you feel you have something most important to share.

Instructional strategies and learning materials. *Questions to guide discussion*: What instructional strategies did you find to be the most effective with your groups? Why were they effective? What learning materials did you find to be most effective, e.g., instructor and/or learner created, published materials, etc.? Why were they effective? What recommendations would you make to other regarding: (a) effective instructional strategies? (b) effective learning materials? *Whole group sharing*: Be prepared to briefly describe: (a) three to four of the most effective instructional strategies; and (b) three to four most effective types of learning materials.

A summary of the recommendations from this session follows:

Select a Good Title for the Class. The title of the class is important and must be carefully worded so as not to make workers feel degraded. Those who lack skills do not want others to know that they are deficient. Upgrade is a good word to use. A statement that says "Changes in technology necessitate upgrading" is good. Avoid using the word literacy. One advertisement promoted "Building the skills you already have."

Obtain Labor and Management Support. One contractor displayed support by putting a note in with the workers' pay checks telling about the class, why and when it would be offered, and the fact that certificates would be awarded.

Select Months, Days of the Week, and Hours that are Convenient for Participants. Do not schedule class between Thanksgiving and Christmas or in the Spring when people are busy. Consider work schedules, e.g., the times when workers are typically laid off are the best times to hold class. For the Winter sessions, January was the best time to hold class. Mid-October to Thanksgiving was also acceptable. Wednesday evenings worked better than Saturdays.

Use a Combination of Recruitment Strategies. Follow up direct mailings with newspaper/ newsletter announcements. Placing an announcement in the local newspaper and announcing the course at the union meetings are additional recommendations. To be effective in recruiting workers to the course, it is necessary to have recruiters who are known and respected.

Promote Enrollment. Announce the dates for enrollment and state "first come, first served" so participants feel acceptance in the course is competitive. If a course does not fill up immediately, keep enrollment open for a couple of extra weeks and let word of mouth help. Send a follow up letter one to two weeks prior to the beginning of the course giving the location, day, time, and so forth.

State the Benefits. General mailings, personal letters, announcements, etc. should stress the benefits of taking the course and give specifics about what the course will offer. If possible, obtain a list of comments from people who have already taken the class to use in presenting the benefits. Learn what the trainees really want (and need); then promote how the course will address those wants and needs.

Provide Certificates of Completion or Continuing Education Units. Certificates of Completion and Continuing Education Units are good enticements to participation, as such rewards are important to the participants.

Materials

The materials developed for recruitment include a letter for direct mailing and an advertisement for the course. Make sure that what you advertise is what you will do.

Assessment of Participants' Needs

Instruments

Formal assessment instruments were used to assess participants' current levels of knowledge and provide quantifiable and qualitative literacy measures useful in determining program focus and the development of instructional materials. Following are the specific instruments used in this project:

TALS Pre and Post Assessments. The ETS Tests of Applied Literacy Skills (Simon and Schuster Workplace Resources 1991), which is a standardized but highly functionally valid set of tests, included several types of literacy measures—namely document and prose sections. The benchmark data gathered from the tests were correlated with other assessments (such as performance-based assessments in the workplace) to approximate participants' achievement of literacy levels at entry and exit.

CLOZE Level 1 and Level 2. CLOZE and GAP procedures, which are assessments based directly on workplace materials, yielded job-specific literacy data.

ABLE Pre and Post Assessments. The Adult Basic Learning Examination was used to assess vocabulary, reading comprehension, problem solving, and number operations.

Learning Styles Instrument. A Learning Styles Instrument was also used with participants. This instrument revealed participant's preferences for visual language, visual numerical; auditory language, auditory numerical; auditory-visual-kinesthetic; individual learner, group learner, and oral expressiveness, written expressiveness.

These assessment instruments were used only with each participant's consent and only after rapport had been developed between the participant and project personnel. They provided quantifiable and qualitative literacy measures to be used in the development of program instructional materials and in formative and summative evaluation of the project.

Informal assessments were conducted through interviews with participants and through the reported self assessments gathered from participants. The interviews were conducted by the instructors, often subsequent to the formal assessments and as a way of leading into the Individual Education Plans (IEPs). These interviews helped workers understand and appreciate the knowledge they already possessed as well as how they could use that knowledge to increase their basic skills. The self assessments helped to focus where participants wanted to (or felt they needed to) direct their learning activities during the class.

Implementation

Some factors that emerged from the project experience with implementing the assessment instruments include:

Time. Some instructors did not do any assessments the first day, thinking it would "turn off" the class, but rather waited until the third or fourth session. Some instructors felt that the assessments need to be split up over a period of weeks.

Process. After using the instrument, one instructor sat down with each member of the class individually and went through the test results with the participant, thus enabling the participant to select the weak areas on which to direct his/her efforts. With this information, the instructors were able to design courses around the assessment results.

Outcomes. While some participants were apprehensive about taking the tests, they had no problem with doing that because it was a requirement. Others ranged from not wanting to take the test to really liking the test. Those who did well appreciated assessment efforts more. Many participants found out that they did better than they thought they would. Math was specified as a primary need for one group. Another group focused more on interpersonal skills. When participants had very high scores, they didn't have to take the post tests. Journeymen, specifically, were told that everyone in the workplace will have to be a teacher at one time or another so they had to be aware of the many different learning styles.

The group of instructors felt that the assessments were important to the workers as well as to instructors. It helped the instructors and participants know where to begin and what areas needed attention. It provided a basis from which the instructor and a participant could develop an Individual Education Plan.

Implementation of the Basic Skills Program

Instructional Strategies

The project team adopted and moved purposefully toward implementing the courses in a learner-directed environment that was collaborative, cooperative, and participatory. Because job-related research has shown that collaboration, group work, and division of labor are essential for learning on the job (Lytle and Wolfe 1989), instructional strategies were designed to include these elements. Often called a constructivist approach, the philosophy is that learners can benefit most fully from actively controlling their own learning and from experiential learning activities

that are anchored in their own previous experiences, current skills, and ideas. Participants often work in small groups, using a problem-solving approach to deal with a realistic work situation and to learn the needed basic skills.

Instructor facilitation in such a program demands great expertise and flexibility, and the project's instructors rose to that challenge rather well. Some of the primary tasks were to create a hospitable learning environment unlike the traditional formal schooling with which some adult learners cannot relate, to establish a process for effective small group work, and to initiate a job-context materials-development system in which the learners could participate.

These tasks were performed for each course by a two-person team consisting of the CETE-hired basic skills instructor and the local union technical skills trainer. The intention was to foster delivery of a well-integrated program applying the communications, mathematics, and problem-solving skills to specific construction tasks. The team was to spend two 4½-hour sessions in preparation and to customize the program to local needs. In practice, the degree of actual team instruction varied from regular engagement to very little. In the latter case, however, it seemed to be a positive factor that a trainer technically qualified in the craft was available as a resource.

Facilities

Local union training facilities were used for the basic skills training. These sites were familiar to the participants and ones with which they associated learning opportunities. Such familiarity removed any stigma associated with participating in the basic skills program.

The union facilities provided flexible seating arrangements that could accommodate both individualized and small- and large-group instruction. They contained chalkboards, flip charts, and other appropriate instructional support materials. In addition, audiovisual equipment such as overhead projectors and VCRs were available. Although some computers were available, they were not sufficient for use in the course.

Instructor Feedback

Basic skills instructors were encouraged to be in touch with the project staff on a weekly basis, but also as needed for support and suggestions. Twice during the project, a full day of

sharing and interaction was scheduled at CETE, which included both basic skills and union instructors as well as the project team. These were felt to be especially beneficial.

The following comments are illustrative of the types of specific strategies shared:

- Sessions were set up to be informal. Trainees were asked what they hoped to get out of the course. Those participants with common proficiencies in math were put in the same group(s). Participants worked in small groups and on assignments they could work on independently. Lecture was not the primary teaching mode. Rather, role playing and problem solving situations were presented for them to analyze.

- One instructor said, "I do anything possible to make the class interesting—board work, small group work, explain and write on the chalkboard. Variety is the key to a good class. Do role playing games, jeopardy. Because the trainees expressed a need for vocabulary development, they studied for 5-6 weeks and played a fishbowl game. For the game, vocabulary words were written on separate pieces of paper, folded, and put into a fish bowl. A student would draw one paper, read the vocabulary word; then make up a story using that word; another student would have to repeat the story using the same vocabulary word. This helped to reinforce vocabulary. They were able to increase their listening skills. Also, we did charades—word charades. We needed to be able to entertain them or have them entertain each other."

- We used tape recorders for vocabulary. We did a lot of cooperative learning as it also results in team building. Teams keep members in line. There was a Captain on each team.

- Role playing was used, started informally with brainstorming about the role. Participants were good about staying in the role. This exercise resulted in more understanding about the role. We stressed the importance of communication skills.

Program Evaluation

To acquire relevant data for evaluation, project staff developed record keeping forms which were sent to all instructors of the basic skills programs for electricians, carpenters, and sheet metal workers. Instructors were asked to use the forms to record data as they collected it.

Instructor Reports

Reports of the training sessions are included in Appendices C and D. The reports were prepared by each of the instructors for each of the classes they taught. Each report contains program information, program preparation and implementation data, and participant data.

The following program information was recorded by each of the instructors for each Basic Skills course offered:

- Instructor's name
- City in which training was held
- Trade for which training was provided
- Union site manager's name
- Union team teacher's name
- Location of the class
- Dates of the classes
- Title of the class

The following program preparation and implementation data were compiled into the reports of the sessions.

- Instructor's Activity Log, which relates the percentage of project time instructors devoted to instruction, preparation, materials development, and clerical/miscellaneous activities
- Class focus which identifies the basic skill areas addressed in the class
- Number of participants attending the class
- Attendance records of participants

The following participant information comprises the remainder of each report:

- Profile chart
- Self assessments
- Learning Styles Instrument results
- ABLE pre- and post-assessment results
- TALS pre- and post-assessment results
- CLOZE Level 1 and Level 1 assessment results
- Self-evaluations of learning

Summary Reports

In addition to the instructors' participant data reports are the following selected class summaries:

Winter 1994 Summary of Basic Skill Classes for Sheet Metal Workers, Electricians, and Carpenters

Basic skill classes for sheet metal workers were held in Toledo and Cleveland, instructed by Melody Fitzpatrick-Parke and Martha Ghenne, respectively. A class for electricians, instructed by David Thieken, was held in Toledo; and one for carpenters, instructed by Anne Magruder was held in Cleveland. Helen Friend conducted a class for carpenters in Columbus which was aborted after 6 sessions.

A majority of the instructor time was spend on class instruction and preparation. Materials development time was greatly reduced for instructors who had taught previous classes. Clerical time varied from 20-30 percent for three instructors; one recorded only 4 percent for clerical, which brought down the average percent of time for clerical/miscellaneous. Class content focused primarily on vocabulary, math, problem solving, and communication skills.

The number of participants varied across sites as did attendance. Where participation was required (as was David Thieken's class) enrollment (20) was high as was attendance (100%). At other sites, enrollment ranged from 5-12 participants. Attendance was generally good (over 72 percent) except for Anne Magruder's class, where absences were more frequent.

Participants averaged in age from 27-40 years. Most participants were white males who had graduated from high school and were employed. More than half of the participants were single head of household and had some trade or military experience.

The skills most commonly checked as ones participants were good at learning included teamwork, reading, listening, and job skills. Those noted most often as skills they needed to learn included communicating, math, solving problems, and studying. Highest scores on the learning style instrument were for auditory numerical, kinesthetic, and group learners categories. ABLE pre- and post-assessments and TALS pre- and post-assessments showed improvement in participant scores and grade equivalency. CLOZE scores were better for Level 2 than Level 1 in most cases.

Participants were positive about the instructor, class, and program. Their evaluations of skills learned showed that they believe they had learned most of the identified skills. Receiving most checks for skills learned were problem solving; reading for analyzing information; reading for details; working with fractions, decimals, and percents; and expressing an opinion.

A summary of the information gathered at each of the four sites followed by individual, detailed reports from each of the sites is presented in Appendix C.

Fall 1994 Basic Skills Class for Sheet Metal Workers, Dayton

"The Competitive Edge" class for sheet metal workers Local 24, in Dayton, Ohio was offered for 4 hours on Saturday mornings, September 14 through November 16. The instructor, Ms. Fitzpatrick-Parke, spent over one-half of her time in the program on instruction, one-third on preparation, and the rest on materials development or clerical/miscellaneous.

The class served 6 participants and focused on math, problem solving, writing and speaking, and team building. Three of the 6 participants were 37-38 years of age; two were older, and one was younger at 25 years of age. All but one participant was white and only one was female. All had graduated from high school, but had not received a college degree. One participant, who was male, black and unemployed, dropped out after 2 weeks due to family problems. All other participants were employed at the time of the class. Class attendance was good, with only one participant missing any of the sessions.

In completing the self assessment instrument, most participants indicated that they were good at learning job skills and math skills. When asked what they needed to learn, most participants noted communication skills, speaking skills, listening skills, and teamwork. Participants' personal goals as identified in their Individual Education Plans stressed better communication skills and working well with other people.

Since the primary class focus was on math, speaking, and writing, the ABLE pre- and post-assessments for number operations and problem solving, the TALS, and the CLOZE instruments were used. Skill improvement between the pre- and post-assessments was evident in most cases, especially on the CLOZE. However, because the post-tests were given on the last night of class when participants were tired after a full day of work, it was felt that this may have influenced the results.

In their self-evaluations of skills learned, participants placed the most checks for skills learned next to spelling, writing, and problem solving.

Fall 1994 Basic Skills Class for Sheet Metal Workers, Akron

The "Sheet Metal Workers Essential Skills" class was offered from 6:00 p.m. to 10:00 p.m. on Thursdays, September 15 to December 15. The instructor, Martha Ghenne, devoted 30 percent of her program time to instruction and 26 percent on preparation. The remaining time was divided among materials development, clerical/miscellaneous, record keeping, and meetings.

The class served 19 participants and focused on math and problem solving skills. All of the participants were white males between the ages of 21 and 33. All but one had graduated from high school and two had graduated from college. Attendance in class was good, as only 4 participants missed more than 2 sessions.

In completing the self assessment instrument, most participants indicated they were good at communicating, teamwork, solving problems, listening, and job skills, but needed to learn math and studying skills.

The Learning Styles instrument showed a mixture of styles among the 19 participants. Improvements between the pre- and post-assessments were realized for almost all participants, especially on the ABLE for math—numbers and problem solving. Post tests were not given for the TALS however.

In their self-evaluation of skills learned, participants placed the most checks next to problem solving and working with fractions, decimals, and percents.

Fall 1994 Basic Skills Class for Electricians, Cincinnati

The "Fall JATC Electricians Class" for electricians in IBEW Local 212 in Cincinnati was held for 4 hours on Saturday mornings from September 20 to December 17. The instructor, David Thieken, devoted over half of his project time (56%) to instruction and over one-third (37%) to preparation. Materials development, meetings, and recruitment consumed the remainder of his time.

The class of 10 participants focuses primarily on math (4 sessions), basic algebra (2 sessions), and vocabulary/communication (2 sessions). Class attendance was good for the 10 participants who completed the class. Originally 20 participants had enrolled and all had come to class at least once. However, after the first 2 or 3 sessions, 10 of the 20 participants dropped out due to transfer, working overtime, or just not wanting to give up Saturday mornings. No assessment information or participant profiles were completed for these individuals.

The 10 participants completing the program ranged in age from 29 to 57 with 7 being between the ages of 34 and 45. Only one participant was female and 2 were Black. The remaining were white males. Eight of the 10 participants had graduated from high school and all but one were employed at the time of the class.

While math was the skill 7 of the 10 participants checked as being good at learning, the remaining 3 participants indicated they needed help in this area. Communication and study were other skills that participants felt they needed to learn. The learning styles instrument was administered to all and revealed almost equal distribution of participants across the different styles. One exception to this is that most participants characterized themselves as being individual rather than group learners.

As noted by the pre- and post-assessment scores, participants improved their skills in basic mathematics, elementary algebra, reading, vocabulary, and communication. Since most of the participants had scored in the PHS for Grade Equivalent, they couldn't raise that level, however, they did raise their Raw Scores and other areas of performance.

Winter 1995 Basic Skills Class for Millwright Union Apprentices, Post Town (west of Dayton)

This class led by Sandra Denny, did not have a name. Participation was not voluntary as the Union officials made it mandatory for apprentices. Class was held in the union shop in Post Town for 6 weeks beginning January 12 on Tuesday and Thursday evenings. Eight participants composed the class; all but one was white and male. Two of the 8 had not completed high school, while 4 others had college degrees. Only 3 were employed at the time of the class. Six of the 8 attended class regularly; 2 were sporadic in attendance.

Communicating, teamwork, math, spelling, solving problems, and job skills were the characteristics most checked by participants as things they were good at learning. Math was the skill most frequently checked as one they needed to learn.

While the ABLE—Numbers Operation and Problem Solving—and the TALS were used, no post tests were given so comparison data was not available for this site.

Winter 1995 Basic Skills Class for Electricians, Dayton

David Thieken, instructor, ran the class for the IBEW Local 82. Twenty-five people enrolled but only 10 completed the class. All but one of the twenty-five were white and all were male. Most of the participants had completed high school. Job skills, listening, teamwork, math, and reading were the characteristics participants checked most frequently as ones they were good at learning. When asked what they thought they needed to learn, "speaking" was the most frequent response.

There is no post data for the ABLE, or TALS, the only two assessment instruments used. Problem-solving and working with fractions were the primary skills participants noted they learned.

Almost all of the instructor's time (90%) was spent on instruction; the remainder of the time (10%) was divided equally between preparation and clerical/miscellaneous.

Spring 1995 Basic Skills Class for Electrical Workers, Cleveland

The "Effective Skills for Supervision" was offered on Wednesday evenings from 5:30 p.m. to 9:30 p.m., February 8 through April 26. Instruction was delivered by Tina Barnette. Sixteen participants enrolled in the class; two dropped out because of working much overtime. Class attendance was good, with 5 participants having perfect attendance and 6 missing only one class.

The class was composed of older workers—7 were in their 50s, 3 in their 40s, and 5 in their mid 30s. One participant was 29. All participants were male and all but one were white. Every participant had graduated from high school, none had college degrees, and all but one were employed at the time of the class.

The self assessment revealed that most participants felt they were good at learning teamwork, math, solving problems, listening, and job skills. The areas they felt needed attention were communicating, writing, spelling, speaking, and studying. The class focus was on developing communication, computation, and problem-solving skills needed for foremanship, which was consistent with participants' expressed needs. As was true for other classes, the learning styles instrument showed equal disbursement of participants across the various learning styles.

The ABLE and CLOZE assessments were not used in this class. Only the TALS pre- and post-assessments were administered. The results of this instrument's analysis showed little difference between the pre- and post-assessments, probably because participants did well on the pre-assessments.

Spring 1995 Basic Skills Class for Sheet Metal Workers, Cincinnati

Melody Fitzpatrick-Parke was the instructor for this class, which was held February 25 through April 22. She spent almost equal time on instruction, preparation, and clerical/ miscellaneous.

The class enrollment was 11, however, only 7 completed the class. Others dropped out after the first or second session. All the participants were in their 40s or 50s, except for two who were each 27 years old. Most were male (one was female) and most were white (3 were Black). All but three were employed at the time of this class.

The self assessments showed that participants believed they were good at job skills, math, and—to some extent—solving problems. When asked what they thought they needed to learn, participants listed communication, teamwork, reading, writing , listening, and speaking.

The learning styles instrument showed a stronger auditory-visual-kinesthetic preference and a preference for oral expressiveness. In general , however, the learning styles of all participants were varied. While there was some improvement between the pre- and post-assessment scores, most of the scores remained the same, with little variation.

In their self-evaluation of skills learned, writing, "reading to remember" and "understanding how I learn best" were most often checked.

Spring 1995 Basic Skills Class for Carpenters, Dayton

The class was held on Monday and Wednesday evenings for 6 weeks beginning March 3. No name was given to the class, which was led by Sandra Denny. The union leader made the class mandatory for apprentices and asked that it be focused on mathematics. Attendance in class was very good.

Younger workers—age 19-32—composed the class. Of the 17 participants 11 were age 26 or younger. All but 3 of the participants were white males. The 3 who were not white were Black—2 males and 1 female. Fifteen of the 17 participants graduated from high school, and one of those also graduated from college. All but 3 of the participants were employed at the time of the study, but none had worked over 8 years, with most working under 5 years.

In general, participants indicated that they were good at communicating, teamwork, solving problems, and job skills. Mathematics, spelling, and studying were the areas participants noted as "needing to learn."

The learning styles instrument and CLOZE were not given. For the ABLE and TALS, no post tests were given.

Program Summary

The basic skill instructors at all sites spent an average of 50 percent of their project time on instruction, 30 percent in preparation, and 20 percent on clerical/miscellaneous functions.

Mathematics and solving problems were the skills most participants at all sites felt they were good at learning. Communication—speaking, listening, and writing—were the skills most participants felt they needed to learn.

Most participants who completed the courses enjoyed their classes, kept regular attendance, and showed improvement from the pre assessments to the post assessments.

Participants, in general, were white males with high school degrees who also had taken trade-related courses and who were employed at the time of the class.

Most participants enjoyed the class, felt they had learned a lot, and were complimentary of their instructors. Comments from several participants and one instructor are included in Appendix E.

Disseminate Program Information

Information about the project was disseminated in a variety of formats and to diverse audiences. Dissemination activities were both internal and external. For example, some dissemination activities were conducted to "market" the project with local unions and to apprise the Ohio State Building and Construction Trades Council of progress. However, most dissemination endeavors informed external audiences about the project. Each of the project specialists has visibility in one or more arenas (e.g., labor education, adult education, literacy, training and development, vocational education); through both informal and formal contacts they were able to acquaint other professionals with the project. Specific examples of both internal and external activities include the following:

Internal

- Project progress reports were given during quarterly meetings of the Ohio State Building and Construction Trades Council. These reports enabled all 17 crafts involved in the Council to become knowledgeable about the project.

- Council leaders reported on the project at semi-annual meetings of labor leaders from neighboring states.

- Information about the project was shared at the NWPL Project Directors' meetings held by the Office of Vocational and Adult Education, U.S. Department of Education.

External

- The project was discussed with numerous visitors to CETE during the project period.
- In response to direct requests for information about the project, CETE staff provided telephone consultation and written information to approximately 50 individuals.
- A project profile describing the project was developed and it is disseminated to all those who receive a capacity information packet on CETE.
- The project was highlighted in the following publications:

  —Pritz, Sandra. "The Ultimate Partnership: Teachers and Workers as Co-Learners." ***Adult Learning*** 5 (July/August 1994): 29-30.
  —Pritz, Sandra G., and Imel, Susan. "Involving Workers in Workplace Literacy." In ***Proceedings of the Twelfth Annual Midwest Research-to-Practice Conference***, edited by K. Freer and G. Dean. Columbus: Ohio State University, October 1993.
  —The lead article, "New Project Addresses Literacy and Numeracy in the Workplace," of the Winter 1992-93 issue of the ***Centergram***, CETE's newsletter, featured the project. The ***Centergram*** is circulated to over 15,000 individuals and organizations.

- The project was discussed as a part of the following presentations:

  —"Workforce Literacy," seminar conducted by Sandra Pritz and Johanna DeStefano for the Industrial Vocational Training Board, Mauritius, February, 1995.
  —"Participatory Partnerships for Workplace Literacy," workshop presented by Sandra Pritz and Susan Imel at the American Vocational Association National Conference, Nashville, Tennessee, December 1993.
  —"Educators Partner with Construction Unions to Provide Literacy Foundations for Technical Upgrades," by Sandra Pritz at the American Vocational Association National Conference, Nashville, Tennessee, December 1993.

Conclusion

The instructors and participants were very enthusiastic about the program. All participant evaluations of the program were positive and written comments, like those in Appendix D, reflected the value they placed on the experience the post-test scores of most participants showed improvement from pre-test scores. When this did not occur, instructors noted extenuating circumstances that may have influenced this outcome, e.g., participants worked a lot of overtime the week of the post-test and were tired.

The instructors enjoyed working with the participants and gained satisfaction for their efforts. All indicated they would serve again on such a project as they saw value in what they had done.

The external evaluation report that accompanies this report summarizes the project experience in terms of both impact and demonstration of a viable model for replication in other crafts and other locations.

Appendix A

DELTA: Dacum Enhanced Literacy Task Analysis*

New initiatives by business and industry to employ job-context instruction depend on a major first step: identification of the specific basic skills used to perform particular job tasks. This type of needs assessment process is termed a literacy audit. The literacy audit is the foundation for designing a workplace literacy program. As such, it is critical for a job-context program that the literacy audit be highly accurate and job specific. Furthermore, it is important the literacy audit process be handled in a manner that is sensitive to the corporate culture and helps to elicit employee ownership.

To meet this need, CETE has developed the DELTA process, meaning DACUM Enhanced Literacy Task Analysis. Delta is a refinement to the convention literacy audit process, based largely on a modification of a highly effective DACUM (Developing a Curriculum) process. DACUM involves a carefully selected group of eight to twelve employees from a job classification working under the guidance of a trained facilitator to elicit the collective expertise and consensus of the committee or panel through small-group brainstorming techniques. This highly participatory process also allows for inclusion of projections of future need, an important aspect in an era of rapid change. The committee spends several days reviewing the job systematically to identify the specific tasks performed along with implications for the knowledge, skills, and attitudes necessary to perform them. The analysis is extended to identification of the literacy skills (including reading, writing, speaking, listening, and computation) needed for each task as well as the nature of the problem solving and decision making required. The outcome is a profile chart giving a detailed portrayal of the job. The contents of the chart are validated and further refined through observation and materials analysis techniques similar to those used in a "standard" literacy task analysis.

Where the chart indicates that certain tasks are heavily dependent on basic skills and where company input indicates that the workers are experiencing problems--perhaps because of changes induced by technology, those tasks are selected for observation on the plant floor. The purpose of the observation is to analyze the task--break it into its component steps and get detailed information about **how** literacy skills are used in performing the steps of the task.

In addition to observations, any written materials used in the process of doing the task are analyzed for level of reading difficulty. CETE uses computer software to assist in this process, and this gives us information from four different reading level indices that emphasize different aspects (Flesch, Flesch-Kincaid, Fogg, and PC Read). Manual calculation on Tom Sticht's Forcast is also used.

CETE provides DELTA services to business and industry as well as training in the DELTA process to all those involved in workforce preparation. For additional information on DELTA and the variety of ways in which the DELTA outcomes can be used, contact:

Sandra G. Pritz, Research Specialist
Center on Education and Training for Employment
1900 Kenny Road
Columbus, OH 43210-1090
800-848-4815

Appendix B

PART-TIME TEACHERS
Position Description

Part-time teachers needed to provide instruction in a workplace educating program that is a partnership between The Ohio State University's Center on Education and Training for Employment, and the Ohio State Building and Construction Trades Council. Instruction will be delivered on Saturday mornings and/or evenings at various local union training sites throughout Ohio, including Dayton, Cincinnati, and Akron/Canton. Specific duties and responsibilities will include the following:

- Provide workplace-based skills instruction specific to one of the following crafts of the construction industry: carpentry, electricity, and sheet-metal
- Develop individual education plans (IEPs) in conjunction with program participants
- Coordinate instructional activities with local union training director
- Coordinate tasks and communicate with union personnel
- Learn job tasks of participants
- Provide information for participant records
- Develop and maintain relationships with program participants, supervisor, on-site personnel, and OSU project staff
- Participate in inservice training and staff development activities before and during the instructional period.

Qualifications: Experience in adult or secondary basic education within a workplace or vocational setting; background in teaching reading, writing, oral communications and mathematics; excellent human relations skills; knowledge of adult education; willingness to work a nontraditional schedule; degree in education at either the masters' or bachelors' level; experience with computer-assisted instruction desirable.

Instruction will begin during September 1994 and continue through March 1995. Inservice training and planning sessions with union coordinators will be required prior to start of instruction.

Submit letter of application, resume, and names, addresses, and telephone numbers of three references to: Sandra Pritz, Project Director, Center on Education and Training for Employment, 1900 Kenny Road, Columbus, OH 43210-1090. Screening of applications will begin immediately with anticipated hiring date as soon as possible thereafter.

Appendix C

Summary
Instructor/Program Information

Preparation (reported weeks = 8):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	42%	27%	12%	20%

Class Focus:

Vocabulary
Communication skills
Math
Language skills
Problem solving skills

Number of Participants:

Dave Thieken - 20
Melody Parke - 5
Anne Magruder - 10
Martha Ghenne - 12

Attendance Records:

Instructors	Attendance
1. Dave Thieken	90% for 20
2. Melody Parke	82% for 5
3. Anne Magruder	42% for 8 (2 dropped out after one night)
4. Martha Ghenne	72% for 10 (2 dropped out after one night)

Summary of Participant Information (Averages)

Profile Chart:

NAME	D. Thieken	M. Parke	A. Magruder	M. Ghenne
Age	35	40	28	27
Race	W = 90%	W = 80%	W = 100%	W = 50%
Sex	M = 95%	M = 100%	M = 100%	M = 92%
Single Head of Household	50%	--	90%	67%
LEP	25%	--	20%	17%
Grad. - HS	90%	--	100%	92%
Year	--	--	1980s	1980s
GED	5%	--	--	8%
College Degree	--	--	--	--
Job Certification	35%	--	20%	--
Trade or Military	70%	--	70%	50%
Employed	100%	--	80%	92%
Years	11	--	4	4.2
Union Member (yrs.)	--	16 yrs	--	--

Self Assessment: Summary (Averages)

What are you good at learning?

NAME	D. Thieken	M. Parke	A. Magruder	M. Ghenne
Communicating	30%	0%	50%	50%
Teamwork	65%	40%	80%	83%
Math	30%	20%	60%	17%
Reading	55%	40%	50%	58%
Writing	0%	0%	50%	50%
Spelling	35%	40%	50%	42%
Solving Problems	50%	20%	60%	17%
Listening	60%	20%	40%	75%
Speaking	0%	20%	20%	50%
Job Skills	65%	40%	70%	42%
Studying	0%	0%	20%	25%

What do you think you need to learn about?

NAME	D. Thieken	M. Parke	A. Magruder	M. Ghenne
Communicating	55%	10%	40%	8%
Teamwork	0%	0%	20%	0%
Math	40%	40%	40%	75%
Reading	30%	40%	20%	25%
Writing	45%	40%	30%	8%
Spelling	40%	60%	20%	8%
Solving Problems	0%	60%	60%	83%
Listening	0%	20%	30%	8%
Speaking	25%	40%	40%	17%
Job Skills	35%	0%	10%	17%
Studying	55%	0%	60%	58%

Learning Styles Instrument: Summary (Averages

NAME	D. Thieken	M. Parke	A. Magruder	M. Ghenne
Visual Language	None	Low	33	27
Visual Numerical		28	31	30.5
Auditory Languag		29	23	28
Auditory Numerical		Low	33	33
Kinesthetic		36	37	34
Individual Learner		Low	29	27
Group Learner		33	29	30
Expressiveness-Oral		Low	31	27
Expressiveness-Written		Low	24	24

ABLE Pre and Post Assessments: Improvement in scores and in grade equivalency.

TALS Pre and Post Assessments: Improvement in scores and in grade equivalency.

Self Evaluation of Program and Learning: Summary (Averages)

Instructor/Class: Positive

Program: Positive

Skills Learned:

Writing	19%
Spelling	29%
Expressing an opinion	51%
Problem solving	73%
Reading to remember	31%
Reading for details	58%
Reading for analyzing information	63%
Analyzing information on charts	22%
Working with basic math	46%
Working with fractions	58%
Working with decimals	58%
Working with percents	52%
Understanding how I learn best	54%
Study skills	46%

Instructor Name:	David Thieken
City:	Toledo, Ohio
Trade:	Electricians
Union Site Manager:	——
Union Team Teacher:	Mike M. . . .
Location of Class:	Northwest Ohio Construction Education Center
Dates of Classes:	February 26 - April 9, 1994

Report for Spring 1994 Sessions

Instructor/Program Information

- Preparation
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 6):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	58%	16%	2%	24%

Class Focus (percent of time):

Pre-Post Assessment (15%)
Learning Styles (8%)
Vocabulary, Comprehension Skills (12%)
Study Skills (7%)
Basic Communication Skills (8%)
Mathematics (50%)

Number of Participants: 20

Attendance Records:

Attendance was good--at least 90%, with almost half at 100% over the course term. This number made it necessary to have a developed curriculum to follow.

Participant Information

Profile Chart:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Age	39	48	44	34	36	42	35	46	33	39	35	34	25	32	30	41	51	35	33	35
Race	W	W	H	W	W	W	W	AI	W	W	W	W	W	W	W	W	W	W	W	W
Sex	M	M	M	M	M	M	M	F	M	M	M	M	M	M	M	M	M	M	M	M
Single Head of House-hold	Y	Y	N	Y	N	N	Y	Y	Y	Y	N	N	Y	N	N	Y	N	Y	N	N
LEP	Y		Y	Y								Y					Y			
Grad. - HS	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Year																				
GED			Y																	
College Degree																				
College Cours-																				
Job Certi-fication	Y				Y			Y			Y	Y			Y		Y			
College Courses																				
Trade or Military	Y	Y	Y		Y	Y	Y	Y			Y			Y	Y	Y	Y	Y	Y	
Employed	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Years	7	25	26	--	9.5	.2	15.5	.25	6	26	4	.5	2.5	14	9	24	20	14.5	15	.5

Self Assessment:

What are you good at learning?

NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Communicating		x	x						x			x				x				x
Teamwork	x		x	x		x		x	x	x			x	x		x	x	x		x
Math				x	x		x				x			x		x				
Reading	x	x			x	x	x			x	x		x		x			x		x
Writing																				
Spelling			x		x			x	x	x		x		x						
Solving Problems	x	x	x		x	x	x	x		x	x		x							
Listening	x	x		x	x				x			x	x	x	x	x			x	x
Speaking																				
Job Skills	x		x		x	x		x	x	x	x		x		x		x	x		x
Studying																				

What do you think you need to learn about?

NAME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Communicating	x	x	x	x	x	x	x	x	x	x	x									
Teamwork																				
Math		x	x			x		x		x	x	x	x							
Reading												x	x	x			x		x	x
Writing		x		x			x		x			x				x	x	x		x
Spelling		x	x		x			x	x		x				x				x	
Solving Problems																				
Listening																				
Speaking			x	x													x	x	x	
Job Skills		x			x		x	x		x	x		x							
Studying	x		x	x			x	x	x		x	x	x						x	x

Learning Styles Instrument:

No data

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Duarte	23	700	41	5		27	717	54	5	11.0
J. Szalkrouski	36	773	88	7	PHS	38	801	95	8	PHS
D. Onlon	31	737	69	6	PHS	37	785	91	8	PHS
C. Frankhauser	15	667	18	3	7.1	20	688	32	4	5.4
R. Depew	35	764	84	7	9.4	33	749	76	6	PHS
R. Zuchousk	26	713	51	5	10.5	29	727	62	6	12.2
R. Zethlow	26	713	51	5	10.5	31	737	69	6	PHS
R. Cooper	33	749	76	6	PHS	32	793	72	6	PHS
D. Race	19	684	29	4	8.1	17	676	23	4	7.6
C. Penn	19	684	29	4	8.1	18	680	26	4	7.9
M. Fanner	33	749	76	6	PHS	35	764	84	7	PHS
M. Galliers	38	801	95	8	PHS	36	773	88	7	PHS
D. Whitt	20	688	32	4	8.4	26	713	51	5	10.5
W. Nichols	25	708	47	5	10.0	32	743	72	6	PHS
J. Van Dusen	23	700	41	5	9.4	31	Hard to motivate			
S. Sparks	34	756	80	7	PHS	37	785	91	8	PHS
D. Russeau	32	743	72	6	PHS	26	713	51	5	10.5
J. Ryan	31	737	69	6	PHS	39	826	98	9	PHS
R. Brint	38	801	95	8	PHS	40	850	99	9	PHS
M. Van Wagner	33	749	76	6	PHS	39	826	98	9	PHS

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Duarte	18	706	38	4	10.3	20	713	46	5	11.0
J. Szalkrouski	35	786	95	8	PHS	34	795	97	9	PHS
D. Onlon	33	772	90	8	PHS	37	806	99	9	PHS
C. Frankhauser	14	690	25	4	8.9	30	755	81	7	PHS
R. Depew	34	778	93	8	PHS	25	733	63	6	PHS
R. Zuchousk	25	773	63	6	PHS	30	755	81	7	PHS
R. Zethlow	21	717	49	5	11.5	25	733	63	6	PHS
R. Cooper	25	733	63	6	PHS	34	778	93	8	PHS
D. Race	12	681	19	3	8.3	19	710	42	5	10.7
C. Penn	12	681	19	3	8.3	14	690	25	4	8.9
M. Fanner	35	786	95	8	PHS	39	847	99	9	PHS
M. Galliers	31	760	84	7	PHS	30	755	81	7	PHS
D. Whitt	11	676	16	3	7.9	24	729	60	6	12.9
W. Nichols	20	713	46	5	11.0	26	737	68	6	PHS
J. Van Dusen	25	733	63	6	PHS	28	Little class contribution			
S. Sparks	18	706	38	4	10.3	23	725	56	5	12.4
D. Russeau	32	766	87	7	PHS	32	766	87	7	PHS
J. Ryan	39	847	99	9	PHS	37	806	99	9	PHS
R. Brint	38	822	99	9	PHS	40	870	99	9	PHS
M. Van Wagner	34	778	93	8	PHS	37	806	99	9	PHS

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
J. Duarte	280		350	
J. Szalkrouski	370	350	370	370
D. Onlon	350	330	370	370
C. Frankhauser	270	270	330	330
R. Depew	340	340	370	390
R. Zuchousk	350	370	350	370
R. Zethlow	350	310	320	340
R. Cooper	350	350	310	360
D. Race	330	270	330	320
C. Penn	260	270	280	320
M. Fanner	340	350	350	340
M. Galliers	350	320	280	340
D. Whitt	340	300	330	320
W. Nichols	370	390	370	370
J. Van Dusen	350	390	330	390
S. Sparks	310	310	370	310
D. Russeau	370	390	370	370
J. Ryan	340	400	350	360
R. Brint	350	370	390	390
M. Van Wagner	350	400	390	390

CLOZE:

No data

Self Evaluation of Program and Learning

Instructor/Class:	Positive
Program:	No data
Skills Learned:	No data

Skills needing work:

Pay attention to detail	1
Speed in math	9
Recording and retrieving	5
Computation	11
Geometry	7
Determining outcomes	7
Reading comprehension	5

Instructor Name:	Melody Parke
City:	Toledo, Ohio
Trade:	Sheet Metal
Union Coordinator:	Tom Berry
Union Team Teacher:	None
Location of Class:	Sheet Metal Joint Apprentice and Training Center
Dates of Classes:	February 26 - April 9, 1994 12 classes

Report for Spring 1994 Sessions

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- Attendance Records

Participant Information

- Profile Chart
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- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 6):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	48.5%	33.5%	14%	4%

Class Focus:

Vocabulary
Listening skills
Affective skills
Fractions
Language skills

Number of Participants: 5

Attendance Records:

Participants	2/26	3/27	3/5	3/9	3/12	3/16	3/19	3/23	3/26	3/30	4/6	4/9
1. Mike Okenka	x	x	x	x	x	x	x	x	x	x		
2. Robert Okuley	x	x	x	x	x	x		x	x	x	x	
3. John Oswald	x			x	x	x	x	x	x	x	x	
4. Randall Houston	x	x	x	x	x		x	x	x	x		
5. Tom Logan	x	x	x	x	x		x	x	x	x	x	

Participant Information

Profile Chart:

	M. Okenka	R. Okuley	J. Oswald	R. Houston	T. Logan
Age	38	38	45	31	47
Race	W	W	W	B	W
Sex	M	M	M	M	M
Single Head of Household					
Limited EP					
Grad. - HS					
Year					
GED? Yr.					
College Degree					
College Course					
Employed					
Years					
Union Member (yrs.)	9+	20	21	4½	29

Self Assessment:

What are you good at learning?

NAME	M. Okenka	R. Okuley	J. Oswald	R. Houston	T. Logan
Communicating					
Teamwork			x		x
Math					x
Reading	x				x
Writing					
Spelling	x				x
Solving Problems		x			
Listening				x	
Speaking					x
Job Skills		x			x
Studying					

What do you think you need to learn about?

NAME	M. Okenka	R. Okuley	J. Oswald	R. Houston	T. Logan
Communicating	x	x	x	x	x
Teamwork					
Math			x	x	
Reading		x	x		
Writing	x	x			
Spelling		x	x	x	
Solving Problems	x		x		x
Listening	x				
Speaking		x	x		
Job Skills					
Studying					

Learning Styles Instrument:

NAME	M. Okenka	R. Okuley	J. Oswald	R. Houston	T. Logan
Visual Language	38	Low	Low	Low	
Visual Numerical	Low	Low	40	36	
Auditory Language	20	Low	32	36	
Auditory Numerical	Low	Low	22	34	
Kinesthetic	34	40	38	32	
Individual Learner	36	36	Low	Low	
Social-Group	Low	24	38	36	
Expressiveness-Oral	Low	Low	20	Low	
Expressiveness-Written	Low	24	Low	Low	

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
M. Okenka	30	713	86	7	10.5	33	749	87	7	PHS
R. Okuley	18	645	35	4	6.0	25	681	65	6	7.9
J. Oswald	25	686	65	6	7.9	33	743	96	9	PHS
R. Houston	18	645	35	4	6.0	15	630	24	4	5.4
T. Logan	39	827	99	9	PHS					

	Problem Solving, Pre					Problem Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
M. Okenka	30	817	99	9	PHS	Post test given only in area of weakness				PHS
R. Okuley	30	800	99	9	PHS	29	793	99	9	PHS
J. Oswald	29	793	99	9	PHS	28	767	98	9	PHS
R. Houston	22	707	82	7	10.4	20	695	73	6	10.4 9.4
T. Logan	32	767	93	8	PHS	Did not take				

61

62

Self Evaluation of Program and Learning

Instructor and Class:	Positive
Program:	Positive; 2 of 5 indicated they did not want more one-on-one instruction

Skills Learned: Number of participants checks:

Writing:	2
Spelling:	3
Expressing an opinion:	4
Problem solving:	3
Reading to remember:	2
Reading for details	4
Reading for analyzing information	3
Analyzing information on charts	1
Working with basic math	3
Working with fractions	3
Working with decimals	1
Working with percents	-
Understanding how I learn best	5
Study skills	2

Also improved in confidence, group discussion, communication skills, and understanding of others.

Comments:

"I never used to be comfortable with my learning abilities as I am now. I've wanted to go to college for a long time and now I will." - Mike Okenka

"I did not realize how important it is to improve my reading and math skills. I guess at my age (45), I thought it was too late to improve." - John Oswald

TALS Pre and Post Assessments:

	Document Literacy				Prose Literacy			
Name	**Pre**	**Grade Equiv.**	**Post**	**Grade Equiv.**	**Pre**	**Grade Equiv.**	**Post**	**Grade Equiv.**
M. Okenka	350	College Senior			370	College Senior		
R. Okuley	340	PHS			300	End of 12th grade		
J. Oswald	330	PHS			310	12th grade		
R. Houston	290	11th grade			230	4th grade		
T. Logan	370	PHS			370	PHS College Senior		

CLOZE:

Name	Level 1	Level 2
M. Okenka	63%	73%
R. Okuley	70%	60%
J. Oswald	60%	54%
R. Houston	41%	42%
T. Logan	63%	79%

Instructor Name:	Anne Magruder
City:	Cleveland, Ohio
Trade:	Carpenters
Union Site Manager:	John Sadowski
Union Team Teacher:	Pat McCafferty
Location of Class:	NE Ohio Carpenter Apprenticeship Training Center Richfield, OH
Dates of Classes:	February 12-April 30, 1994 12 classes

Report for Spring 1994 Sessions

Instructor/Program Information

- Preparation
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

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- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 8):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	31%	31%	18%	20%

Class Focus (percent of time):

Geometry
Conflict Resolution
Problem-Solving
Communication Skills
Blueprint Reading

Number of Participants: 10

Attendance Records:

Participants	1	2	3	4	5	6	7	8	9	10	11
M. Stone	x	x			x	x		x	x		x
J. Owen	x	x	x		x	x	x			x	
M. White	x		x								
J. Doering	x	x	x								
D. Lawson		x									
M. Ling	x										
R. Skymske		x	x	x		x		x	x		
D. Rex		x			x	x		x	x	x	
R. McElhatton	x		x	x	x		x	x	x	x	x
M. Ramsey	x	x		x	x	x		x	x	x	x

Participant Information

Profile Chart:

NAME	MS	JO	MW	JD	DL	ML	RS	DR	RMc	MR
Age	30	33	24	23	25	27	27	33	29	29
Race	W	W	W	W	W	W	W	W	W	W
Sex	M	M	M	M	M	M	M	M	M	M
Single Head of Household	Y	Y	Y	Y	N	Y	N	Y	N	Y
LEP	-	N	Y	Y	-	N	N	Y	N	N
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year	81	-	88	88	86	85	84	78	82	82
GED	-	-	-	-	-	-	-	-	-	-
College Degree	-	-	-	-	-	-	-	-	N	-
Job Certification	-	-	-	-	-	-	-	Y	-	Y
College Courses	-	-	-	Y	-	-	-	-	Y	-
Trade or Military	Y	Y	Y	N	Y	Y	Y	N	Y	N
Employed	N	Y	Y	Y	Y	Y	Y	N	Y	Y
Years		3.5	4	4	4	3.5	5		4	4.5

Self Assessment:

What are you good at learning?

NAME	MS	JO	MW	JD	DL	ML	RS	DR	RMc	MR
Communi-cating	x		x	x	x			x		
Teamwork		x	x	x	x		x	x	x	x
Math	x			x	x	x	x			x
Reading	x		x		x	x			x	
Writing	x		x		x	x			x	
Spelling	x	x	x		x				x	
Solving Problems		x		x		x	x		x	x
Listening		x		x	x				x	
Speaking	x								x	
Job Skills	x		x	x	x	x			x	x
Studying	x								x	

What do you think you need to learn about?

NAME	MS	JO	MW	JD	DL	ML	RS	DR	RMc	MR
Communi-cating						x	x		x	x
Teamwork						x				x
Math	x		x						x	x
Reading							x			x
Writing		x		x			x			
Spelling		x					x			
Solving Problems	x	x	x		x			x		x
Listening		x	x							x
Speaking					x	x	x			x
Job Skills										x
Studying			x	x	x	x		x		x

Learning Styles Instrument:

NAME	MS	JO	MW	JD	DL	RS	DR	RMc	MR
Visual Language	28	28	30	40		32	38	38	28
Visual numerical	34	28	28	38		32	22	38	30
Auditory language	28	18	30	20		20	24	22	24
Auditory numerical	38	24	36	34		38	30	34	28
Auditory-visual-kinesthetic	24	38	38	40		38	40	38	40
Indiv. learner	32	22	24	34		38	36	22	26
Group learner	26	38	38	18		14	32	40	26
Expressiveness-Oral	26	28	40	32		30	30	36	26
Expressiveness-Written	30	26	26	20		16	16	26	30

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
M. Stone	31					33				
J. Owen	29					33				
M. White	24									
K. Doering	32									
D. Lawson	29									
M. Ling	36									
R. Skymate	36									
D. Rex	28									
R. McElhatton	27					35				
M. Ramsey	33					35				

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
M. Stone	26					30				
J. Owen	26					35				
M. White	18									
J. Doering	27									
D. Lawson	27									
M. Ling	30									
R. Skymate	29									
D. Rex	28									
R. McElhatton	26					34				
M. Ramsey	29					37				

ABLE - Cont.

	Vocabulary					Reading				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
M. Stone	29					45				
J. Owen	32					47				
M. Whitelin	27					43				
J. Doering	31					46				
D. Lawson										
M. Ling										
R. Skymate	30					47				
D. Rex	30					46				
R. McElhatton	32					48				
M. Ramsey	30					46				

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
M. Stone	330	330	340	340
J. Owen		350	350	350
M. White	340		340	
J. Doering	350		320	
D. Lawson	350		340	
M. Ling	370		400	
R. Skymate	340	310	360	390
D. Rex	370	330	370	370
R. McElhatton	370	370	390	370
M. Ramsey	370	370	390	390

CLOZE:

NAME	Level 1	Level 2
M. Stone	68%	70%
J. Owen	70%	69%
M. White	73%	70%
J. Doering	70%	69%
D. Lawson		
M. Ling		
R. Skymate	70%	70%
D. Rex	70%	70%
R. McElhatton	70%	69%
M. Ramsey	38%	70%

Self Evaluation of Program and Learning

Instructor/Class: Positive

Program: 3 of 5 responses indicated they did not want more group work

Skills Learned:

Writing	1
Spelling	
Expressing an opinion	1
Problem solving	5
Reading to remember	1
Reading for details	3
Reading for analyzing information	3
Analyzing information on charts	2
Working with basic math	1
Working with fractions	4
Working with decimals	3
Working with percents	4
Understanding how I learn best	1
Study skills	2

Comments:

"I do feel that I've learned many valuable skills which can be useful to my personal and professional life." - Mike Ramsey

"The main thing that has helped me is being able to read materials better. The class brought out things on communication that will give me knowledge of what is needed for getting a point across." - Randy Skymske

"The course has given me new outlooks in interpersonal skills. Example: I try to step back and evaluate the situation before judging. I try harder to listen to all. I look at my job from more perspectives, such as the employers' point of view. I also feel more confident in my abilities." - James M. Owen

Instructor Name:	Martha Ghenne
City:	Cleveland, Ohio
Trade:	Sheet Metal
Union Site Manager:	John Nestor
Union Team Teacher:	Joe Stasny
Location of Class:	JATC Training Center
Dates of Classes:	January 29-April 30, 1994 12 classes

Report for Spring 1994 Sessions

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Participant Information

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- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 8):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	32%	27%	11%	30%

Class Focus (percent of time):

Math
Problem Solving
Job Skills
Values
Speaking Skills

Number of Participants: 12

Attendance Records:

Participants	1-29	2-5	2-19	2-26	3-5	3-12	3-19	3-26	4-9	4-16	4-23	4-30
J. Burg	x	x	x	x	x	x	x	x	x	x	x	x
R. Bynum	x	x	x	x	x	x	x	x		x		
D. Coughlin		x	x	x		x		x				
J. Esarey		x										
D. Fulp	x	x	x	x	x	x		x	x	x	x	x
J. Hovan	x		x	x	x	x		x		x	x	x
P. Maitino		x										
S. Muniz	x	x	x	x	x	x	x	x	x	x	x	x
L. Pritchett		x	x		x	x	x		x	x		
T. Sabol	x		x	x	x	x	x	x		x	x	x
S. Sanchez	x	x	x	x	x	x	x	x	x		x	x
E. Smith	x			x		x						x
E. Tate	x	x	x	x	x	x	x	x	x	x	x	x
J. Yambor	x	x	x	x	x			x	x			x

Participant Information

Profile Chart:

	JB	RB	DC	DF	JH	SM	LP	TS	SS	ES	ET	JY
Age	22	32	29	30	19	23	28	23	33	31	31	27
Race	W	W	W		W	H	B	W	H	B	B	W
Sex	M	F	M	M	M	M	M	M	M	M	M	M
Single Head of House-hold	Y	Y	Y	Y	Y	N	-	Y	Y	-	N	Y
LEP	N	-	N	Y	N	Y	N	-	N	N	N	N
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
Year	89	79	-	81	-	90	84	89	-	80	81	84
GED	-	-	-	-	-	-	-	-	Y	-	-	-
College Degree	-	-	-	-	-	-	-	-	-	-	-	-
College Course	-	-	-	-	-	-	-	-	-	-	N	-
Job Certi-fication	-	-	-	-	-	-	-	-	-	-	N	-
College Courses	-	Y	N	Y	-	Y	-	-	-	N	N	-
Trade or Military	-	Y	Y	N	Y	Y	Y	-	-	Y	N	Y
Employed	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Years	4.5	4	3	--	6.5	3.5	3.5	3.5	3	.5	7	7

Self Assessment:

What are you good at learning?

NAME	JB	RB	DC	DF	JH	SM	LP	TS	SS	ES	ET	JY
Commu-nicating	x				x	x			x	x	x	
Team-work	x	x		x	x	x		x	x	x	x	x
Math		x		x								
Reading	x	x		x	x	x			x		x	
Writing	x			x	x			x	x		x	
Spelling	x	x			x			x	x			
Solving Problems			x			x						
Listening	x	x		x	x	x		x	x	x	x	
Speaking					x	x			x	x	x	x
Job Skills	x				x	x			x			x
Studying			x	x		x						

What do you think you need to learn about?

NAME	JB	RB	DC	DF	JH	SM	LP	TS	SS	ES	ET	JY
Commu-nicating		x										
Team-work												
Math	x	x		x	x	x		x	x		x	x
Reading		x		x				x				
Writing						x						
Spelling						x						x
Solving Problems		x	x	x	x		x	x	x	x	x	x
Listening										x		
Speaking		x		x								
Job Skills		x									x	
Studying		x	x	x	x				x		x	x

Learning Styles Instrument:

NAME	JB	RB	DC	DF	JH	SM	LP	TS	SS	ES	ET	JY
Visual Language	22	24	28	34	20	32	34	28	22	34	40	26
Visual numerical	16	18	34	26	34	34	24	32	40	36	40	32
Auditory language	26	24	24	20	36	30	28	36	28	30	26	30
Auditory numerical	28	30	36	30	34	30	34	34	38	36	36	30
Auditory-visual-kinesthetic	26	36	30	38	34	38	32	30	40	36	36	30
Indiv. learner	26	24	26	26	38	28	24	20	22	32	32	26
Group learner	18	24	28	38	26	32	34	36	40	28	32	22
Expressiveness-Oral	20	12	36	20	28	34	26	32	26	34	34	26
Expressiveness-Written	26	22	22	32	22	28	22	18	16	26	30	24

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Burg	28	696	77	7	9.0	36	774	95	8	PHS
R. Bynum	33	741	95	8	PHS					
D. Coughlin	32	729	92	8	12.5					
D. Fulp	26	683	68	6	8.0	35	764	93	8	PHS
K. Havaw	23	667	54	5	7.1	19	683	42	5	8.0
S. Muniz	23	667	54	5	7.1	29	726	76	6	12.1
L. Pritchett	33	741	95	8	PHS					
T. Sabol	28	696	77	7	9.0	28	721	72	6	11.5
S. Sanchez	24	672	59	5	7.4	27	717	70	5	11.0
E. Smith	29	703	81	7	9.6	32	743	85	7	PHS
E. Tate	31	719	89	8	11.2	30	732	79	7	12.9
J. Yambor	26	683	68	6	8.0	22	695	52	5	8.9

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Burg	29	792	99	4	PHS	37	808	99	9	PHS
R. Bynum	27	750	97	9	PHS					
D. Coughlin	28	766	98	9	PHS					
D. Fulp	20	693	72	6	9.2	22	723	66	6	12.2
K. Havaw	19	688	67	6	8.8	19	712	55	5	10.9
S. Muniz	23	712	85	7	10.9	31	762	91	8	PHS
L. Pritchett	27	750	97	9	PHS					
T. Sabol	23	712	85	7	10.9	21	720	62	6	11.9
S. Sanchez	27	750	97	9	PHS	28	748	84	6	PHS
E. Smith	22	706	81	7	10.3	26	739	78	7	PHS
E. Tate	28	766	98	9	PHS	29	752	86	7	PHS
J. Yambor	22	706	81	7	10.3	30	757	88	7	PHS

ABLE - Cont.

	Vocabulary					Reading				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Burg	29	730	97	9	PHS	46	750	98	9	PHS
R. Bynum	25	692	86	7	10.1	43	714	86	7	PHS
D. Coughlin	29	730	97	9	PHS	47	775	99	9	PHS
D. Fulp	28	718	95	8	PHS	46	750	98	9	PHS
K. Havaw	26	699	89	8	10.9	46	750	98	9	PHS
S. Muniz	31	772	99	9	PHS	44	723	90	8	PHS
L. Pritchett	26	699	89	8	10.9	45	734	94	8	PHS
T. Sabol	27	708	92	8	11.9	46	750	98	9	PHS
S. Sanchez	24	685	82	7	9.4	45	734	94	8	PHS
E. Smith	27	708	92	8	11.9	46	750	98	9	PHS
E. Tate	31	772	99	9	PHS	42	707	81	7	12.3
J. Yambor	30	746	99	9	PHS	45	734	94	8	PHS

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
J. Burg	320	300	390	390
R. Bynum	270		370	
D. Coughlin	370		360	
D. Fulp	320	300	310	290
K. Havaw	280	260	330	310
S. Muniz	310	370	330	350
L. Pritchett	320		320	
T. Sabol	320	290	310	330
S. Sanchez	250	330	350	340
E. Smith	290	300	330	320
E. Tate	250	320	330	370
J. Yambor	330	280	330	340

CLOZE:

NAME	Level 1	Level 2
J. Burg	67%	63%
R. Bynum	26%	57%
D. Coughlin	58%	58%
D. Fulp	51%	54%
K. Havaw	49%	49%
S. Muniz	49%	46%
L. Pritchett	53%	63%
T. Sabol	53%	51%
S. Sanchez	40%	49%
E. Smith	42%	54%
E. Tate	63%	55%
J. Yambor	35%	40%

Self Evaluation of Program and Learning

Instructor/Class: Positive

Program: 2 of 12 participants indicated they did not want more group work

Skills Learned: 9 participants replied as noted

Writing	1
Spelling	
Expressing an opinion	4
Problem solving	7
Reading to remember	5
Reading for details	4
Reading for analyzing information	5
Analyzing information on charts	3
Working with basic math	8
Working with fractions	9
Working with decimals	8
Working with percents	7
Understanding how I learn best	1
Study skills	3

Comments:

"The instructors were excellent!"

Instructor Name:	Helen Friend
City:	Columbus, Ohio
Trade:	Carpenters
Union Site Manager:	Doug Soma
Union Team Teacher:	
Location of Class:	South Central Carpenters Local 200
Dates of Classes:	12/94 - 1/95 (six sessions)
Title of Class:	None given

Report for Winter 1994 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus (No data)
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment (No data)
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Appendix D

Instructor Name:	Melody Fitzpatrick-Parke
City:	Dayton, Ohio
Trade:	Sheet Metal Workers
Union Coordnator:	Dave Slater
Union Team Teacher:	None
Location of Class:	SMW Local 24 Dayton, Ohio
Dates of Classes:	9/14/94 - 11/16/94 Saturday morning (4 hrs. each)
Title of Class:	The Competitive Edge

Report for Fall 1994 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Original and 3 years later
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Instructor's Activity Log:

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	57%	32%	9%	2%

Class Focus (percent of time):

Basic Math
Problem Solving
Affective Skills
Behaviors
Writing and Speaking Skills
Meyers Briggs
Team Building

Number of Participants: 6

Participants	9/14	9/16	9/21	9/25	10/1	10/8	10/12	10/19	10/26	11/2	11/5	11/9
J. Deis	X	X	X	x	X	X	X	X	X	X	X	X
M. Erickson	X	X	X	X	X	X	X	X	X	X	X	X
B. Fea	X	X	X	X	X	X	X	X	X	X	X	X
G. McKinney	X	X	X	X	X	X		X		X		
S. PaXton	X	X	X	X	X	X	X	X	X	X	X	X
D. Smith	X	X	Dropped out due to family problems									

Participant Information

Profile Chart:

	JD	ME	BF	GM	SP	DS
Age	38	38	45	--	25	37
Race	W	W	W	W	W	B
Sex	M	M	M	M	F	M
Single Head of Household	N	Y	N	Y	Y	Y
LEP	N	N	N	Y	N	--
Grad. - HS	Y	Y	Y	Y	Y	Y
Year	'74	'74	'67	'54	'87	'76
GED	--	--	--	--	--	--
College Degree	N	N	N	N	N	N
College Course	N	Y	Y	N	Y	Y
Job Certification	N	Y	N	N	Y	Y
Trade or Military Courses	N	--	Y	Y	Y	--
Employed	Y	Y	Y	Y	Y	N
Years	16	13	22	40	6	--

Self Assessment:

What are you good at learning?

	JD	ME	BF	GM	SP	DS
Communicating				X		X
Teamwork	X					
Math	X	X	X		X	X
Reading				X	X	
Writing					X	
Spelling			X			
Solving Problems	X	X				
Listening	X			X	X	
Speaking						
Job Skills		X	X	X	X	X
Studying						

What do you think you need to learn about?

	JD	ME	BF	GM	SP	DS
Communicating	X	X	X		X	
Teamwork		X	X		X	
Math						
Reading						X
Writing		X				
Spelling		X			X	
Solving Problems			X		X	
Listening		X	X			X
Speaking	X		X	X	X	
Job Skills				X		
Studying				X	X	

Learning Styles Instrument:

Name	JD	ME	BF	GM	SP	DS
Visual Language	32	22	24	36	28	34
Visual Numerical	34	24	28	40	36	32
Auditory Language	16	38	28	22	22	14
Auditory Numerical	24	32	26	26	28	34
Kinesthetic	26	34	28	40	30	32
Individual Learner	34	28	28	32	30	26
Social-Group	24	22	26	30	34	30
Expressiveness - Oral	14	28	20	28	16	30
Expressive - Written	22	16	26	28	34	20

Individual Education Plans

Name	JD	ME	BF	GM	SP	DS
Personal Goals	None	Working with people	Better communication skills	Improve self	Better communication	Improve self
Skill Strengths						
Skills Needing Work						

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Deis	39	827	98	9	PHS	37	785	91	8	PHS
M. Erickson	31	737	69	6	PHS	35	764	84	7	PHS
B. Fea	39	826	98	9	PHS	40	850	99	9	PHS
G. McKinney	30	718	96	7	10.5					
S. Paxton	30	713	86	7	10.5	32	743	72	6	PHS
D. Smith	35	785	99	9	PHS					

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
J. Deis	34	780	93	8	PHS	25	733	63	6	PHS
M. Erickson	37	806	99	9	PHS	38	822	99	9	PHS
B. Fea	35	786	95	8	PHS	34	178	93	8	PHS
G. McKinney	26	739	95	8	PHS					
S. Paxton	26	739	95	8	PHS	28	746	74	6	PHS
D. Smith	26	739	95	8	PHS					

ABLE Pre and Post Assessments:

(Total Mathematics - Numbers and Problem Solving)

Name	Raw Score Pre	Raw Score Post	GE Pre	GE Post	Difference
J. Deis	73	62	PHS	PHS	
M. Erickson	68	73	PHS	PHS	
B. Fea	74	74	PHS	PHS	
G. McKinney	56		11.7		
S. Paxton	56	60	11.7	PHS	
D. Smith	61		PHS		

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
J. Deis	370	390	370	390
M. Erickson	330	320	370	350
B. Fea	340	310	340	340
G. McKinney	290		300	
S. Paxton	370	330	330	390
D. Smith	240		250	

Post-test was given on last night of class when participants were tired after a full day of work.

CLOZE:

NAME	Level 1	Level 2
J. Deis	58%	76%
M. Erickson	37%	69%
B. Fea	65%	64%
G. McKinney	65%	63%
S. Paxton	65%	69%
D. Smith	30%	28%

Self Evaluation of Program and Learning

Instructor/Class: Positive

Program: 1 participant of 6 indicated they did not want more group work

Skills Learned: 9 participants replied as noted

Writing	3
Spelling	3
Expressing an opinion	1
Problem solving	3
Reading to remember	1
Reading for details	1
Reading for analyzing information	1
Analyzing information on charts	2
Working with basic math	1
Working with fractions	1
Working with decimals	1
Working with percents	1
Understanding how I learn best	2
Study skills	2

Comments:

J. Deis: The great thing about this course was its flexible format. Our instructor, having evaluated our initial test results, was able to determine our strengths and gave us a choice of what we wanted to learn.

B. Fea: The "competitive edge" class increased my feeling of self-worth and value to society.

S. Paxton: The class has helped me in the workplace and I feel it is important for it to continue. I have become more aware of people who are not like me.

Instructor Name:	Martha Ghenne
City:	Akron, Ohio
Trade:	Sheet Metal Workers
Union Site Manager:	John Nelson
Union Team Teacher:	Jim Shear
Location of Class:	Jefferson County Joint Voc. School Wintersville, Ohio
Dates of Classes:	9/15/94 - 12/15/94 Thursday evening (6:00-10:00 p.m.)
Title of Class:	Sheet Metal Workers Essential Skills

Report for Fall 1994 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Instructor's Activity Log

	Instruction	Preparation	Materials Development	Clerical/ Misc.	Record Keeping	Meetings
Percent of Time	30%	26%	12%	17%	11%	4%

Class Focus (percent of time):

Math - basic skills, equations, formulas
Problem Solving
Calculator (NTF)

Number of Participants: 19

Participants	9/15	9/22	9/29	10/6	10/13	10/20	10/27	11/3	11/10	11/17	12/1	12/8	12/15
1. Apitzsch, A.	x		x	x		x	x						
2. Baggott, J.	x	x	x	x	x	x		x	x	x	x		x
3. Boston, R.	x	x	x		x	x	x	x		x	x		x
4. Caldwell, S.	x	x	x		x	x	x	x		x	x	x	x
5. Coffield, D.	x	x	x		x	x	x	x		x	x		
6. Cottis, R.	x	x	x	x	x	x	x	x	x	x	x	x	x
7. Francis, J.	x	x		x	x	x	x	x	x		x	x	x
8. Gambos, R.	x	x		x		x	x	x	x	x	x	x	x
9. Klos, W.	x	x	x	x		x	x	x	x	x	x	x	x
10. Lemmon, C.	x	x	x	x	x	x	x	x		x	x		x
11. Lemmon, C.	x	x	x	x	x	x	x	x	x		x		x
12. Mains, D.	x	x	x	x		x		x	x	x	x	x	x
13. Mazzulli, S.	x	x		x	x	x		x	x	x	x	x	x
14. Scott, R.	x	x	x	x	x	x			x	x	x		x
15. Sikora, R.	x	x	x	x	x	x	x	x		x	x	x	
16. Sullivan, J.	x	x	x		x	x		x	x	x	x	x	x
17. Trifonoff, J.	x	x	x	x	x	x	x	x	x	x	x	x	x
18. Wells, H.	x	x	x	x	x	x	x	x	x	x	x	x	x
19. Yeater, R.	x	x	x	x	x	x	x	x	x	x	x	x	x

Participant Information

Profile Chart:

(Please refer to page 3 for names that match numbers in chart.)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Age	24	22	23	21	25	31	25	34	33	23	21	20	23	20	24	30	19	28	28
Race	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
Sex	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Single Head of House-hold	Y	N	N	N	Y	N	Y	N	Y	Y	N	N	N	N	N	Y	Y	N	N
LEP	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year	'88	'90	'90	'91	'87	'82	'87	--	'79	'89	'91	'92	'89	'92	'88	'82	'94	'84	'84
GED	--	--	--	--	--	--	--	Y	--	--	--	--	--	--	--	--	--	--	--
College Degree	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	Y	N
College Course	N	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	Y	Y
Job Certification	N	N	Y	N	N	N	N	N	Y	N	N	N	N	N	Y	N	N	--	N
Trade or Military Courses	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Employed	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Years	6.5	2	.5	2.5	9	1.5	1	8	13	2.5	2.5	2	2.5	1.5	1	1.5	1	2	4

Self Assessment:

What are you good at learning?

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Communicating		x	x	x		x	x	x	x	x	x					x	x		x
Teamwork	x	x		x	x	x	x			x	x		x	x		x	x	x	
Math		x		x	x				x			x						x	x
Reading	x				x	x			x						x	x			
Writing	x								x			x			x	x			
Spelling	x				x								x		x	x		x	x
Solving Problems		x	x		x				x		x	x				x	x	x	x
Listening	x			x	x			x	x		x				x	x	x	x	x
Speaking	x		x		x			x	x		x					x			
Job Skills	x	x	x		x	x					x	x	x	x	x	x	x	x	
Studying		x														x	x		

What do you think you need to learn about?

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Communicating	x											x							
Teamwork																			
Math	x					x		x					x	x	x	x	x		
Reading		x		x							x						x	x	
Writing		x		x							x						x	x	x
Spelling		x		x		x			x			x					x		
Solving Problems	x			x			x						x		x				
Listening																			
Speaking				x											x				
Job Skills				x				x											
Studying	x			x					x		x		x	x	x				x

Learning Styles Instrument:

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.
Visual language		23	28	28	34	34	25	24	30	24	18	28	34	20	26	36	12	28	29
Visual numerical		25	32	40	24	36	34	28	29	20	24	32	28	34	34	28	12	22	30
Auditory language		32	23	33	24	20	35	32	22	30	36	25	24	30	34	16	40	25	30
Auditory numerical		37	18	40	40	34	36	30	31	22	30	16	30	32	34	30	36	30	30
Auditory-visual-kinesthetic		25	24	34	37	33	30	34	31	28	36	34	32	36	36	38	36	34	35
Indiv. learner		30	24	32	40	36	20	20	31	26	26	20	30	18	16	32	26	28	25
Group learner		36	26	26	22	29	36	30	16	26	26	31	38	36	38	16	18	30	25
Expressiveness-Oral		26	24	34	20	36	26	28	29	22	32	20	16	24	28	14	32	28	29
Expressiveness-Written		16	12	16	26	16	14	20	18	18	18	18	20	22	14	34	18	20	12

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	31	719	86	7	11.2					
2.	35	783	99	9	PHS	39	827	99	9	PHS
3.	26	683	62	6	8.0	23	699	59	5	9.3
4.	25	678	57	5	7.7	25	708	67	6	10.0
5.	36	807	99	9	PHS					
6.	24	672	53	5	7.4	26	712	71	6	10.4
7.	33	741	94	8	PHS	33	749	87	7	PHS
8.	35	783	99	9	PHS	34	756	94	8	PHS
9.	28	696	72	6	9.0	36	774	98	9	PHS
10.	34	757	97	9	PHS	37	786	99	9	PHS
11.	29	703	77	7	9.6	23	699	56	5	9.3
12.	33	741	94	8	PHS	31	737	87	7	PHS
13.	32	729	90	8	12.5	29	726	82	7	12.1
14.	32	729	90	8	12.5	34	756	94	8	PHS
15.	30	710	81	7	10.2	38	801	99	9	PHS
16.	30	710	81	7	10.2	31	737	87	7	PHS
17.	30	710	81	7	10.2	22	695	55	5	8.9
18.	35	783	99	9	PHS	36	774	98	9	PHS
19.	33	741	94	8	PHS	34	756	94	8	PHS

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	23	712	77	7	10.9					
2.	28	766	97	9	PHS	36	797	98	9	PHS
3.	25	728	86	7	12.8	26	739	78	7	PHS
4.	26	738	90	8	PHS	18	708	52	5	10.5
5.	30	815	99	9	PHS					
6.	25	728	86	7	12.8	37	808	99	9	PHS
7.	25	728	86	7	12.8	22	723	66	6	12.2
8.	30	815	99	9	PHS	36	797	98	9	PHS
9.	26	738	90	8	PHS	26	739	78	7	PHS
10.	27	750	94	8	PHS	32	767	93	8	PHS
11.	26	738	90	8	PHS	27	743	80	7	PHS
12.	27	750	94	8	PHS	33	774	94	8	PHS
13.	28	766	97	9	PHS	35	788	97	9	PHS
14.	26	738	90	8	PHS	26	739	78	7	PHS
15.	28	766	97	9	PHS	34	780	96	9	PHS
16.	23	712	77	7	10.9	30	757	88	8	PHS
17.	22	706	72	6	10.3	17	704	48	5	10.1
18.	[illegible]	792	99	9	PHS	38	824	99	9	PHS
19.	29	792	99	9	PHS	30	757	88	7	PHS

ABLE - Cont.

	Vocabulary					Reading				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	31	772	99	9	PHS	48	798	99	9	PHS
2.	29	730	96	9	PHS	45	734	92	8	PHS
3.	31	772	99	9	PHS	43	714	83	7	PHS
4.	24	685	80	7	9.4	45	734	92	8	PHS
5.	30	746	98	9	PHS	44	723	88	7	PHS
6.	27	708	91	8	11.9	45	734	92	8	PHS
7.	21	667	64	6	7.6	38	684	59	5	9.3
8.	32	796	99	9	PHS	46	750	97	9	PHS
9.	32	796	99	9	PHS	46	750	97	9	PHS
10.	30	746	98	9	PHS	44	723	88	7	PHS
11.	26	699	88	7	10.9	45	734	92	8	PHS
12.	31	772	99	9	PHS	45	734	92	8	PHS
13.	26	699	88	7	10.9	45	734	92	8	PHS
14.	26	685	80	7	9.4	47	775	99	9	PHS
15.	30	746	98	9	PHS	47	775	99	9	PHS
16.	30	746	98	9	PHS	45	734	92	8	PHS
17.	27	708	91	8	11.9	44	723	88	7	PHS
18.	32	796	99	9	PHS	46	750	97	9	PHS
19.	31	772	99	9	PHS	48	798	99	9	PHS

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
1.	340		400	
2.	350		340	
3.	280		310	
4.	290	290	320	
5.	370		400	
6.	260		300	
7.	290		300	
8.	350		390	390
9.	370		360	
10.	310		320	
11.	350		350	
12.	240		320	320
13.	300		300	
14.	370		330	
15	370		370	
16.	350		390	
17.	310		300	
18.	370		390	
19.	350		390	

ABLE Pre and Post Assessments:

(Total Mathematics - Numbers and Problem Solving)

Name	Raw Score Pre	Raw Score Post	GE Pre	GE Post	Difference
1.	54	--	10.5	--	NO POST TEST
2.	63	75	PHS	PHS	N/C
3.	51	49	9.5	11.2	+16%
4.	51	43	9.5	10.0	+5%
5.	66	--	PHS	--	NO POST TEST
6.	49	63	9.0	PHS	+35%
7.	58	55	12.6	12.9	+2%
8.	65	70	PHS	PHS	N/C
9.	54	62	10.5	PHS	+19%
10.	61	69	PHS	PHS	N/C
11.	55	50	10.9	11.5	+19%
12.	60	64	PHS	PHS	N/C
13.	60	64	PHS	PHS	N/C
14.	58	60	12.6	PHS	+2%
15	58	72	12.6	PHS	+2%
16.	53	61	10.1	PHS	+24%
17.	52	39	9.9	9.4	-5%
18.	64	74	PHS	PHS	N/C
19.	62	64	PHS	PHS	N/C

CLOZE:

NAME	Level 1	Level 2
1.	44%	63%
2.	65%	52%
3.	56%	55%
4.	53%	61%
5.	67%	72%
6.	49%	60%
7.	65%	43%
8.	67%	61%
9.	65%	77%
10.	67%	64%
11.	56%	57%
12.	65%	64%
13.	53%	60%
14.	65%	54%
15.	61%	67%
16.	70%	61%
17.	63%	49%
18.	67%	70%
19.	56%	66%

Self Evaluation of Program and Learning

Instructor/Class:	Positive
Program:	7 of 15 participants indicated they did not want more group work
Skills Learned:	15 participants replied as noted
Writing	0
Spelling	0
Expressing an opinion	3
Problem solving	12
Reading to remember	2
Reading for details	3
Reading for analyzing information	4
Analyzing information on charts	5
Working with basic math	3
Working with fractions	13
Working with decimals	12
Working with percents	11
Understanding how I learn best	3
Study skills	1

Instructor Name:	David Thieken
City:	Cincinnati, Ohio
Trade:	Electricians
Union Site Manager:	Dan Danzinger IBEW Local 212
Union Team Teacher:	George Weil Ann Ochs Ann Miller
Location of Class:	Ohio Electrical Class 1216 E. McMillen Cincinnati, Ohio
Dates of Classes:	8/20/94 - 12/17/94 Saturday morning (4 hrs. each)
Title of Class:	Fall JATC Electricians Class

Report for Fall 1994 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning

Instructor/Program Information

Instructor's Activity Log

	Instruction	Preparation	Materials	Meetings	Recruit
Percent of Time	56%	37%	1%	5%	1%

Class Focus (percent of time):

Pre/Post-Test Assessment (17%)
Individual Education Plans (8%)
Mathematics (33%)
Vocabulary (9%)
Communication (8%)
Learning Styles (8%)
Algebra (17%)

Number of Participants: 10 completed

Attendance Records (of completers)

Participants	9/24	10/1	10/8	10/15	10/22	10/29	11/6	11/13	11/20	11/27	12/3	12/10
1. R. Bauer	x	x	x	x	x	x	x	x	x	x	x	x
2. A. DeMarcio	x	x	x	x	x	x	x	x	x	x	x	x
3. C. Hines	x	x	x	x	x	x	x	x	x	x	x	x
4. D. Hinners	x	x	x	x	x	x	x	x	x	x	x	x
5. M. Hoffman	x	x	x	x		x	x	x		x	x	x
6. D. Hutchinson	x	x	x	x	x		x	x		x	x	x
7. R. Lloyd	x	x	x	x			x	x		x	x	x
8. C. Paris	x	x		x	x	x	x	x	x	x	x	x
9. K. Richard	x	x	x	x	x	x	x	x				x
10. S. Weishaupt	x	x	x			x	x	x	x	x	x	x

Note: Ten additional individuals came tc the class at least once, but dropped out after the first 2 or 3 classes. No assessment information or profiles were completed for these individuals.

Class Schedule:

Week 1: Pre-Test: ABLE and TALS
Week 2: Individual Sessions
Week 3: Math
Week 4: Math
Week 5: Math
Week 6: Math
Week 7: Building Vocabulary
Week 8: GAP/Learning Styles
Week 9: Communication Problems
Week 10: Basic Algebra
Week 11: Basic Algebra
Week 12: Post-Test - Certificates

Profile of Noncompleters:

Name	Age	Race	Sex	Union	Yrs. of Union Membership	Classes Attended
D. Carroll	36	W	M	Local 212	1	1
S. Courtney	31	W	M	Local 212	1	1
R. Heck	33	W	M	Local 212	5	5
W. Heck	38	W	M	Local 212	14	5
T. Luce	35	W	M	Local 212	14	4
C. Neeley	50	W	M	Local 212	31	3
J. Perry	41	W	M	Local 212	3	1
J. Robinson	--	W	M	Local 212	1	4
B. Tompkins	43	W	F	Local 212	15	4
J. Wakefield	49	W	M	Local 212	33	3

The above dropped out due to transfer, working overtime, or just not wanting to give up 12 Saturday mornings.

Participant Information

Profile Chart:

(Please refer to page 2 for names that match numbers in chart.)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Age	37	41	43	29	45	34	57	40	--	37
Race	W	B	B	W	W	W	W	W	--	W
Sex	M	M	M	M	M	M	M	M	F	M
Single Head of Household	N	N	N	N	N	N	N	--	N	N
LEP	N	N	N	N	N	N	N	--	N	N
Grad. - HS	Y	Y	N	Y	Y	Y	N	Y	Y	Y
Year	'75	'71	--	'83	'67	'78	--	'72	'72	'74
GED	--	--	Y	--	--	--	N	--	Y	--
College Degree	N	N	N	N	N	N	N		N	N
College Course	Y	Y	N	N	N	Y	N	--		Y
Job Certification	N	N	N	N	N	Y	N	--	N	Y
Trade or Military Courses	Y	Y	N	N	Y	--	Y	--	Y	Y
Employed	Y	Y	Y	Y	Y	Y	Y	Y	N	Y
Years	11	--	9	9	25	8.5	40	2.5	--	13
Union Membership	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Years of Membership	11	16	19	9	22	10	--	2.5	14	12

Self Assessment:

What are you good at learning?

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Communicating	x					x	x			
Teamwork	x		x			x	x		x	
Math	x		x		x	x	x	x		x
Reading	x	x				x	x		x	
Writing	x					x	x		x	
Spelling	x					x	x		x	
Solving Problems	x			x		x	x	x		
Listening	x		x		x	x				
Speaking	x						x			
Job Skills	x	x	x		x	x	x			x
Studying	x					x				

What do you think you need to learn about?

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Communicating			x		x	x		x	x	
Teamwork										x
Math		x			x				x	
Reading										
Writing	x			x		x				
Spelling				x						x
Solving Problems									x	
Listening						x	x			
Speaking		x				x			x	
Job Skills					x					
Studying					x		x	x	x	

Learning Styles Instrument:

Name	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Visual Language			x				x		x	
Visual Numerical	x	x			x					
Auditory Language										
Auditory Numerical				x		x		x		x
Kinesthetic										
Individual Learner	x	x	x		x		x		x	x
Social-Group				x		x		x		
Expressiveness - Oral	x		x		x	x				x
Expressive - Written		x		x			x	x	x	

Individual Education Plans

Name	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Personal Goals	Own a business	College	Improve job skills	Improve vocab-ulary & spelling	Improve commu-nication, inter-personal	Improve communi-cation skills	Improve commu-nication skills	Improve commu-nication skills	Ready for work	Improve job skills
Skill Strengths	Organ-izing reading	People Writing	Math	Problem solving	Math	Problem solving	People Job skills	Reading Problem solving	Mechan-ical Science People	thorough
Skills Needing Work	Writing	Math Patience Concen-tration	Reading	Commu-nication	Commu-nication	Study Concen-trate	Algebra	Comm.	Math Comm.	Comm.

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
R. Bauer	37	786	92	8	PHS	38	801	95	8	PHS
A. Demarcia	20	687	31	4	8.3	27	717	54	5	11.0
C. Hines	29	726	62	6	12.1	31	737	69	6	PHS
D. Hinners	37	786	92	8	PHS	39	849	98	8	PHS
D. Hutchinson	39	851	99	9	PHS	39	851	99	9	PHS
M. Hoffman	30	732	65	6	12.9					
C. Paris	36	774	88	7	PHS	36	774	88	7	PHS
R. Lloyd	20	687	31	4	8.3	29	726	62	6	PHS
K. Richard	34	754	80	7	PHS	37	785	91	8	PHS
W. Weishaupt	40	851	99	9	PHS	39	849	98	9	PHS

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
R. Bauer	37	808	99	9	PHS	39	849	99	9	PHS
A. Demarcia	18	208	40	5	10.5	22	723	54	5	12.2
C. Hines	18	708	40	5	10.5	18	708	40	5	10.5
D. Hinners	32	767	88	6	PHS	34	786	93	8	PHS
D. Hutchinson	37	808	99	9	PHS	38	824	99	9	PHS
M. Hoffman	27	743	72	6	PHS					
C. Paris	37	808	99	9	PHS	39	849	99	9	PHS
R. Lloyd	19	712	43	5	10.9	26	739	68	6	PHS
K. Richard	30	757	81	7	PHS	37	805	99	9	PHS
W. Weishaupt	27	793	72	6	PHS	30	757	81	7	PHS

ABLE Pre and Post Assessments:

(Total Mathematics - Numbers of Problem Solving)

Name	Raw Score Pre	Raw Score Post	GE Pre	GE Post	Difference
R. Bauer	74	77	PHS	PHS	+ 3.75%
A. Demarcia	38	49	9.2	11.2	+13.75%
C. Hines	47	49	10.8	11.2	+2.5%
D. Hinners	69	73	PHS	PHS	+5.0%
M. Hoffman	57	--	PHS	--	NO POST TEST
D. Hutchinson	76	77	PHS	PHS	+1.25%
R. Lloyd	39	55	9.4	PHS	+20.0%
C. Paris	73	75	PHS	PHS	+2.5%
K. Richard	64	74	PHS	PHS	+12.5%
S. Weishaupt	67	69	PHS	PHS	+2.5%

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post	Comments
R. Bauer	340	330	390	370	Excellent student
A. DeMarcio	300	290	370	370	Trouble with detail and speed
C. Hines	230	290	300	310	Slow reader
D. Hinners	350	370	390	390	Very good reading skills
M. Hoffman	330	--	400	--	Perfect score, no post test
D. Hutchinson	370	320	370	390	Excellent reader
R. Lloyd	350	360	370	320	Slow reader
C. Paris	350	330	350	370	Very good reader, needs to improve on speed
K. Richard	370	390	400	390	Excellent student; perfect reading scores
S. Weishaupt	350	350	390	360	

CLOZE:

NAME	Level 1	Level 2
R. Bauers	71%	Didn't take
A. Demarcia	52%	74%
C. Hines	25%	42%
D. Hinners	54%	80%
D. Hutchinson	Didn't take	75%
M. Hoffman	50%	71%
C. Paris	75%	83%
R. Lloyd	64%	83%
K. Richard	56%	75%
S. Weishaupt	67%	83%

Self Evaluation of Program and Learning

No data reported.

Instructor Name:	Sandra Denny
City:	Post Town
Trade:	Carpenters
Union Site Manager:	Mark Combs
Union Team Teacher:	Ken
Location of Class:	Millwright Union Shop Post Town
Dates of Classes:	1/12/95 - 2/29/95
Title of Class:	None given

Report for Winter 1995 Sessions

Instructor/Program Information

- Preparation
- Class Focus
- Number of Participants
- Attendance Records

Participant Inf rmation

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 8):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time				

Class Focus: Mathematics

Number of Participants: 8

Attendance Records:

Participants	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
1. D. Brewer										
2. R. Cain										
3. J. Douglas										
4. M. Haston										
5. T. Jaeger										
6. M. McLearren										
7. J. Randall										
8. K. Sutton										

Participant Information Profile Chart:

NAME	1.	2.	3.	4.	5.	6.	7.	8.
Age	22	23	48	38	31	29	27	19
Race	W	W	B	W	W	W	W	W
Sex	M	M	F	M	M	M	M	M
Single Head of Household	Y	Y	Y	--	Y	--	Y	--
LEP	Y	Y	N	N	Y	N	N	--
Grad. - HS	Y	N	Y	--	Y	Y	Y	N
Year	90	92	71	83	84	83	85	--
GED	--	Y	Y	Y	--	N	--	--
College Degree	Y	--	Y	Y	Y	--	--	--
Job Certification	Y	--	Y	Y	Y	--	--	--
College Courses	Y	--	Y	Y	Y	N	--	--
Trade or Military	Y	N	Y	N	N	Y	Y	--
Employed	Y	N	--	N	Y	N	Y	N
Years	3				3		.5	

Self Assessment:

What are you good at learning?

NAME	1.	2.	3.	4.	5.	6.	7.	8.
Communi-cating		X	X	X	X	X		
Teamwork		X	X	X	X	X		X
Math		X	X	X	X	X	X	X
Reading				X	X	X		
Writing		X		X	X	X		
Spelling	X	X		X	X	X		
Solving Problems	X	X		X	X	X	X	X
Listening			X	X	X	X		
Speaking			X	X	X	X		
Job Skills	X	X	X	X	X	X		
Studying				X	X	X		

What do you think you need to learn about?

NAME	1.	2.	3.	4.	5.	6.	7.	8.
Communi-cating	X				X		X	
Teamwork					X			
Math			X	X	X		X	X
Reading				X	X			
Writing				X	X			
Spelling					X	X		
Solving Problems			X		X			
Listening					X		X	X
Speaking	X				X		X	
Job Skills				X	X		X	
Studying		X			X			

Learning Styles Instrument:

NAME									
Visual Language									
Visual numerical									
Auditory language									
Auditory numerical									
Auditory-visual-kinesthetic									
Indiv. learner									
Group learner									
Expressiveness-Oral									
Expressiveness-Written									

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score of 40	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	30					33				
2.	28									
3.	28									
4.	31									
5.	23									
6.	28									
7.	3									

*No post tests were given.

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score of 40	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	26									
2.	27									
3.	29									
4.	28									
5.	25									
6.	29									
7.	8									

*No post tests were given.

ABLE - Cont.

	Language					Reading				
Name	Raw Score of 30	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.										
2.										
3.										
4.										
5.										
6										
7.										

*No post tests were given.

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
1.	370		310	
2.	320		320	
3.	270		290	
4.	260		290	
5.	330		260	
6.	140		200	
7.	300		300	
8.	370		350	

*No post tests were given.

CLOZE:

NAME	Level 1	Level 2

Self Evaluation of Program and Learning

Instructor/Class:

Program:

Skills Learned:

- Writing
- Spelling
- Expressing an opinion
- Problem solving
- Reading to remember
- Reading for details
- Reading for analyzing information
- Analyzing information on charts
- Working with basic math
- Working with fractions
- Working with decimals
- Working with percents
- Understanding how I learn best study skills

Comments:

Instructor Name:	David Thieken
City:	Dayton, Ohio
Trade:	Electricians
Union Site Manager:	William Newlin IBEW Local 82
Union Team Teacher:	Bob Knisley John Humphrey
Location of Class:	Union Hall
Dates of Classes:	1/5/95 - 4/15/95
Title of Class:	None

Report for Winter 1995 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
  Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Instructor's Activity Log

	Instruction	Preparation	Materials Development	Clerical/Misc.
Percent of Time	90%	5%		5%

Class Focus (percent of time):

Basic math/fractions/percentages/algebra
Communication exercises
Vocabulary

Number of Participants: 10 completed

Attendance Records: Not available

Participants	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
1. J. Lewis											
2. J. Montgomery											
3. J. Huffman											
4. S. Belton											
5. D. Ehirger											
6. C. Schindler											
7. T. Caudill											
8. R. King											
9. R. Deveys											
10. D. McGary											
11. B. Heinrich											
12. B. Snyder											
13. L.R. Mastin											
14. S. Bentley											
15. R. Moran											
16. T. Jackson											
17. T. Langston											
18. N. Polaine											
19. N. Napier											
20. C. Moore											
21. W. Johnson											
22. R. Ridinger											
23. D. Almstead											
24. E. Towe											
25. B. Howard											

Participant Information

Profile Chart:

(Please refer to page 3 for names that match numbers in chart.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22-25
Age			36	31	36	28	18	26	24	40	56	32	33		35	28	28	30	33	36	36	
Race			W	W	W	W	W	W	W	W	W	W	W		W	W	W	W	W	B	W	
Sex			M	M	M	M	M	M	M	M	M	M	M		M	M	M	M	M	M	M	
Single Head of House-hold			N	Y	N	N	N	Y	N	Y	N	Y	N		N	Y	Y	N	Y	Y	Y	
LEP			--	N	N	N	N	N	N	Y	--	N	N		N	N	Y	N	Y	Y	N	
Grad. - HS			Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y		Y	N	Y	Y	Y	Y	Y	
Year			--	'81	'76	'85	'94	'87	'87	'73	'56	'82	'80		'77	'89	'84	'80	'80	'77	'77	
GED			--	--	--	--	Y	--	N	--	--	Y	--		--	Y	--	N	--	--	--	
College Degree			N	N	--	N	N	--	Y	N	--	N	--		Y	--	N	N	N	N	--	
College Course			Y	N	Y	Y	N	--	--	Y	--	Y	--		--	--	N	Y	N	N	--	
Job Certification			--	Y	N	N	N	--	Y	--	Y	--	--		--	--	Y	Y	Y	N	Y	
Trade or Military			N	--	Y	Y	N	Y	Y	N	--	X	Y		Y	--	Y	--	Y	Y	N	
Employed			Y	Y	Y	N	Y	Y	Y	N	Y	N	Y		Y	Y	Y	N	--	Y	Y	
Years			--	2	9.5	9.5	1	6.3	4.5		3		1/3		.5	.75	8.5	1		1.3	.25	

Self Assessment:

What are you good at learning?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22-25
Communicating					X	X	X			X			X					X		X	X	
Teamwork					X	X	X		X	X			X		X		X	X		X	X	
Math			X	X		X	X		X				X					X	X	X	X	
Reading			X		X	X	X	X	X				X				X	X			X	
Writing						X	X	X	X									X		X	X	
Spelling						X	X		X												X	
Solving Problems			X		X	X	X		X				X					X			X	
Listening						X	X		X	X			X		X		X	X		X	X	
Speaking					X		X											X			X	
Job Skills				X		X	X		X				X		X	X	X	X			X	
Studying						X	X	X	X													

What do you think you need to learn about?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22-25
Communicating				X				X	X						X							
Teamwork																						
Math					X		X	X					X		X		X					
Reading															X							
Writing					X								X									
Spelling					X								X					X		X		
Solving Problems										X						X						
Listening					X													X				
Speaking				X		X		X	X	X			X		X					X		
Job Skills					X																	
Studying					X		X						X		X			X		X	X	

Learning Styles Instrument: None

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	33	749	76	6	PHS					
2.	29	727	62	6	12.2					
3.	36	773	88	7	PHS					
4.	40	850	99	9	PHS					
5.	33	749	76	6	PHS					
6.	39	826	98	9	PHS					
7.	23	700	41	5	9.4					
8.	21	692	35	4	8.7					
9.	22	696	38	4	9.0					
10.	16	671	21	3	7.3					
11.	30	732	65	6	12.2					
12.	39	826	98	9	PHS					
13.	23	700	41	5	9.4					
14.	35	764	84	7	PHS					
15.	31	737	69	6	PHS					
16.	15	667	18	3	7.1					
17.	16	671	21	3	7.3					
18.	32	743	72	6	PHS					
19.	34	756	80	7	PHS					
20.	18	680	26	4	7.9					
21.	32	743	72	6	PHS					
22.	17	676	23	4	7.6					
23.	13	658	13	3	6.6					
24.	31	737	69	6	PHS					
25.	28	722	58	5	11.6					

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	38	822	99	9	PHS					
2.	25	733	63	6	PHS					
3.	36	795	97	9	PHS					
4.	40	870	99	9	PHS					
5.	32	766	87	7	PHS					
6.	34	778	93	8	PHS					
7.	29	750	78	7	PHS					
8.	17	702	35	4	9.9					
9.	26	737	68	6	PHS					
10.	25	733	63	6	PHS					
11.	28	746	74	6	PHS					
12.	35	786	95	8	PHS					
13.	28	746	74	6	PHS					
14.	18	706	38	4	10.3					
15.	32	766	87	7	PHS					
16.	15	694	28	4	9.3					
17.	19	710	42	5	10.7					
18.	24	729	60	6	12.9					
19.	23	725	56	5	12.4					
20.	14	690	25	4	8.9					
21.	22	721	53	5	12.0					
22.	24	729	60	6	12.9					
23.	13	685	22	3	8.6					
24.	35	786	95	8	PHS					
25.	33	772	90	8	PHS					

ABLE - Cont.

	Total Math				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	71	780	93	8	PHS
2.	54	729	60	6	12.5
3.	72	785	94	8	PHS
4.	80	885	99	9	PHS
5.	65	758	82	7	PHS
6.	73	790	96	9	PHS
7.	52	725	56	5	12.0
8.	38	697	32	4	9.2
9.	48	717	49	5	10.8
10.	41	703	37	4	9.7
11.	58	739	68	6	PHS
12.	74	796	97	9	PHS
13.	51	723	55	5	11.7
14.	53	727	58	5	12.2
15.	63	752	78	7	PHS
16.	30	680	19	3	8.0
17.	35	691	27	4	8.8
18.	56	734	64	6	PHS
19.	57	736	66	6	PHS
20.	32	684	23	4	8.3
21.	54	729	60	6	12.5
22.	41	703	37	4	9.7
23.	26	671	14	3	7.5
24.	66	760	83	7	PHS
25.	61	746	74	6	PHS

TALS Pre and Post Assessments:

(Total Mathematics - Numbers of Problem Solving)

Name	Document Pre	Document Post	Prose Pre	Prose Post	Comments
1.	390		390		
2.	330		320		
3.	370		370		
4.	370		360		
5.	370		390		
6.	370		390		
7.	290		310		
8.	230		310		
9.	340		310		
10.	270		300		
11.	310		370		
12.	350		360		
13.	330		370		
14.	280		310		
15.	370		390		
16.	290		280		
17.	340		310		
18.	300		290		
19.	290		310		
20.	310		310		
21.	330		390		
22.	320		340		
23.	310		280		
24.	350		360		
25.	320		300		

CLOZE: None

Self Evaluation of Program and Learning

Instructor/Class: Dave Thieken

Program:

Skills Learned:

Problem solving	4
Reading for details	2
Reading for analyzing information	2
Analyzing information on charts	3
Working with basic math	3
Working with fractions	4
Working with decimals	3
Working with percents	2
Understanding how I learn best study skills	1

Comments:

"The teacher was excellent in making sure everyone understood what we just finished before moving on." Lee Ray Martin

Instructor Name:	Tina Barnette
City:	Cleveland
Trade:	Electricians
Union Site Manager:	Gene Stepanik
Union Team Teacher:	Carl Scheutzow
Location of Class:	9333 Sweet Valley Dr. Valley View, OH 44125
Dates of Classes:	2/8/95 - 4/26/95 Weds. 5:30-9:30 p.m.
Title of Class:	Effective Skills for Supervision

Report for Spring 1995 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Instructor's Activity Log:

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time				

Class Focus: Developing communication, computation, and problem-solving skills needed for foremanship.

Number of Participants: 16

Attendance Records:

Participants	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
1. Carl Beckman	x	x	x	x	x	x	x	x	x	x
2. John Bramley	x	x	x	x	x	x	x	x	x	x
3. Roger Bramley	x	x	x	x	x	x	x	x	x	x
4. Bill Bandga	x	x	x	x	x	x	x		x	x
5. Craig Carroll	x	x	x	x			x	x	x	
6. Craig Clink	x		x				x	x	x	x
7. John Ferry	x	x	x	x	x	x	x	x	x	x
8. Jim Krebs	x	x		x	x	x	x	x	x	x
9. David Lupica	x	x	x	x	x	x	x	x		x
10. Tom Murtaugh	x	x	x	x	x	x	x		x	x
11. Bill Oden	x	x	x	x	x	x	x		x	x
12. Joe Otis	x	x	x	x	x	x	x	x	x	x
13. Dennis Potter*	x	x	x	x						
14. Barry Ruikus	x		x	x	x			x	x	x
15. Dan Rondenella*	x	x	x	x	x					
16. John Washington	x	x	x	x	x	x		x	x	x

*Working much overtime.

Participant Information

Profile Chart:

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Age	35	32	54	50	37	40	56	47	29	36	58	56	54	43	33	53
Race	W	W	W	W	W	W	W	W	W	W	B	W	W	W	W	W
Sex	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Single Head of Household	N	N	N	Y	Y	--	Y	Y	N	Y	N	N	Y	Y	Y	Y
LEP	N	N	N	N	N	--	N	N	N	N	N	N	N	N	N	--
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year	'77	'81	'59	--	'76	'73	'57	'65	'83	'76	'56	'56	'58	'69	'79	'59
GED	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
College Degree	N	N	N	N	N	N	N	N	--	N	N	N	N	N	N	N
Job Certification	Y	Y	Y	Y	Y	Y	Y	Y	--	Y	Y	Y	Y	Y	Y	Y
College Courses	Y	--	Y	--	Y	Y	N	Y	Y	Y	Y	Y	--	Y	Y	--
Trade or Military	N	Y	Y	--	Y	--	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Employed	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
*Years	2/3		1/6	30	4	17	29	5	5	1/2	17	2	9.5	18	3	3
Union Membership	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Years	16	7	36	30	9	20	38	26	8	8	24	37	34	18	10.5	33

*Years reported from last one or two jobs, not total years of work.

Self Assessment:

What are you good at learning?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Communi-cating		X	X				X	X	X	X		X	X	X		X
Teamwork		X	X	X	X	X	X	X	X	X		X	X	X	X	X
Math	X	X	X	X		X	X	X	X	X	X	X		X		X
Reading		X	X			X	X		X	X	X	X		X		
Writing		X							X			X		X		
Spelling		X			X	X				X						
Solving Problems			X		X	X	X	X	X	X	X	X		X	X	X
Listening	X	X	X		X		X	X	X	X		X	X	X		X
Speaking		X	X					X	X	X		X	X	X		
Job Skills	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Studying		X	X		X				X			X		X	X	

What do you think you need to learn about?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Communi-cating	X			X	X	X					X				X	
Teamwork	X															
Math	X				X		X		X							
Reading	X			X			X						X			
Writing	X		X	X			X			X	X					X
Spelling	X		X	X			X					X	X	X		X
Solving Problems	X	X							X				X			
Listening	X					X									X	
Speaking	X			X		X			X		X					X
Job Skills	X								X							
Studying	X			X		X	X			X						X

Learning Styles Instrument:

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Visual Language			X	X	X		X				X	X			X	
Visual numerical				X			X			X	X	X				
Auditory language	X		X	X								X	X			X
Auditory numerical	X		X	X	--		X				X	X	X		X	X
Auditory-visual-kinesthetic	--	X		X	X		X	X	X	X		X	X		X	
Indiv. learner	X	X		X								X	X			
Group learner				X						X	X		X			X
Expressiveness-Oral	--			X	--		X					X				
Expressiveness-Written								--								

X = Best
-- = Least
Blank = OK

ABLE Pre and Post Assessments: Didn't use

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
1.	350	350	390	350
2.	350	350	390	370
3.	350	340	370	370
4.		370		370
5.	330		390	
6.		350		320
7.	330	370	300	310
8.	370	370	390	350
9.	370	350	340	370
10.	370	350	350	390
11.	310	330	280	370
12.	290	350	330	330
13.	310		310	
14.		370		360
15.	340		370	
16.	350	350	330	320

CLOZE: Didn't use.

Self Evaluation of Program and Learning: Didn't use.

Comments:

Carl said he was given a job that he had never done before. "If it hadn't been for the blueprint-reading activity we did no class last week, I wouldn't have known where to start." With that activity in mind, Carl went to the prints first and no trouble doing the job.

Instructor Name:	Melody Fitzpatrick-Parke
City:	Cincinnati, Ohio
Trade:	Sheet Metal Workers
Union Coordnator:	Joe Zimmer
Union Team Teacher:	None
Location of Class:	1579 Summit St. Cincinnati, Ohio
Dates of Classes:	2/25/95 - 4/22/95
Title of Class:	The Competitive Edge

Report for Spring 1995 Sessions

Instructor/Program Information

- Instructor's Activity Log
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Original and 3 years later
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Instructor's Activity Log:

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time	32%	37%		31%

Class Focus:

Communication skills: writing (sentence construction), listening skills, grammar, punctuation, vocabulary, behavior modeling, problem-solving

Number of Participants: 11

Attendance Records:

Participants	Week 1 2/25/95	Week 2 3/11/95	Week 3 3/18/95	Week 4 3/25/95	Week 5 4/1/95	Week 6 4/8/95	Week 7 4/21/95	Week 8 4/22/95
1. T. Pennington	X	X	X	X	X	X	X	X
2. A. Ihle	X							
3. D. Merriweather	X	X						
4. C. Hargis	X	X	X	X	X	X	X	X
5. J. Bambach	X	X	X	X	X	X	X	X
6. T. Rider	X	X	X	X	X	X	X	X
7. R. Binford	X	X	X	X	X	X	X	X
8. J. Riegler	X	X	X	X	X	X	X	X
9. T. Staten	X	X	X	X	X	X	X	X
10. R. Taylor	X							
11. C. Williams	X	X						

Participant Information

Profile Chart:

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Age	46	27	47	57	53	40	41	45	27	42	49
Race	W	W	B	W	W	W	B	W	W	W	B
Sex	M	M	M	M	M	M	M	W	M	M	M
Single Head of Household	N	Y	N	Y	Y	Y	Y	Y	Y	Y	
LEP											
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year	1967	1985	1965	1957	1959	1972	1972	1967	1985	1971	1965
GED						N		N		N	N
College Degree			Y	N	N	N	Y	N	N		
Job Certification	Y		Y	N	Y	Y	Y	Y	Y		
College Courses	N	Y	Y	N	Y	N	Y	Y	N	N	Y
Trade or Military	Y		Y	Y	Y	Y	Y	Y	Y	Y	
Employed	Y	Y	N	Y	N	Y	N	Y	Y	Y	N
Years	21	13	Not given	28	24.5	20	Not given	28	6	11	

Self Assessment:

What are you good at learning?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Communi-cating	X	X						X			X
Teamwork	X			X				X	X		X
Math	X	X	X	X				X	X	X	
Reading		X	X							X	
Writing			X							X	
Spelling			X					X	X	X	
Solving Problems	X	X		X			X			X	
Listening	X		X							X	
Speaking	X	X						X			
Job Skills		X	X	X		X		X	X	X	
Studying			X								

What do you think you need to learn about?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Communi-cating	X	X	X	X		X	X		X	X	X
Teamwork	X	X	X			X	X			X	X
Math				X			X				X
Reading	X	X		X		X	X	X	X		X
Writing	X	X		X		X	X	X	X		X
Spelling	X	X		X			X				X
Solving Problems	X		X			X		X	X		X
Listening	X			X		X	X	X	X		X
Speaking	X	X	X	X			X		X	X	X
Job Skills	X	X					X				X
Studying	X	X		X		X	X	X	X	X	X

Learning Styles Instrument:

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Visual Language	22			28	36	28	26	32	36		
Visual numerical	32			20	32	28	24	38	36		
Auditory language	40			22	18	28	26	26	14		
Auditory numerical	16			32	22	34	24	36	30		
Auditory-visual-kinesthetic	40			36	40	32	28	34	34		
Indiv. learner	30			28	28	28	20	38	36		
Group learner	36			20	20	26	20	18	26		
Expressiveness-Oral	32			32	26	30	30	16	18		
Expressiveness-Written	28			10	26	18	18	36	26		

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	35	764	84	7	PHS	33	749	76	6	PHS
2.	33	749	76	6	PHS					
3.	36	774	88	7	PHS					
4.	26	713	51	5	10.5	29	727	62	6	12.2
5.	30	732	65	6	12.9	29	727	62	6	12.2
6.	34	756	80	7	PHS	29	727	62	6	12.2
7.	23	699	40	5	9.3	31	737	69	6	PHS
8.	34	756	80	7	PHS	37	785	91	8	PHS
9.	26	712	50	5	10.4	33	749	76	6	PHS
10.	32	743	72	6	PHS					
11.	31	721	90	8	11.5					

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	40	872	99	9	PHS	38	822	99	9	PHS
2.	24	731	60	6	PHS					
3.	32	767	88	7	PHS					
4.	17	702	35	4	9.9	20	688	32	4	8.4
5.	27	743	72	6	PHS	29	750	78	7	PHS
6.	36	797	97	9	PHS	34	778	93	8	PHS
7.	14	692	27	4	9.1	17	702	35	4	9.9
8.	37	808	99	9	PHS	35	786	95	8	PHS
9.	23	727	58	5	12.7	35	786	95	8	PHS
10.	39	849	99	9	PHS					
11.	26	739	95	8	PHS					

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
1.	330	350	370	320
2.	320		310	
3.	370		340	
4.		330	280	290
5.	340	280	290	290
6.	350	330	300	300
7.	270/280	300	280	300
8.	350	350	390	350
9.	280/290	330	290	370
10.	310		350	
11.	290		270	

CLOZE:

NAME	Level 1	Level 2
1.	65%	70%
2.		
3.		
4.	53%	
5.	56%	60%
6.	51%	66%
7.	44%	57%
8.	67%	75%
9.	65%	60%
10.		
11.		

Self Evaluation of Program and Learning

Instructor/Class:

Program:

Skills Learned:

- Writing
- Spelling
- Expressing an opinion
- Problem solving
- Reading to remember
- Reading for details
- Reading for analyzing information
- Analyzing information on charts
- Working with basic math
- Working with fractions
- Working with decimals
- Working with percents
- Understanding how I learn best study skills

Comments:

Instructor Name:	Sandra Denny
City:	Dayton
Trade:	Carpenters
Union Site Manager:	Mark Combs
Union Team Teacher:	Jerry
Location of Class:	Dayton Career Center Dayton, Ohio
Dates of Classes:	3/3/95
Title of Class:	None given

Report for Spring 1995 Sessions

Instructor/Program Information

- Preparation
- Class Focus
- Number of Participants
- Attendance Records

Participant Information

- Profile Chart
- Self Assessment
- Learning Styles Instrument
- ABLE Pre and Post Assessments
- TALS Pre and Post Assessments
- CLOZE Level 1 and Level 2
- Self Evaluation of Program and Learning
- Certificate Award

Instructor/Program Information

Preparation (reported weeks = 8):

	Instruction	Preparation	Materials Development	Clerical/ Misc.
Percent of Time				

Class Focus: Mathematics

Number of Participants: 17

Attendance Records:

Participants	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
1. T. Barharst										
2. C. Coberly										
3. R. Curry										
4. R. Dunson										
5. S. Huff										
6. C. Lemp										
7. R. Perry										
8. T. Potter										
9. J. Pugh										
10. R. Shroyer										
11. B. Smith										
12. L. Smith										
13. J. Turner										
14. B. Young										
15. R. Vance										
16. S. Vance										
17. N. Vaun										

Participant Information Profile Chart:

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
Age	20	26	28	26	19	24	22	26	28	32	25	19	19	23	31	32	30
Race	W	W	W	B	W	W	W	W	W	W	W	W	W	W	W	B	B
Sex	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	F	M
Single Head of Household	Y	Y	Y	Y	Y	N	Y	Y	N	Y	--	Y	N	Y	N	Y	--
LEP	N	N	--	N	N	N	N	--	Y	N	N	Y	N	N	N	N	--
Grad. - HS	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
Year	94	86	95	86	--	90	92	87	85	91	89	94	93	89	81	81	82
GED	--	--	--	--	--	--	--	--	--	Y	Y	--	--	--	--	--	--
College Degree	N	N	N	N	N	N	N	--	Y	N	N	N	N	N	Y	N	N
Job Certification	N	N	N	N	N	N	N	--	N	N	N	N	N	N	N	Y	Y
College Courses	N	N	N	N	Y	N	N	Y	Y	N	N	N	Y	Y	Y	N	Y
Trade or Military	N	N	N	N	N	Y	N	Y	Y	N	N	N	N	Y	N	N	Y
Employed	N	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Years		8		.5	1	2	1	7	5		5.5	2		.25	5	5	

Self Assessment:

What are you good at learning?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
Communi-cating	X			X	X	X		X	X		X	X	X		X	X	X
Teamwork	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X
Math	X				X	X	X	X	X		X	X	X	X	X	X	
Reading					X		X		X	X	X				X		X
Writing					X		X		X	X	X			X	X		X
Spelling	X				X					X	X			X			X
Solving Problems		X	X	X	X			X	X	X	X	X	X	X	X		
Listening	X		X				X	X		X	X	X	X		X	X	X
Speaking	X				X		X		X						X		X
Job Skills	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X
Studying			X			X			X		X				X		X

What do you think you need to learn about?

NAME	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
Communi-cating		X	X			X						X		X			
Teamwork						X						X					
Math			X	X					X	X		X					X
Reading			X									X					
Writing			X	X				X				X	X				
Spelling		X						X	X			X	X		X		
Solving Problems	X											X					X
Listening					X				X			X					
Speaking			X			X						X					
Job Skills									X			X					
Studying				X	X		X					X	X	X		X	

Learning Styles Instrument:

NAME									
Visual Language									
Visual numerical									
Auditory language									
Auditory numerical									
Auditory-visual-kinesthetic									
Indiv. learner									
Group learner									
Expressiveness-Oral									
Expressiveness-Written									

ABLE Pre and Post Assessments

	Number Operations, Pre					Number Operations, Post				
Name	Raw Score of 40	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	27					33				
2.	24									
3.	12									
4.	9									
5.	31									
6.	21									
7.	19									
8.	33									
9.	31									
10.	25									
11.	28									
12.	31									
13.	31									
14.	36									
15.	32									
16.	35									
17.	18									

*No post tests were given.

ABLE - Cont.

	Problem Solving, Pre					Problem-Solving, Post				
Name	Raw Score of 40	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	25									
2.	21									
3.	8									
4.	7									
5.	26									
6.	19									
7.	21									
8.	30									
9.	28									
10.	26									
11.	26									
12.	28									
13.	33									
14.	29									
15.	30									
16.	23									
17.	19									

*No post tests were given.

ABLE - Cont.

	Language					Reading				
Name	Raw Score of 30	Scaled Score	Percentile Rank	Stanine	Grade Equiv.	Raw Score	Scaled Score	Percentile Rank	Stanine	Grade Equiv.
1.	25									
2.	18									
3.	13									
4.	8									
5.	17									
6.	19									
7.	18									
8.	27									
9.	23									
10.	27									
11.	26									
12.	27									
13.	23									
14.	30									
15.	25									
16.	25									
17.	27									

*No post tests were given.

TALS Pre and Post Assessments:

Name	Document Pre	Document Post	Prose Pre	Prose Post
1.	--		300	
2.	370		340	
3.	220		270	
4.	260		300	
5.	300		--	
6.	350		370	
7.	270		320	
8.	300		400	
9.	300		340	
10.	310		400	
11.	320		350	
12.	330		300	
13.	350		--	
14.	340		340	
15.	390		400	
16.	280		350	
17.	330		--	

*No post tests were given.

CLOZE:

NAME	Level 1	Level 2

Self Evaluation of Program and Learning

Instructor/Class:

Program:

Skills Learned:

- Writing
- Spelling
- Expressing an opinion
- Problem solving
- Reading to remember
- Reading for details
- Reading for analyzing information
- Analyzing information on charts
- Working with basic math
- Working with fractions
- Working with decimals
- Working with percents
- Understanding how I learn best study skills

Comments:

Appendix E

P.A. #24 Summit Rd

Name Tony Rider Location Cincinnati, Ohio

Think about yourself and the time you have spent in the skills class, then answer the following question in an essay.

What changes have you experienced in your personal and work life since visiting the skills class? Compare and contrast how you felt about yourself and your learning abilities when you began the program and how you feel now.

I have the skills, ability and knowledge to achieve the goals I wish. My set backs and delays are due to my poor planning, by involving myself in too many projects. Finishing projects started, without taking on addition task is tough as I sometime use these as excuses to delay progess on existing chores. There are two things that effects this one being learned, and the other - personality trait.

I am confident now, my learning abilities are sufficient its my focus that needs adjustment. I stronly feel the class and instructor were God sent. Together a long waited question has been answered.

Name Jim Riegler Location Sheet Metal Local 24 Cinti, Oh.

Think about yourself and the time you have spent in the skills class, then answer the following question in an essay.

What changes have you experienced in your personal and work life since visiting the skills class? Compare and contrast how you felt about yourself and your learning abilities when you began the program and how you feel now.

The skills class has enabled me to attempt to better understand why people react as they do in various situations. Knowing now the different Personality Types gives me more patience to be less judgemental towards others and more tolerable of our differences of opinion.

Although the class has not changed my feeling about myself or my learning abilities, it has helped me to realize that I need to return to college and broaden my education if I am going to compete in today's World. I intend to resume my studies effective this fall.

May 8, 1995

Ms. Sandy Pritz
CETE OSU
1900 Kenny Rd.
Columbus, Ohio 43210

Dear Sandy:

Upon the recent completion of the "Competitive Edge" program in Cincinnati, Ohio as well the entire pilot program for the Ohio Building And Construction Industry, I wanted to once again take a moment to thank you for allowing me to be a part of this exceptional program. I Never would have guessed in the beginning that this program would be not only an adventure, but also a learning experience like I have never known. It was an honor to be a part and I hope I have the pleasure, in the near future, to work with you and CETE once again. Also, if you would, please keep me in mind for any future programs with the center. I am open and willing to travel to any extent.

Sandy, it's very difficult to summarize in brief all that I have witnessed over the course of this pilot program. However, I have to say I seen first hand how successful this program was at helping others to make significant differences in their lives. It was a program that allowed the every day person, and often times an individual with little or no hope for a brighter future to once again experience a renewed sense of faith and hope for a better tomorrow. If ever the opportunity should arise, I would love the chance to personally attest, from the perspective of the facilitator, to the success and value of programs such as the one for the Ohio Building And Construction Industry to those who make decisions about such programs coming into existence. I do realize that my statement in terms of the impact the program has had on individual lives may seem over zealous and somewhat unbelievable, but I am here to say the program did work for those who exerted the effort and I believe it can do the same for others on a much larger scale if offered. Needless to say Sandy, I believe in the value of the program whole heartedly indeed.

In addition it is my firm belief that without people like you and others at CETE, committed to making a difference, the grass roots of the American workforce would never have the opportunity to compete once again in the global marketplace. I feel quite privileged to say I had the opportunity to be a part of this program.

Lastly, I would like to extend a special thank you to not only you, but also to Susan Imel and Johanna DeStefano for all of your efforts in providing me with the fundamental training to successfully perform my job and for exposing me, to what I consider to be the most profound and noble work of all; Adult Education. In addition, please also extend a warm thank you to Debbie Weaver whose continued efforts and support never failed, despite the many demands placed upon her.

Respectfully,

Melody Fitzpatrick-Parke