DOCUMENT RESUME

ED 424 379 CE 077 289

AUTHOR	Brandenburg, Dale C.
TITLE	Impact Research Report and Site Summaries for Project ALERT. Workplace Education.
INSTITUTION	Wayne State Univ., Detroit, MI. Coll. of Education.
SPONS AGENCY	Office of Vocational and Adult Education (ED), Washington, DC. National Workplace Literacy Program.
PUB DATE	1998-00-00
NOTE	85p.; For other "Project ALERT" reports, see CE 077 287-302.
CONTRACT	V198A40082-95
AVAILABLE FROM	Workplace Education: Project ALERT, Wayne State University, 373 College of Education, Detroit, MI 48202 ($40, plus $5 shipping).
PUB TYPE	Reports - Evaluative (142)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Adult Basic Education; Communication Skills; Continuing Education; *Education Work Relationship; *Institutional Cooperation; Mathematical Applications; Mathematics Instruction; Multimedia Instruction; On the Job Training; *Outcomes of Education; Skill Development; Statistics; Teaching Methods; Whole Language Approach; *Workplace Literacy

ABSTRACT

In order to evaluate the Project ALERT (Adult Literacy Enhanced & Redefined through Training) Workplace Literacy Project, data were collected to gauge the impact of the program on individual participants, the organizations in which they were employed, and to provide the use of whole language and multimedia techniques in workplace literacy programs. In addition, case studies of the implementation of the program were developed on a site-by-site basis. Data collection were collected through participant surveys, customized pretests, and the Test of Adult Basic Education as a posttest. Evaluation showed that the project served 683 participants, typically African-American male U.S. citizens with a high school diploma whose first language is English. Most participants showed significant improvements in skills after taking the course, and most used skills at least to some extent 6 months after taking the courses. Courses included the following: math, communications, apprentice preparation, interpersonal communication, statistical process control, commercial driver license, technology for the workplace, effective communication, and numbers at work. (Site-specific results are reported for the following: Chrysler Corporation, City Management Corporation, and Davis Tool & Engineering. The report contains outcome data tables, participant comments, survey forms, and interview schedules.) (KC)

WORKPLACE EDUCATION

Impact Research Report And Site Summaries

For Project ALERT
National Workplace Literacy Program

Prepared by

Dr. Dale C. Brandenburg
Project Director
Wayne State University

Wayne State University
College of Education

Table of Contents

The material in this project was prepared under Grant No. V198A40082-95 from the National Workplace Literacy Program, Office of Vocational and Adult Education, US Department of Education, under authority of the Adult education Act P.L. 91-230. Federal funding has contributed 70% ($1,028,512) of the total cost. The remaining 30% ($471,688) has been provided by four partners of the project UAW - Chrysler National Training Center, City Management Corporation, Davis Tool and Engineering and Wayne State University in the form of cost-sharing in-kind. Grantees undertaking such projects under government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Education.

Project ALERT
Impact Research Summary

The purpose of this report is to summarize data collected during Project ALERT to gauge the impact of the program on individual participants, the organizations of which they were employees, and to provide insight regarding the use of whole language and multimedia techniques in workplace literacy programs. In addition, case studies of the implementation of the program are provided on a site by site basis to document the path toward impact in each organization.

Types of Data Collected to Measure Project Outcomes

To determine impacts, gains and participant reactions, pre and post tests, as well as survey forms, were completed by all students (descriptions follow later in this section). At the beginning of each course, all students completed the following survey forms and pre-tests:

- *Learner Enrollment*
- *Learner Expectation* (the top part)
- *The Adult Basic Education* (TABE) test (reading and math portions)
- Customized pre-test for each course.

At the end of each course, students completed survey forms and post-tests:

- *Learner Assessment*
- *Learner Expectation* (the bottom portion)
- Project ALERT Participant Survey, a course evaluation
- The Adult Basic Education (TABE) reading post-test
- Customized post-test for course (same as pre-test)

Six months following instruction, a survey form was given to participants who completed the courses, and they could volunteer to be interviewed by a staff member. A twelve-month survey (identical to the six-month version) was also designed, but since few participants had completed classes more than one year previously, the data is not reported. The survey form was designed to elicit participant reaction to impact the class may have had on job and everyday life experiences.

Customized pre and post tests were designed for each course to test specific course concepts. Students completed these at the beginning and end of the course to determine gains. Sometimes an additional customized test was given to test very specific participant skills, e.g., computer basics.

Data were gathered for two different project activities: during the instructional development pre-design analysis phase of operations and during and after implementation to conduct impact research and evaluation tasks. Documentation of pre-design analysis was facilitated by three instruments that were designed, piloted, revised, and validated by project staff: *Hourly Employee Interview*, *Supervisor Interview*, and *Observation Checklist*. These

instruments were used to standardize data collection for curricula design across sites. Results from this effort can be found in the companion document, Needs Assessment in Workplace Education by Brandenburg and Richey. Data were collected with the instruments by interviewing approximately 55 hourly employees, union officials, and supervisors, and by observing shop-floor operations for pertinent job tasks. Instructors collected data for impact research and evaluation. Data collection instruments used are detailed below:

- *TABE- Reading Test-* Four reading passages ranging from 350-415 words in length. Passages are in different formats (recipe, classified section of telephone directory, informational articles), each followed by five to seven multiple choice reading comprehension questions. Timed test, 25 minutes to complete 25 questions. Administered before and after each course, except during last 6 months of project operations in 1997.

- *TABE- Math Test-* Fifteen problems requiring use of addition, subtraction, multiplication, and division of whole numbers; mixed fractions, division of fractions; calculations with decimals, percents, and negative numbers. Timed test, 9 minutes. Administered before and after each course, except during last 6 months of project operations in 1997.

- *Customized Pre/Post Course Mastery Tests-* Designed to reflect content of specific courses. Number of items varied by course. Untimed.

- *Learner Enrollment* – Forty items, including demographic information and self-ratings of job literacy abilities, workplace context, and perceptions of basic skills. Administered during participant intake process.

- *Learner Assessment* –Twenty items, including self-assessments of abilities and work environment, interest in additional classes, and possible impact factors that may have occurred since the course began. Administered at the completion of each course.

- *Learner Expectation* – Open-ended questions for indicating areas in which participants hoped to improve while taking the course and areas in which participants perceived they had improved after taking the course. Top half of form administered prior to instruction, bottom half of form completed after completion of instruction.

- *Project ALERT Participant Survey* – Four open-ended questions asking what participants liked, disliked, and thought were most important about the course, plus open comments.

- *Six-Month Survey* and *Twelve-Month Survey* – Two part instruments, similar to each other. First part: 39 objective, 5-point scaled questions concerning

course outcome impact on the job and in everyday life. Second part: 13 questions for a 20-30 minute person-to-person interview.

Demographics

Participants: The participants in the project were 683 employees of the project industry/service partners. Demographic data for 329 participants at Chrysler Detroit Axle, Davis Tool, and City Disposal Systems. A brief description of the available composite average participant profile is as follows:

Composite Average Participant Profile

Thirty-nine year old, African-American male US citizen with a high school diploma whose first language is English.

More detailed demographic information about participants is displayed in *Figure 1* below.

Figure 1: Demographic Characteristics of Participants (n = 329)

Age:		**Ethnicity:**		**Gender:**	
20-29 years old	14.6%	White	33.7%	Male	82.1%
30-39 years old	33.7%	Black	58.4%	Female	17.9%
40-49 years old	33.1%	Asian	0.9%		
50-59 years old	17.9%	Indian	1.2%		
60-69 years old	0.6%	Other	5.8%		

Born in US?		**English spoken at home?**	
Yes	92.7%	Yes	96.0%
No	7.3%	No	4.0%

Education Level:

No schooling	**1-5 yrs.**	**6-8 yrs.**	**9 yrs.**	**10 yrs.**	**11 yrs.**
0.9%	2.7%	1.8%	4.3%	4.3%	4.6%

12 yrs. or more	**HS diploma**	**GED**	**Some college**	**College degree**	**Trade school**
76.3%	58.7%	12.8%	30.1%	14.6%	17.6

General Outcome Data

Participant Pre-Post Learning

Table 1 below provides overall data on participant pre-post learning. Following each course name (under the second column labeled "n") is the total number of students completing the class. After each specific test is the number of students that completed both the pre and post tests of that particular test. The course outcomes are listed for the pilot session of the class and then for the regular session of the class.

The means (average) for each pre and post score are provided along with the percentages of the raw scores (the mean divided by the total possible score). There is an indication to show statistical significance. Also included in the last column is the number of students that showed improvement from the pre to post score of a test.

Table 1
Pre-Post Learning Results For All Classes By Site

Results for Chrysler Detroit Axle

Course and Testing Instrument	Number of students	Mean Scores Pre-test Raw Score %	Mean Scores Post-test Raw Score %	Statistically Significant ($p < .01$)	Number who Improved
Math for Machine Operators	63				
TABE Math	21	7.6 (51%)	9.1 (61%)	Yes	14
Customized MMO	48	16.2 (54%)	20.4 (68%)	Yes	43
Effective Communication on Computer	110				
TABE Reading	77	14.9 (60%)	15.9 (64%)	No	39
Customized ECC	89	20.0 (48%)	25.0 (60%)	Yes	68
Custom Computer	75	12.6 (58%)	16.3 (77%)	Yes	59
Interpersonal Communication	124				
TABE Reading	83	16.5 (66%)	18.0 (72%)	Yes	28
Customized IPC	103	10.9 (36%)	18.5 (62%)	Yes	44

Results for Davis Tool and Engineering

Course and Testing Instrument	Number of students	Mean Scores Pre-test Raw Score %	Mean Scores Post-test Raw Score %	Statistically Significant (p<.01)	Number who Improved
Apprentice Prep	58				
TABE Math	34	8.4 (56%)	10.1 (67%)	Yes	22
TABE Reading	34	18.4 (74%)	19.7 (79%)	No	22
Customized APP	34	22.5 (70%)	25.7 (80%)	Yes	26
Interpersonal Com/ Prob. Solving					
TABE Reading	54	18.6 (74%)	19.5 (78%)	No	28
Customized IPC	54	10.8 (36%)	18.8 (62%)	Yes	47
SPC Prep					
Customized SPC I	12	15.0 (41%)	20.4 (55%)	Yes	9
Customized SPC II	14	3.6 (36%)	6.5 (65%)	Yes	12
TABE Math	13	7.7 (51%)	8.7 (58%)	No	6

Results for City Management Corporation

Course and Testing Instrument	Number of students	Mean Scores Pre-test Raw Score %	Mean Scores Post-test Raw Score %	Statistically Significant (p< .01)	Number who Improved
Commercial Drvr. License Prep	15	2.7 (18%)	3.3 (22%)	No	8
TABE Math	15	16.4 (66%)	17.1 (68%)	No	5
TABE Reading	18	38.5 (77%)	45.7 (91%)	Yes	16
Customized CDL					
Tech. For Workplace					
TABE Reading	16	14.5 (58%)	16.3 (65%)	No	11
TABE Math	16	6.8 (66%)	7.1 (68%)	No	9

Course and Testing Instrument	Number of students	Mean Scores Pre-test Raw Score %	Mean Scores Post-test Raw Score %	Statistically Significant (p< .01)	Number who Improved
Customized TW	31	8.1 (43%)	18.1 (91%)	Yes	28
Effective Commun.					
Customized EC	10	11.5 (46%)	12.0 (48%)	No	4
TABE Reading	9	8.2 (33%)	10.8 (43%)	Yes	8
TABE Math	10	4.3 (29%)	5.5 (37%)	No	7
Interpersonal Comm.					
Customized IPC	20	16.8 (56%)	21.3 (71%)	Yes	16
Numbers at Work	Complete data N=3	Not analyzed			

Six Month Follow-Up

The impact of the courses was determined from data collected by a 6-month follow-up self-rating survey. It concerned participants' perceptions of continued improved skill application on the job and in everyday life situations. The survey results are presented for each site below.

Table 2: Chrysler Detroit Axle -- Use of Information Provided in Course Six Months Later

	N	Minimum	Maximum	Mean (Low Score is Higher)	Std. Dev.
Used information on job	49	1	5	2.61	1.19
Used information in everyday life	50	1	5	2.42	1.14
Shared information with others	49	1	5	2.41	1.06
Decided on new education goals	46	1	5	3.02	1.31
Taken on more job responsibilities	48	1	5	2.85	1.44
Could get better job	48	1	5	2.88	1.33
More satisfied with my job	49	1	5	2.65	1.27
Better worker	48	1	5	2.19	1.28

Table 3: City Management Corp. -- Use of Information Provided in Course Six Months Later

	N	Mini mum	Maxi mum	Mean (Low is more positive)	Std. Dev.
Used information on job	14	1	4	2.43	1.16
Used information in everyday life	14	1	4	2.29	1.07
Shared information with others	15	1	4	2.47	1.13
Decided on new education goals	14	1	5	2.43	1.16
Taken on more job responsibilities	15	1	5	3.40	1.24
Feel could get better job	14	1	4	2.93	1.27
More satisfied with my job	14	1	5	3.43	1.34
Feel I am better worker	13	1	4	2.15	1.14
Valid N (listwise)	11				

Table 4: Davis Tool -- Use of Information Provided in Course Six Months Later

	N	Mini mum	Maxi mum	Mean (Low score is more positive)	Std. Dev.
Used information on job	18	1	5	2.44	1.20
Used information in everday life	18	1	5	2.61	1.20
Shared information with others	18	1	5	2.61	.98
Decided on new education goals	17	1	5	1.82	1.19
Taken on more job responsibilities	18	1	5	2.67	1.41
Feel could get better job	17	1	4	2.00	1.06
More satisfied with my job	18	1	5	2.50	1.25
Better Worker	18	1	5	2.44	1.15
Valid N (listwise)	17				

These data indicate that workers perceive themselves as at least "somewhat" using the skills learned in the Project ALERT courses they took on the job and in everyday life situations. It is important to note that participants also reported taking "some" more responsibility on their jobs and felt "some" more satisfaction with their jobs at two of the three locations. Additionally, the courses made participants at all three locations feel that they were "some[what]" better workers.

Although no post-program supervisor ratings or participant observations were conducted to collect impact data, the 6-month follow-up self-rating participant surveys document perceptions of application of learning to performance of job tasks, as well as to everyday life situations. Mean results are displayed below for participant self-ratings for frequency of "better performance" (Table 5) and "more confident performance" (Table 6) of those skills addressed across all courses.

"Since you took the __ class, do you think you are <u>better</u> at the following things?"

Rating scale: Always-5, Usually-4, Sometimes-3, Seldom-2, Never-1

Table 5: Specific Skill Improvement ("Better") Ratings

Prompt Stem:	**Chrysler Axle Mean (n = 51)**		**City Mgmt. Corp. Mean (n = 15)**		**Davis Tool Mean (n = 18)**	
	On the Job	**Everyday Life**	**On the Job**	**Everyday Life**	**On the Job**	**Everyday Life**
Reading	3.4	3.5	3.1	3.3	3.5	3.5
Listening	4.1	4.1	3.9	3.4	3.7	3.7
Doing Math	3.1	3.0	2.6	2.7	3.6	3.6
Speaking in Public	3.2	3.1	2.0	2.2	3.6	3.3
Speaking in Private	3.6	3.7	3.1	3.2	3.6	3.5
Taking Tests	2.9	3.1	2.7	2.5	3.8	3.8
Understanding words	3.5	3.5	3.4	3.4	3.7	3.6
Solving Problems	3.7	3.7	3.7	3.5	4.0	3.8
Following directions	4.0	4.2	3.9	3.8	4.0	3.9
Understanding your responsibilities	4.2	3.9	4.1	3.3	3.8	3.7
Expressing your ideas	3.8	2.5	3.5	3.4	3.8	3.8
Using a computer	2.5	3.7	3.2	3.7	2.0	1.9

"Since you took the ___ class, are you more confident in the following things?"
Always-5, Usually-4, Sometimes-3, Seldom-2, Never-1

Table 6: Specific Skill Improvement ("Confidence") Ratings

Prompt Stem:	Chrysler Axle Mean (n = 51)		City Mgmt. Corp. Mean (n = 15)		Davis Tool Mean (n = 18)	
	On the Job	Everyday Life	On the Job	Everyday Life	On the Job	Everyday Life
Reading	3.6	3.6	2.5	2.7	3.8	3.8
Listening	4.1	4.0	3.3	2.9	3.6	3.6
Doing Math	3.2	3.1	2.0	2.1	3.6	3.7
Speaking in Public	3.3	3.3	1.9	1.9	3.6	3.6
Speaking in Private	3.7	3.8	2.6	2.9	3.1	3.1
Taking Tests	2.7	2.9	1.6	1.9	4.1	4.1
Understanding words	3.6	3.3	3.0	2.9	3.9	3.8
Solving Problems	3.9	3.8	3.1	3.2	4.2	4.1
Following directions	4.0	4.1	3.0	3.2	4.4	4.2
Understanding your responsibilities	4.2	3.9	3.3	2.7	4.1	3.8
Expressing your ideas	3.8	2.5	2.7	2.8	2.1	2.1
Using a computer	2.4	3.8	2.4	3.0	4.5	4.2

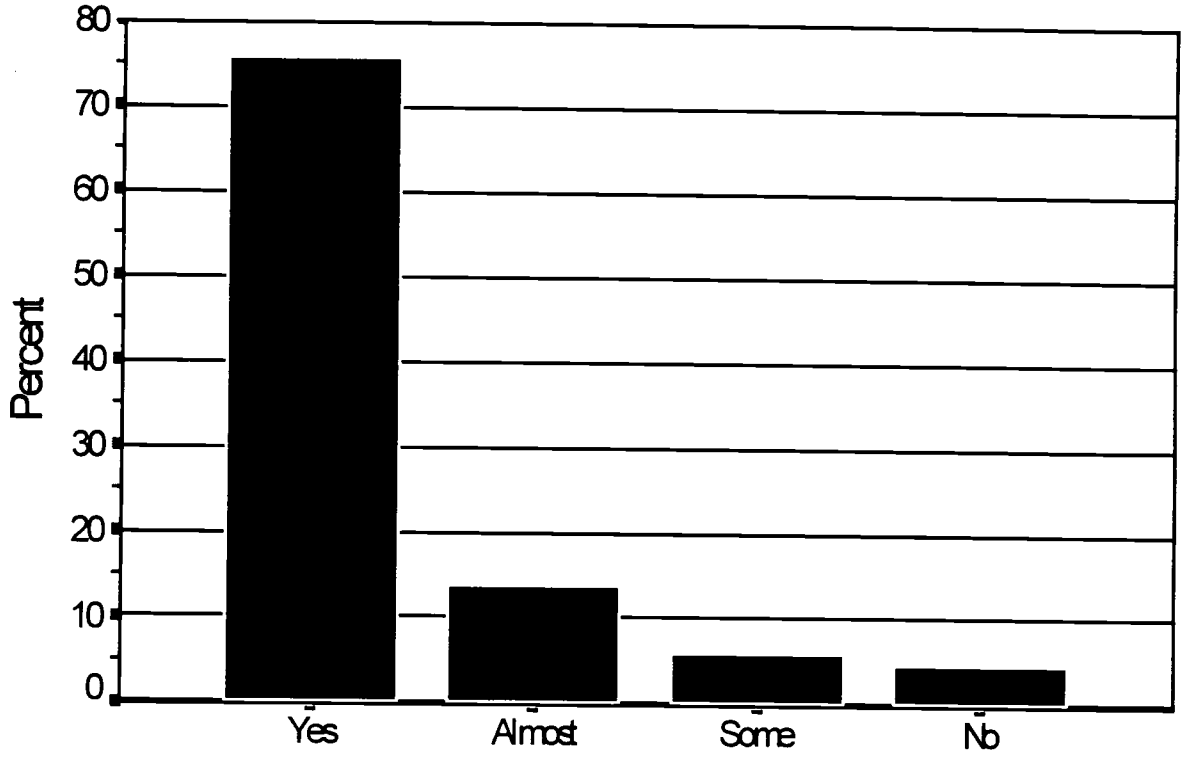
Responses ranged from "usually" to "seldom" with most reporting "sometimes" as the frequency of skill use both on the job and in everyday life activities. Data patterns indicate that the skills workers reported using most frequently across all sites were "listening," "following directions," and "solving problems." The skills reported as being used least often were "expressing your ideas" and "taking tests." All skills taught, however, were reported by participants as being used to some extent six months after the course.

Six-Month Interview Data

In both *Learner Expectation* and 6-month post-program survey comments, participants indicated that the skill or applications learned had utility to them. Eighty-seven percent of respondents on the post-program portion of the *Learner Expectations* instrument (n = 89)

indicated that their learning goals had been met or "almost" met. Figure 2 below shows the general analysis of this finding.

Figure 2 -- Learner Expectation Summary Results Across Sites and Classes



Comments on the courses taken from the 6-month post-program participant surveys included the following:

- This class was more beneficial to me. I think every employee should experience this class.
- Need to have more time on the computer.
- Bring on the advanced classes.
- I think it would be a great benefit for the employee to have a second class in effective communication on the computer. [This] would give the student all the confidence they would need to operate a computer.
- Excellent. Instructors very helpful.
- Why send us to class when you can't follow thru it yourself. Management.
- When do we start the advanced classes?

- I learned a lot of simple ways to solve the problems, especially in the workplace. Sometimes we have to make the first attempts. How do you approach a person and what do you say to them—that is the key most of the time in solving a problem.
- Excellent tool to learn how to express, understand, and receive collective information from/to another.
- Excellent instructors. Very helpful.
- This class was a huge help in my private life as well as on my job.
- A really good concept. Communicating is the key to problem solving. Need [periodic] reinforcement.
- Classes for people who have been out of school for some time is a wake-up call; it isn't to learn some new things, it's a refreshing new outlook.
- "Outstanding" once people understand the purpose, which I have.
- Class is good, but we could have [done] less math and more computer.
- The class was very basic and the information doesn't seem to be needed in my job.
- Very good class. I think about it a lot. I think everyone should take Pre-CNC Math.
- Don't stop, more...time.
- The teacher was great....
- I enjoyed the class. It gave me the ability to overlook some technical fears of operating computers. I can operate one now without worrying about erasing everything.
- I've enjoyed each class that I have taken and enjoyed knowing all of my instructors, as well.
- It's a good thing for people like me.

Additionally, participants were asked to rate the courses they took (5-point scale, with 5 as highest) and asked, *"Would you recommend this course to others?"* and *"Would you be interested in taking other courses?"* Results across all sites (n = 329) showed overall course rating as 3.6. Ninety-eight percent would recommend the courses they took to others and seventy-nine percent expressed interest in taking another course.

Learner Perceptions Before and After Instruction

The Learner Enrollment and Learner Assessment forms were completed prior to the onset of instruction (Enrollment) in the classroom whereas the Assessment form was completed during the last day of instruction. Each is meant to measure the perceptions of change as a result of attending the class. Tables 7 and 8 below represent general analyses of those data collected by these forms.

Site by Site Information

The last three sections outline the process of implementation and results as the project was implemented in the three major sites. Some specific research data for each site is also included.

Table 7
Learner Enrollment Results by Course

Course Label		Your ability to read English	Your ability to understand English	Your ability to speak English	Your ability to write in English	Your ability to work as part of a team	Your ability to use math	Your ability to solve problems/use reasoning
Apprentice Prep	Mean	2.90	2.98	3.13	2.66	3.25	2.49	2.77
	N	61	61	60	61	61	61	61
SPC Prep	Mean	2.73	3.20	3.33	2.60	3.27	2.13	2.53
	N	15	15	15	15	15	15	15
Eff. Com. on Computer	Mean	3.06	3.25	3.19	3.08	3.29	2.69	2.87
	N	80	80	80	80	80	80	80
IPC	Mean	3.14	3.34	3.24	3.27	3.37	2.83	2.96
	N	83	83	83	83	83	83	83
Math for Machine Operators	Mean	3.23	3.36	3.36	3.23	3.32	2.73	2.86
	N	22	22	22	22	22	22	22
CDL Prep	Mean	3.16	3.26	3.26	3.05	3.53	2.79	2.89
	N	19	19	19	19	19	19	19
Tech for Wrkplace	Mean	3.35	3.53	3.29	3.35	3.41	2.53	3.12
	N	17	17	17	17	17	17	17
Effective Communication	Mean	2.35	2.94	3.00	2.41	3.41	2.24	2.82
	N	17	17	17	17	17	17	17
IPC for City Mgmt at Romulus	Mean	3.57	3.71	3.57	3.14	3.50	3.36	3.50
	N	14	14	14	14	14	14	14
IPC for City Mgmt	Mean	3.65	3.65	3.58	3.58	3.50	2.85	3.04
	N	26	26	26	26	26	26	26
Reading Improvement	Mean	2.75	3.00	3.25	3.00	3.50	2.12	2.81
	N	16	16	16	16	16	16	16
Total	Mean	3.08	3.26	3.25	3.05	3.36	2.66	2.91
	N	370	370	369	370	370	370	370

Table 8
Learner Assessment Results by Course

Course Label		Your ability to read English	Your ability to understand English	Your ability to speak English	Your ability to write in English	Your ability to work as part of a team	Your ability to use math	Your ability to solve problems/use reasoning
Apprentice Prep	Mean	3.51	3.69	3.74	3.49	3.97	3.51	3.77
	N	35	35	35	35	35	35	35
SPC Prep	Mean	3.11	3.22	3.22	3.44	3.22	2.67	3.00
	N	9	9	9	9	9	9	9
Eff. Com. on Computer	Mean	3.06	3.17	3.18	2.94	3.32	2.64	2.94
	N	66	66	66	66	66	66	66
IPC	Mean	3.24	3.42	3.37	3.18	3.34	2.91	3.12
	N	76	76	76	76	76	76	76
Math for Machine Operators	Mean	3.05	3.05	3.15	2.95	3.25	2.75	3.10
	N	20	20	20	20	20	20	20
CDL Prep	Mean	3.22	3.33	3.33	3.22	3.22	3.00	3.11
	N	9	9	9	9	9	9	9
Tech. for Wrkplace	Mean	3.08	3.31	3.46	3.31	3.38	2.85	3.15
	N	13	13	13	13	13	13	13
Effective Communication	Mean	2.11	2.78	2.78	2.11	3.22	2.11	2.89
	N	9	9	9	9	9	9	9
Reading Improvement	Mean	2.85	2.92	2.92	2.62	3.23	2.15	2.92
	N	13	13	13	13	13	13	13
Total	Mean	3.14	3.30	3.31	3.09	3.40	2.83	3.14
	N	250	250	250	250	250	250	250

CHRYSLER CORPORATION: DETROIT AXLE PLANT
FINAL REPORT
October, 1997

INTRODUCTION

This report describes an approach that resulted from the Chrysler Detroit Axle Corporation partnership with Wayne State University and Project ALERT. The process is replicable in other workplace environments. Interviews with 22 hourly employees and 5 plant site supervisors provided information about the educational needs of the employees and the company. All stakeholders contributed key information to the plan for implementation of the program. The implementation of a program in a large company was complex and time consuming. Management, union representation, the Local Joint Training Committee, and the National Training Center (NTC) were constantly involved in the process. Existing education and training programs also had to be taken into consideration. None of the process could be confirmed without all stakeholders approval.

Relationships with the stakeholders at the plant were difficult to establish. The Project ALERT team tried to meet with the Local Joint Training Committee for more than four months. There were delays for a variety of reasons, the belief that sufficient training existed already, a pending work stoppage/strike, human resource directors and staff who were not responsive to our inquiries, and delayed communication with the National Training Center (NTC). During the delays the classroom was built, some of the equipment was installed, and liaison training was started with the help and guidance of the NTC. Six months after the program coordinator joined the project; interviews with the supervisors and the employees were completed. Liaison training, recruitment, class schedules on release time, and a supervisor's orientation were initiated during the next five months.

Multi-media instruction was the main focus of ALERT's proposed program at the site. When the interviews with workers and supervisors were analyzed, the project staff and the stakeholders recognized that there was a need for additional classes in some broad content areas and for computer training. The following courses were developed: Effective Communication on Computers (ECC), Interpersonal Communication & Problem Solving (IPC), and Pre Computer Numerical Control (Pre-CNC).

The success of the program depended on the support of upper management (specifically the production manager), the liaisons (union representatives) that recruited participants, the guidance of the NTC, and the instructors' willingness to help the participants have a positive learning experience.

The following paragraphs describe major components of implementation:

ROOM LOCATION – SCHEDULES:

1. A room was constructed on site to accommodate 9 computers and all of the classroom

equipment. The room was too small for the equipment and created space problems for both the participants and the instructor.
2. Furniture that accommodated the computers, white boards, file cabinets, and printers for the computers were made available. Additional supplies and equipment were also provided as needed.
3. Class schedules were arranged during the three shifts. Most classes met for 2 hours for 2 days each week for 10 weeks (total of 40 hours). In some cases due to work stoppage or department shut downs, the instructional time was extended to complete the courses.

INSTRUCTOR HIRING

Project ALERT's pool of instructors were assigned to the Axle plant as needed. The instructors appreciated the newly constructed classroom and liked the comfortable atmosphere at the plant because other programs were ongoing at the plant. Instructors were willing to facilitate classes for all 3 shifts as needed. Classes were offered at the end of the midnight shift (4:30-6:30 A.M.). Instructors reported that this was not successful because workers frequently fell asleep on the job or some where in the plant at the end of the third shift. The classes that were offered at the beginning of the third shift were small but most participants attended regularly.

DAILY OPERATIONS MANAGEMENT OF THE PROGRAM COORDINATOR:

All aspects of managing records, attendance reports to the stakeholders, class schedules, retention of participants, and reports to all stakeholders about program events were the responsibilities of the program coordinator. The liaisons (union representatives) recruited the participants and kept them involved in the program. The NTC, management at the plant, and the program coordinator defined the liaisons roles. Ongoing coordination and supervision of the liaisons were extremely important and demanded a considerable amount of the program coordinator's time.

The following courses were created for Chrysler Detroit Axle:

1.*Interpersonal Communication & Problem Solving* (IPC) required almost daily attention from the program coordinator during the first few rounds of classes. The program coordinator co-facilitated the classes in order to deal with the hourly employees resentment that supervisors were not in the classes. Workers believed the communication problems existed at the management levels. Furthermore, concerns about scores on tests or information on ALERT forms surfaced repeatedly. The program coordinator dealt with issues that could disturb instruction. Eventually, the concerns diminished because workers in the plant heard positive reports about the classes.

2.*Effective Communication on Computers* (ECC) was developed to teach basic computer skills and to develop reading and writing skills by using a description of Axle's production process and participants' job descriptions as parts of the curriculum. The program coordinator observed and modeled instruction as needed. Then these strategies were reinforced in the staff development sessions.

3.*Pre-Computer Numerical Control* (CNC) (eventually renamed as *Math for Machine Operators*) was offered to workers in the gear divisions. Basic math skills needed to understand the CNC training were emphasized. Multi-media software supported the instruction and was to have been the key to ALERT's program at Axle. The program coordinator depended on the multi-media staff for assistance with instructional delivery.

The program coordinator spent most of her time in the plant meeting with management, the liaisons, and the participants. There were constant changes in workers' shifts or departments. A myriad of other participants' personal problems required attention from the program coordinator. Obtaining records from individual participants in a large plant was another concern. High absenteeism in various departments prevented participants from attending the classes on a regular basis; they also substituted for absent workers. The program coordinator tracked the problems and obtained assistance from supervisors as needed.

Additional materials were often needed to supplement the participants' basic skills instruction; these materials were supplied by the program coordinator and the curriculum design team.

STUDENT PARTICIPATION - RETENTION OF STUDENTS

Voluntary attendance on release time was key to the success of the Axle program. Overall participants who regularly attended the classes and their enthusiasm for being in the program were an incentive to others to register for the classes. The other workers in the participants' departments usually knew who was attending a class and what it was about. The instructors were pleased with the interest most participants demonstrated throughout the courses. Many participants expressed appreciation for the opportunity to attend and reported this to the program coordinator on a regular basis. Certificates of recognition for participation or for completion of the courses were given to the participants at the end of the classes. A class celebration was also scheduled on the last day the class met.

PROGRAM COORDINATOR RESPONSIBILITIES (See job description in Davis Tool Report)

Recruitment was a major task at the beginning of the implementation process. The program coordinator and the UAW liaisons worked together to register students. It was difficult and took a great deal of time because the plant was large. There were barriers to consider, UAW seniority guidelines and supervisors concerns about production while workers were in the classes.

All classes began with an orientation session. The following issues were discussed in each session: confidentiality, concerns about returning to a classroom experience, and the usual questions about what would be required for the course.

The program coordinator was accountable and flexible. She demonstrated interest in learning about the company and the appropriate channels for getting through the system. She also tried to determine the company expectations from the course offerings. This was never clear to her. Furthermore, organizational constraints created events that occurred throughout the

implementation process. They were dealt with according to the culture of the organization.

Frequent contact with all stakeholders seemed to be the most demanding dimension of the implementation process. Record keeping and monitoring the entire start and end of each round of classes were also difficult tasks due to the size and complexity of the company. Participants who missed the last days of the classes when final records were completed presented a major problem for the program coordinator. Absenteeism, changing shifts and rotation assignments to different departments made it difficult to obtain incomplete records. The records were needed for the research component of the Project ALERT grant.

Upper management encouraged supervisors to attend an ALERT orientation. The supervisors did not ask many questions initially at the meetings but the program coordinator spent time with them informally on the shop floor until the supervisors understood the program. Most workers notified their supervisors before going to class until the routine of leaving on a regular basis for the 10 weeks was established. The program coordinator was interested in the supervisors' production problems caused by workers attending classes, frequent discussions with supervisors seemed to help. It was extremely important to build rapport with the supervisors and with the employees.

The program coordinator was in the plant 85% of the time that classes met. When a participant was absent more than 2 days without explanation, the program coordinator went to the work station of the absent participant to encourage him/her to return to the classes or to offer/ provide makeup work. This provided an opportunity for the program coordinator to discuss the participants needs/concerns and to build relationships with area supervisors. Supervisors offered scooter riders to the various departments and helped the program coordinator find the absent participants. Visibility of the program coordinator and her relationships with the employees helped spread the word about the program. Supervisor cooperation was essential. Participants' release schedules were not always forwarded on time. Therefore, the coordinator located absent participants' area supervisors and got permission to have them attend. This worked well but demanded a great deal of time and energy because the plant was large.

Instructors were monitored daily. On site staff development and frequent contact with the instructors was an effective way to build positive relationships with the instructors. The program coordinator became a part of the delivery of instruction and freely modeled instructional strategies as needed. After the sessions the instructor and the coordinator discussed the strategies.

During the delivery of instruction, participant feedback and feedback to the organization were additional responsibilities of the program coordinator. All of this information about the implementation process was documented for the project by the program coordinator.

MATERIALS AND COURSE SET UP

Three courses were offered during the 3 shifts. All participants were on release time. A schedule was established to avoid overlap of departments that were releasing workers during a shift. This

important consideration was needed to prevent a reduction in plant production. Initially, 2 sections of the classes were offered for the 1st and 2nd shifts. Midnight classes were added in later rounds of course schedules. All classes met for 4 hours each week for 10 weeks (a total of 40 hours per course).

Curriculum guides were given to the instructors along with the necessary supplies required for each course. Disks were required for the computer-based courses. All participants were given folders.

The **ECC** course used commercial software (The New Reading Disk) that was modified to include content that dealt with automotive issues at the plant and personal issues. A curriculum design team member attended all of the ECC class sessions and worked with the instructor to develop her delivery of instruction. The program coordinator, the curriculum designer, and the instructor reviewed the daily lessons. Several important changes were made in the curriculum and in the customized test for the course. Reading and writing improvement were emphasized in the first three rounds of classes. Unfortunately, more time was needed to build basic reading and writing skills of the participants than was possible in the 10 weeks. The last round of classes stressed computer skills because the participants attended on their own time instead of on release time. They requested more time on building computer skills.

The **IPC** course became the most popular offering. The course curriculum integrated previous communication and problem solving strategies that were used in other Chrysler plant training. The NTC provided a curriculum. The course developer referred to the lessons in the curriculum as she developed the ALERT IPC course. Each lesson had an icebreaker to launch the objectives for the lesson. Ninety percent of the time the participants were interactive. Few revisions of the course were necessary but the instructors who taught the classes modified the lessons to match the participants.

PreCNC was set up to prepare Axle's gear division employees to operate computer panels. Basic math skills were needed before the employees could easily absorb the training offered by the company. Math instruction presented some problems for participants who had poor school experiences in the past. In addition, the multi-media software had technical problems; this was compounded by the limited computer skills the participants had. The curriculum was designed to integrate teacher directed lessons and to supplement the lessons with the software. The software program had a notepad upon which daily lessons were recorded. The notepad was used for lesson closure. (Calculators were provided)

All participants took parts of the Test of Adult Basic Education (TABE) Survey Form D. Some classes only required the reading portion. The PreCNC participants were assessed with the reading and math portions of the TABE. Participants were also tested on a customized test. These tests were designed to test specific objectives of the curriculum for each course.

CURRICULUM DEVELOPMENT

The **IPC** course was designed to meet the needs expressed by supervisors and employees. Many

of the hourly workers had participated in the Product Quality Improvement (PQI) training. Their interviews revealed considerable dissatisfaction with their previous training. Communication and problem solving issues were addressed in the PQI training but the employees did not believe it had changed any of the relationships at the plant. Therefore, the IPC curriculum was specifically designed to facilitate strategies that would help workers change their relationships with each other and with their supervisors, as well as with their families. Other Chrysler communication training was partially included too. The program coordinator worked closely with the curriculum designer while she delivered the first 2 courses. The experience enabled the program coordinator to facilitate the course as needed.

The **ECC** course was written for Chrysler Detroit Axle. It used many examples from the work environment as well as general topics that were familiar to adult learners. Basic reading and writing skills were taught on the computer. Participants liked to use the computer; they were not as eager to build basic communication skills. Therefore, the curriculum design team modified the course to balance the instruction of computer and basic skills.

The **Pre CNC** course was designed to integrate multi-media software with teacher directed instruction. Videos of the production process in the plant, many meetings with engineers to interpret the process flow, discussions with front line employees and considerable time with management were all necessary parts of developing this course. Some technical difficulties with the curriculum design created problems in the delivery of instruction. The instructor, the curriculum design team, and the program coordinator had to modify the course to deal with the technical difficulties. Multi-media software development was very time consuming and complicated. During the 4 rounds of classes, several modifications were made in teacher directed instruction and in the software.

The program coordinator participated in curriculum development and especially in the modifications. When instructors were absent, the program coordinator substituted for them. Therefore, it was necessary for her to understand the goals and objectives of all the courses.

PUBLICITY AND KICK OFF

Two liaisons (union representatives) played key roles in the recruitment effort. They were selected and trained for their roles. Training was completed over 2 1/2 days. The liaisons assisted in composing flyers and talking with employees on the shop floor or during breaks. Their work was difficult because of the size of the plant and the 1300 employees who were potential participants and needed information about the course offerings. The recruitment plan was effective because of the cooperation and commitment of the local union leadership, plant management, and staff from the UAW Chrysler National Training Center (NTC). Furthermore, the liaisons attended the classes and used their positive experiences to "sell" the program. Additional work on the part of the liaisons was needed to foster attendance at the class sessions.

The program coordinator worked closely with the liaisons to monitor their effectiveness and to deal with their concerns or problems. Several issues surrounding seniority and conflicts in various departments had to be managed carefully with approval from management and the local

union. In addition, there were liaisons that trained to recruit and then due to promotions or family matters were unable to continue to support this very important task. New liaisons were trained very quickly and barely understood their responsibilities and the difficulty of reaching 1300 workers. (At the end of the project there were 1700 employees.)

RECORD KEEPING - REPORTING

Records for attendance and pre-post test scores were kept at WSU. Confidentiality about the records was extremely important to the workers. Attendance was reported to the human resource department and made available to the area supervisors. All of the stakeholders were informed about participant attendance and the procedures used to keep learners involved. In addition, the liaisons' release time was reported to the company.

Record management for 8 or 9 classes for data entry was a major part of Project ALERT's reports. The program coordinator organized a folder for each site that permitted anyone on the project staff to assess the progress of the program for each class.

STUDENT NEEDS ASSESSMENT

Information obtained during the initial interviews of the employees influenced the design of the courses. The TABE Reading and /or Math Survey Form D were used for assessment. The Math portion of the test was needed to assess the PreCNC participants. Generally, the tests provided information about the skills levels of the workers. Instructors were encouraged to use the tests to determine where the learners needed additional support. Each course also had customized tests to determine the skills levels for course objectives. Few participants asked for their test results.

COURSE EVALUATION

The pre/post customized tests showed the start and end skill levels of the participants. All courses were modified as needed to match the students.

Feedback from management and from the liaisons was very positive. There was high demand for an opportunity to participate in the classes. Employees approached the liaisons or the program coordinator about registering for the classes. At first it appeared that the workers liked the release time and registered for that reason only. When they became involved in the instruction, their interest flourished and this helped to spread the word. Participants completed a survey form at the end of the classes. The forms helped the project team understand some of the participants' reactions to the courses.

Every effort was made to help the participants have a successful experience. Regular attendance was essential for successful completion of the courses. The barriers that usually plague adult learning centers were evident at Axle. Overall, the stakeholders were pleased with the program. The commitment and support of management and especially the ongoing availability of the production manager to do strategic planning with the program coordinator were key to the success of the program.

Some information from the Six-Month Follow-Up survey is given below for the overall course ratings for each class section. The data show a positive perception of the classes. An appendix on participant comments follows the set of tables below.

Course Ratings by Indivdual Section

Count

		Rate Course			
		Excellent	Good	All Right	Total
Course Number	20401	1			1
	20801	1	2		3
	20802	1			1
	20803		1		1
	20804	1	1		2
	20805	3	3		6
	20806	1	2		3
	20901	1	1		2
	20902	2	2		4
	20903	2		1	3
	20904	2	3		5
	20905	1	1		2
	21001		1		1
	21002	1		2	3
	21003		1	1	2
	21004		2		2
Total		17	20	4	41

Other data from the Learner Enrollment and Learner Assessment forms are displayed on the following pages. These items were especially created for this project and do not overlap items in the standard forms.

Learner Enrollment Job Perceptions

Course Name		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
Eff Com on Computer	Mean	2.14	1.84	3.76	2.93	2.38	2.65	1.63
	N	80	80	80	80	80	80	80
IPC	Mean	2.45	1.83	3.86	3.31	2.60	2.64	1.47
	N	83	83	83	83	83	83	83
Math for Machine Operators	Mean	2.50	2.18	3.73	3.14	2.59	2.50	1.68
	N	22	22	22	22	22	22	22
Total	Mean	2.32	1.88	3.80	3.12	2.50	2.63	1.56
	N	185	185	185	185	185	185	185

Learner Enrollment Academic Perceptions

CSENUMB		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
Eff Com on Computer	Mean	3.28	2.60	3.85	2.64	3.19	3.04
	N	80	80	80	80	80	80
IPC	Mean	2.87	2.07	3.63	2.34	2.63	2.66
	N	83	83	83	83	83	83
Math for Machine Operators	Mean	3.00	2.23	3.82	2.50	3.55	2.82
	N	22	22	22	22	22	22
Total	Mean	3.06	2.32	3.75	2.49	2.98	2.84
	N	185	185	185	185	185	185

Learner Assessment Job Perceptions

Course Label		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
Eff Com on Computer	Mean	2.21	1.65	3.83	2.89	2.55	2.24	1.38
	N	66	65	66	66	66	66	66
IPC	Mean	2.47	1.71	3.89	3.03	2.25	2.41	1.43
	N	76	76	76	75	76	75	76
Math for Machine Operators	Mean	2.20	1.75	4.32	3.37	2.74	2.32	1.47
	N	20	20	19	19	19	19	19
Total	Mean	2.33	1.69	3.92	3.01	2.43	2.33	1.42
	N	162	161	161	160	161	160	161

Learner Assessment Academic Perceptions

Course label		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
Eff Com on Computer	Mean	3.20	2.38	3.31	2.39	2.97	2.77
	N	65	66	64	66	66	66
IPC	Mean	2.82	1.96	3.28	1.93	2.39	2.32
	N	76	76	75	76	76	76
Math for Machine Operators	Mean	3.21	1.89	3.68	2.26	2.79	2.32
	N	19	19	19	19	19	19
Total	Mean	3.02	2.12	3.34	2.16	2.68	2.50
	N	160	161	158	161	161	161

Appendix to Axle Report

Participant Comments

Student Comments from the Participant Survey

Interpersonal Communication

For the question, "What was the most important thing you learned in this course?" the following comments were given:

- "We will be able to get along, even if the other person seems so wrong."
- "how to communicate without losing my cool"
- "that other people think and feel much like I do"
- "more about people I work with - their likes and dislikes- and how to communicate with them"
- "how to listen effectively and how to understand what someone is trying to say"
- "how and why some people think like they do"
- "to think before you talk or give your opinion"

For the question, "What did you like most about this course?" the following comments were given:

- "the class learned how to solve problems in groups together"
- "interacting with people"
- "togetherness - team work"
- "learned new communication skills"
- "being able to discuss problems on a one to one basis"
- "listening and communicating while being objective"

For the question, "What did you like least about this course?" the students gave the following comments:

- "try to stay awake"
- "time class lets out"
- "you can only take it once"
- "some lessons not covered completely because of lack of time"
- "when the heaters in the room didn't work"

For the item for "other comments," these were given:

- "I enjoyed Elaine as a teacher"
- "I liked all the people and the teaching"
- "I think everyone should be made to take this course because it helped me in a very big way - at work, at home, and in everyday life
- "I think this class needs more time than 2 hours a day. Time is really rushed most of the time."

Student Comments from the Participant Survey

Effective Communication on Computers

For the question, "What was the most important thing you learned in this course?" the following comments were given:

- "I have leaned how to operate one of the most complicated machines to use"
- "how to work the computer - the ability to use the word processor"
- "opening documents and saving information"
- "the computer lingo"
- "how to save information on a floppy disk - how to get into and out of a program"

- "introduction to my home computer. Before this course, I would not dare to operate it."
- "Before this class, I didn't know the first thing about turning on a computer."
- "what makes a computer and how it works"
- "understand the concept of writing, which I hate to do"

For the question, "What did you like most about this course?" the following comments were given:

- "The instructor was very good; she took the extra time needed for students to understand."
- "using the computer"
- "class discussion"
- "the attention from the teacher- when I didn't know nothing or what was going on"
- "there was no pressure from the teacher; she was pleasant and helpful"
- "the teacher was easy to understand and easy to work with, very understanding of her students"
- "It showed me many things about the computer that I can bring home and use day to day"

For the question, "What did you like least about this course?" the students gave the following comments:

- "not long enough, when you are learning so much"
- "didn't have enough time"
- "when I didn't have my hands on the computer"
- "would like it to go farther than it did"

For the item for "other comments," these were given:

- "It was an interesting course, but could have been a little longer"
- "If there were advanced computer classes, I would like to take them. I would like to recommend this teacher to teach it."
- "The teacher was great; very, very, very helpful. You couldn't pick a better one."
- "I really enjoyed the class, and look forward to more in the same field"

Work Related Benefits for Effective Communications on Computers

The following are excerpts from participant's comments made at the end of the Effective Communication on Computer class:

"I feel more comfortable with computers now. Before, I didn't know that much about computers. Now, if they bring computers into my department, I wouldn't mind using a computer on my job. I know a lot more about them."

"I only knew about my own job before. I didn't know that much about the rest of the plant. In class, we learned more about what goes on at the plant."

"When I had to explain my job to my partner, it made me think a lot more about my job. It helped to have my partner ask questions about things that weren't clear."

"I have really had to think in this class. I have learned how important it is to be clear in order to get your message across. You have to think about what you want to say and how to say it, to be sure it is understood by the one who reads it."

"I have had to read carefully and follow directions to do the keyboarding exercises. This has helped me to read more carefully on my job and follow directions."

"I think about what I write now. I can read all right, but when I try to write something, it has been difficult to think about what I want to say and then write it in the right way. I'm getting a lot better."

"I know more about memos and writing business and personal letters. I never wrote these before this class. I learned that it is important to write down problems so there is a record, if there is a question about it later."

"After doing those reading exercises, I'm getting a lot better in figuring out what words fit in those blanks. You have to read the whole sentence and then figure out what goes there. You really have to think about what words go with what other words. It has helped me in reading other things."

Student Comments from the Participant Survey

Math for Machine Operators:

For the question, "What was the most important thing you learned in this course?" the following comments were given:

- "I was greatly refreshed in decimals, fraction, etc."
- "I learned mostly about math and how to chart"
- "I learned how to run a CNC machine better, with more confidence"
- "better understanding of fractions"

For the question, "What did you like most about this course?" the following comments were given:

- "the variety of things helped not to be bored"
- "how to use the computer"
- "working with computer - I never worked on a computer before"
- "the teacher, he was patient with students, worked to make sure everyone understood"
-

For the question, "What did you like least about this course?" the students gave the following comments:

- "there needs to be more of a matching of positive and negative programs to the CNC machine
- "need more CNC programs"

For the item for "other comments," these were given:

- "the course time would be better at the beginning or near end of the shift"
- "I liked this course; would like more computer."
- "I would like to continue to take all classes WSU has to offer at the plant in the future."
- "I hope WSU will continue to work and teach here at the Axle Plant. I hope they will be able to offer more classes that will further enhance communication and quality in the workplace."

CITY MANAGEMENT CORPORATION
FINAL REPORT
October, 1997

INTRODUCTION

This report describes an approach that resulted from the City Management Corporation partnership with Wayne State University and Project ALERT. The process is replicable in other workplace environments. Interviews with 16 hourly employees, and 4 supervisors provided information about the needs of the employees and the company. The general manager, human resource directors, union chair, and Wayne State University project staff established a plan for implementation of the program. The curriculum design was both Whole Language and Technology based. The basic skills refresher curriculum for all communication skills (reading, writing, speaking listening) and math were developed using City workplace materials. These broad content areas were needed in all the curricula as follows: Commercial Drivers License (CDL), Effective Communication (EC), Pre Mobile Technology (PMT), Numbers at Work, and Interpersonal Communication & Problem Solving (IPC). The company identified needs for these courses, at the beginning of the partnership and others later in the project. The courses would help the company develop a potential pool of drivers with Temporary Instructional Permits (TIP), improve basic communications skills, math, and prepare workers for the computer skills needed to operate the computers in the waste hauling trucks.

The success of the program was largely due to strong support from the general manager and the human resource directors. The teachers who delivered instruction were also key to the success; they were eager to meet the participants needs.

The following paragraphs describe major components of implementation:

ROOM LOCATION - SCHEDULES

1. On - site at City Disposal, a trailer provided a classroom for approximately 7-8 participants. There was no other place in the main office. The trailer was located in the yard at City Disposal, one of the waste hauling sites of the City Management Corporation. Heavy truck traffic and unpleasant waste surrounded the trailer. The trailer was prepared by City workers and set-up with computers according to the design of the human resource directors and the program coordinator.
2. Moveable chairs and tables, a blackboard, file cabinets and teacher's desk and chair were made available. The company also provided a hot/cold water cooler and ample refreshments (coffee, tea, cocoa etc.)
3. Schedules were arranged after work - late afternoon, early evening, or Saturday. Pre Mobile Technology classes met on Saturday for 2 hours -15 weeks or 1 day during the week. Others met 1 or 2 days per week for 10 - 15 weeks. Classes met for approximately thirty to forty hours (2 days per week for 2 hours) depending upon the course content and the learners readiness. A learner-centered approach was consistently applied. As learners expressed their needs, the instructor modified instruction.

INSTRUCTOR HIRING

All of the problems that prevented the establishment of a large pool of instructors continued to plaque the Project ALERT. Few qualified instructors were willing to work part time without benefits. The first instructor who was willing and eager to join the City Disposal program was a good match for the participants. She understood that adults returning to the classroom might have a great deal of anxiety. Some of her instruction included discussion about how to overcome the discomfort. Staff development was needed for instructors who did not understand the Whole Language philosophy. The first instructor at City viewed the Whole Language approach as a separate part of the curriculum. Throughout her delivery of instruction the curriculum designer and the program coordinator attended the classes and modeled the strategies for Whole Language instructional delivery. Unfortunately the glossary of activities that was in all of the curricula did not become an integral part of instruction. It was difficult to get the instructors to use the activities. Nevertheless, the instructor for CDL and Effective Communication was well liked by the participants. A second instructor was hired to teach PreMobile Technology. None of the learners' comments were negative. In fact, the best comments were about the instructors' efforts to meet the learners needs.

DAILY OPERATIONS MANAGEMENT OF THE PROGRAM COORDINATOR

1. *The Real Opportunity for Advancement and Development (R.O.A.D)* computer software, print based materials, and a site license was purchased. The program was designed to help drivers develop the reading skills needed to study for and pass the federally legislated Commercial Motor Vehicle Driver's License (CDL) exam were ordered for the project. Student disks were also provided to record individual learners' lessons.
2. The instructor and the curriculum designer developed additional materials for the computer instruction course (Pre Mobile Technology).
3. *Effective Communication* curriculum materials were modified as needed by the instructor.
4. *The program coordinator to match the specific group receiving instruction reviewed interpersonal Communication and Problem Solving course materials.* In addition the program coordinator attended most of these classes to determine ongoing needs of the group.
5. Tutorial sessions were also offered to support the CDL class and the Effective Communication class. These were arranged as needed at first. The instructor and the participants determined the need. Eventually, a regular tutorial session was agreed upon and open to all of the learners.
6. The program coordinator was highly visible by participating in the delivery of instruction at least twice a week, including Saturdays. She continued to update the general manager, the human resource directors, and the workers about course offerings or attendance problems throughout the project. Monthly reports about participants who completed the courses and weekly reports to the human resource division to alleviate attendance problems were provided as needed.
7. 7.Individual education plans and materials were needed for limited readers. The teacher and the program coordinator developed the materials. A non-reader was tutored individually by the program coordinator throughout the Effective Communication class.

STUDENT PARTICIPATION-RETENTION OF STUDENTS

Voluntary attendance created the same problems that existed in the other companies. Telephone numbers were not current and in some cases addresses were inaccurate. The assistant to the general manager was usually the only person available to contact the absent students. His workload was so demanding that this method of contacting students was not efficient. He would have to remember to contact them on payday. Unfortunately, our messages to the participants were frequently not delivered. There was no other central distribution place for the program coordinator to maintain contact. In addition, employees frequently worked overtime and were unable to get to class. Most drivers had to be available more hours than they were scheduled to work.

PROGRAM COORDINATOR RESPONSIBILITIES
(See job description in Davis Tool Final Report)

All of the classes began with an orientation that dealt with issues concerning the classes, the requirements for attendance, and the confidentiality concerns. The program coordinator explained all of these issues and the need for the extensive amount of paperwork that a university grant requires. She also provided special lessons for the Effective Communication class and modeled Whole Language instruction.

The instructor who taught the CDL class and the Effective Communication class frequently discussed the pace of learning with the program coordinator and also documented the daily delivery of instruction. The pace of instruction was a concern to her and to the program coordinator. They decided that the CDL printed materials should be taught first and then supported with the software.

The program coordinator managed problems with climate control, inadequate security of the trailer, and equipment failure. Most of the time the company responded in a timely manner but several of the physical problems in the trailer were not easy to fix. The program coordinator provided feedback to the company and to the project directors. A critical part of this partnership was to continue updating all stakeholders since some of the management team was not on site at City Disposal.

Eight supervisors met for an orientation about the programs before the first Effective Communication class started. They received an explanation of the incentives for completion of the first set of courses. The program coordinator also discussed the skills that the employees would be learning and how the supervisors could support and encourage participation in the classes. The Effective Communication class could have created the most obvious change in communication from employee to supervisor. Two meetings with the supervisors allowed for discussion of this possibility. During the second meeting (approximately 8 weeks later), there were some reports from supervisors about employees who demonstrated positive changes by being more attentive or more open to suggestions and a few comments were also made about positive changes that occurred in the paperwork.

Information flyers and a newsletter were created to disseminate information about the classes. These were distributed with the paychecks. It was the most efficient way to reach the employees. The program coordinator had to depend on the assistant to the general manager. This was not an efficient way to maintain contact with the company due to the heavy workload of the assistant.

MATERIALS AND COURSE SET UP

Commercial Drivers License (CDL):
Instruction for this class included: test taking skills, reading comprehension strategies, and basic computer skills. Classes were planned to meet the needs of the employees and the companies. Employees usually attended classes on their own time. City Municipal requested a CDL class for their workers on company time. No absences were allowed for the City Municipal class because employees were paid to attend. Upon completion of all the CDL classes, the teacher scheduled a day for the entire class to take the TIP test at the Secretary of State office. All students who took the test and the teacher successfully passed the test. Eight sections of the course were offered.

The TABE Survey Form D was used to pre and post test for reading and math. The commercial test for the ROAD materials was also used for pre and post assessment. The classes met for 36 to 40 hours of instruction depending on the learners' readiness and their reading levels. Most classes ended within 10 to 12 weeks.

The supervisor at City Municipal felt that the time allowed for instruction was excessive. He wanted a quicker course. The discussion that surrounded this matter included concerns about instructional time required to teach safety and truck maintenance.

Pre Mobile Technology (PMT):
The company informed the Project ALERT staff that computers are used in trucks for a variety of data collection items i.e. travel time, distance, speed, location etc. City Management removed the computers that were installed in the trucks five years ago. Some of the drivers had difficulty using them. Since the use of computers in trucks is becoming quite common and interest in how to use computers is high, providing this basic instruction could benefit the workers and the company. Classes were offered after work and on Saturdays for 12-14 sessions - 2 hours for each class. Later in the project the class was offered to other divisions of City for 7 weeks - 2 hours for each class, a total of 14 hours of instruction. A curriculum was written to address the needs of the workers and the company. Five sections were offered.

All classes began with an orientation by the program coordinator. The following sessions provided a review of skills taught in the class before and new skills as well. Each session built on the previous one. Participants took notes for each class and these notes were shared for closure of the lessons. The program coordinator attended most of the classes and spent time with the instructor to review strategies for learners who were having difficulty remembering the lessons.

The TABE Survey Form D was used to pre and post for reading and math skills. A customized test was also used to preview and review the learners' skills for using computer software programs. The first two sections of the course were offered for thirty hours of instruction. Later course schedules were shortened to one day per week for two hours. Attendance problems occurred with the longer schedules.

Effective Communication (EC): Part 1-2

Improvement of all communication skills was the primary goal of this course. Reading, writing, speaking, and listening were included in all of the lessons. The Whole Language approach was only partially evident in the delivery of instruction but the curriculum was changed as needed. Learners started to produce a newsletter that would demonstrate their progress. Mini-speeches and some written demonstrations were also started but the students needed more time for development. Therefore, a Part 2 was offered. Thirty hours of instruction was provided (2 hours for 15 weeks) in Part 1. An additional 20 hours of instruction was offered in Part 2. Attendance for both classes was poor due to the same problems found in other voluntary attendance classes.

A non-reader in the class required special lessons. The program coordinator and the instructor worked on the lessons and also tutored individual students as needed.

Numbers at Work:

This course was developed to help the employees compute their paychecks at City Disposal. Calculation of the paychecks was a problem for several employees. At first there were many that expressed interest but very few followed through when it was time to register and attend. Unfortunately, voluntary attendance problems plagued this course too. The participants who remained expressed great appreciation for the class. Two sections were offered, 6 people registered for the first class, only 3 completed the course. The second class had 3 workers who registered but only 1 completed.

The Test of Adult Basic Education (Math only) pre /post and a customized test were administered. Classes were scheduled for 20 hours.

Interpersonal Communication & Problem Solving (IPC):

Two sections of this course were offered. The addition of these courses was the result of City Management becoming aware of the positive effect the courses had on other participants at other ALERT sites. The Romulus division was extremely pleased with the course. The human resource division of the company will consider continuing the program in the fall of 1997 even though the course at City Management (main office) was not delivered well. The teacher at the main office was not as effective as expected.

Another section of IPC was started at Inland Waters. Several management problems that concerned the company employees caused an abrupt end to the delivery of this course. No needs assessment was done before the class started. Careful attention was paid to these matters through discussions and meetings with the company's manager and the HR division at City Management before the class was terminated.

Frequent phone calls from the assistant human resource director to the participants to follow their feelings about the courses helped the program coordinator greatly. Adjustments for delivery of instruction, the content, or the scheduling could be made efficiently with this kind of support.

A specific change in scheduling was required due to the heavy work schedules of the participants. The course was delivered at Romulus for 13 weeks (1 day) for 3.5 hours. The City Management class was delivered for 12 weeks (1 day) for 3.5 hours.

The TABE Survey Form D was used for pre/post testing as well as a customized test for the course.

CURRICULUM DEVELOPMENT:

The Project ALERT team developed the following curricula: *PreMobile Technology, Effective Communication,* and *Numbers at Work.* A consultant from another division at WSU developed the *Interpersonal Communication and Problem Solving (IPC)* course. The project team provided considerable information and background material from another partner company in ALERT for the development of the IPC course.

The program coordinator monitored the curriculum and helped the IPC course developer make modifications for the first company but this was not necessary for City Management, Romulus. However, the second offering of the course at City Management was not delivered by the instructor as it was intended. This contributed to the lack of success in Round 2 on site at City Management's main office.

PUBLICITY AND KICK OFF:

The recruitment process was not efficient because the program coordinator had to depend on the office staff at City Disposal for distribution of flyers and other information. We did not have a central distribution place in the company nor an available person who could assist with this. Management and employee attitudes toward the ALERT staff were very positive. Meetings to discuss program schedules and other recruitment issues were held regularly. The general manager at City Disposal offered $300 to any employee who completed a first course.

In spite of this generous offer, attendance issues were still problematic.. The program coordinator made contacts with the class participants in a variety of ways, i.e. notes that were given to the supervisors or the dispatcher, phone calls when the numbers were available, information or packets of materials for make up work etc. The first instructor continually tried to contact the participants in the yard or through the office on site.

The greatest support came from the assistant human resource director who eventually put surveys in the employees paychecks at all of the divisions. Her findings about employee course interest helped the project coordinator schedule classes according to the needs of the workers.

RECORD KEEPING - REPORTING:

All records for attendance and pre-post tests scores were kept at WSU. Confidentiality was extremely important to the workers. Attendance was reported to the human resource director on a regular basis even though attendance was voluntary. She assisted the program coordinator by checking on workers who indicated that their work schedules were too full to attend every class. The high demand work schedules were a problem for the instructor, for the participants, and for the project. Unfortunately, this created some difficulties for completing records and for scheduling classes.

Telephone numbers were not current and the classes had participants who came from several different work places within the company. The human resource director became very concerned and called or sent memos to the supervisors of the participants.

STUDENT NEEDS ASSESSMENT:

The TABE Reading Survey Form D was used for all of the courses. TABE Math surveys were used in the CDL course at first and in the Numbers at Work course. All courses offered at City required reading skills but not necessarily math. Each course had a specialized test that surveyed pre and post skills for the individual courses. The curriculum team customized the tests. A commercially prepared CDL test assessed items that were similar to the official TIP. Participants were told their scores at the end of the class.

COURSE EVALUATION:

The CDL course had 100% success rate for all that took the official CDL at the Secretary of State Office. The teacher scheduled the testing day at the end of the first courses and also took and passed the test.

EC Parts 1-2 classes were not well attended. Work schedules, personal family issues, and fatigue from working overtime seemed to be the main reasons for poor attendance.

PMT classes were well attended and participants were eager to learn the computer skills necessary to complete the course. Feedback was excellent and most of the participants completed the course.

IPC was extremely successful at the Romulus site. The delivery of the course at the second site (City Management - main office) was unsuccessful. The participants indicated their objections to the course delivery but most felt the objectives and the content of the course were valuable.

Numbers at Work also had very light attendance. Initially, recruitment for the course was excellent but registration and participation were not. The interest in learning to calculate a complicated paycheck did not continue once the course started. The project team tried to determine the issues that surrounded the lack of participation. We concluded that irregular work

schedules, math phobia, and other unknowns may have been the reasons for the limited number of participants.

Some information from the Six-Month Follow-Up survey is given below for the overall course ratings for each class section. The data show a positive perception of the classes.

Course Number * Course Rating Crosstabulation

Count

		Rate Course			
		Excellent	Good	All Right	Total
Course Number	30401	2			2
	30402		2		2
	30501	2	1		3
	30502		1		1
	30601		3	1	4
	30602			1	1
Total		4	7	2	13

Overall, the company appreciated the opportunities Project ALERT provided for their employees. Discussion about how to continue offering the courses and about contracts that would support continuation has been promising.

Other data from the Learner Enrollment and Learner Assessment forms are displayed on the following pages. These items were especially created for this project and do not overlap items in the standard forms.

City Management

Report to City Management Human Resources Department: 6/25/97

Course	No. Enrolled	No. Completed	Custom Test Result	TABE Reading	TABE Math
CDL	27	16	Increase	No change	Slight increase
Pre-Mob Tech	14	14	Large increase	Slight increase	Slight increase
Effective Communication	13	9	Increase	Large increase	Increase
Numbers at Work	3	2	Large increase	--	Increase
Interpersonal Communication	11	11	*	--	--

* Increases in:
  - Working in Teams
  - Solving Problems
  - Know how to Learn

.. No changes in:
  - Taking responsibility
  - Persisting
  - Having a sense of Quality
  - Interest in Learning
  - Adapting to Change
  - Thinking in terms of Systems

Learner Enrollment Job Perceptions

Course Label		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
CDL Prep	Mean	2.58	1.42	3.42	2.63	3.05	3.16	1.32
	N	19	19	19	19	19	19	19
Tech for Wrkplace	Mean	2.12	1.65	3.71	2.47	2.53	2.71	1.71
	N	17	17	17	17	17	17	17
Eff Comm	Mean	1.94	1.76	3.71	2.82	3.29	2.35	1.29
	N	17	17	17	17	17	17	17
IPC - Romulus	Mean	2.57	2.29	3.00	3.29	2.14	1.71	1.57
	N	14	14	14	14	14	14	14
Total	Mean	2.30	1.75	3.48	2.78	2.79	2.54	1.46
	N	67	67	67	67	67	67	67

Learner Enrollment Academic Perceptions

CSENUMB		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
CDL Prep	Mean	2.37	1.95	3.47	2.11	2.95	2.32
	N	19	19	19	19	19	19
Tech for WrkPlace	Mean	2.76	2.12	3.53	2.12	2.82	2.47
	N	17	17	17	17	17	17
Eff Commun	Mean	3.47	2.41	3.88	3.53	3.94	3.76
	N	17	17	17	17	17	17
IPC	Mean	2.29	2.00	2.71	2.57	1.57	2.29
	N	14	14	14	14	14	14
Total	Mean	2.73	2.12	3.43	2.57	2.88	2.72
	N	67	67	67	67	67	67

Learner Assessment Job Prceptions

Course Label		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
CDL Prep	Mean	3.33	1.67	3.22	2.33	4.11	3.11	1.00
	N	9	9	9	9	9	9	9
Tech for Wrkplace	Mean	2.46	1.92	3.25	2.23	2.54	2.46	1.62
	N	13	13	12	13	13	13	13
Effect Commun	Mean	2.56	1.25	3.33	2.33	2.44	2.22	2.00
	N	9	8	9	9	9	9	9
Total	Mean	2.74	1.67	3.27	2.29	2.97	2.58	1.55
	N	31	30	30	31	31	31	31

Learner Assessment Academic Perceptions

Course Label		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
CDL Prep	Mean	3.44	2.89	3.22	2.22	3.33	2.11
	N	9	9	9	9	9	9
Tech for Wrkplace	Mean	2.85	2.00	2.92	2.38	3.31	2.85
	N	13	13	13	13	13	13
Effec Commun	Mean	4.33	2.75	4.25	3.56	3.44	3.89
	N	9	8	8	9	9	9
Total	Mean	3.45	2.47	3.37	2.68	3.35	2.94
	N	31	30	30	31	31	31

DAVIS TOOL & ENGINEERING
FINAL REPORT
October, 1997

INTRODUCTION:

This report will describe a model that resulted from the Davis Tool & Engineering Co. partnership with Wayne State University and Project ALERT. The process is replicable in other workplace environments. Meetings with the human resource director, the union chairman, and the individual interviews (Needs Assessment) determined a need for not only general education of its employees but also a gap in the number of employees eligible for apprenticeships. One company requirement for entry into an apprenticeship was a successful passing score on the Differential Aptitude Test (D.A.T). This requirement was an educational area in which W.S.U. could develop a Whole Language curriculum that would prepare Davis employees for the test.

Since research findings advocate effective adult literacy is context - bound, it is important to attend to those elements in life and in work that will be meaningful and relevant to adults. Furthermore, the future needs workers who can learn performance tasks. The competencies on the D.A.T. develop the "to do" skills of the learners.

A Whole Language curriculum was designed so that learners would gain the skills needed to pass the D.A.T. Test-taking strategies were also included to help learners deal with test-taking anxiety. The instruction was paced so that all learners could participate as a group with individual tutorials supplied as needed.

The following paragraphs describe major components of implementation.

ROOM LOCATION-SCHEDULES:

1. On - site location (not in the administration area) for the **Skills Enhancement Center** was prepared to accommodate up to 24 learners. (Davis workers performed renovation)
2. Moveable chairs and tables, white board and chalkboard, overhead projector, general classroom supplies, and appropriate climate control were made available.
3. Schedules were arranged around the end and start-up times of two shifts. Both classes met for 75 minutes each, 2 days per week. A tutorial session was added on a third day to accommodate individualized needs or to provide open instruction to any one in the plant.
4. Instruction was available for 4 hours on the days scheduled for instruction or tutoring.

INSTRUCTOR HIRING:

Selection of instructors for workplace education programs is critical to the success of a program. Project Alert was unable to hire Detroit Public Schools adult education teachers due to union issues in the school district. This information was unknown until seven months had passed during the first year of the grant. The program coordinator had to search for potential instructors in other places such as church bulletins, newsletters in other programs, etc. Other factors that

limited selection were: limited hours of employment in the middle of the workweek, no benefits, short duration of employment (grant expiration - 3 years).

1. Distribution of job a description helped establish a pool of teachers who each had two interviews with the program coordinator and members of the curriculum team.
2. Specific interview questions were written to determine qualifications for Davis Tool Co., i.e. a balance of 3 critical areas - adult education, literacy, and workplace contexts.
3. Staff development was not done prior to the start of instruction due to the delays in starting the delivery of instruction. The program coordinator attended all classes to model strategies for using prior knowledge and interactive instruction that reflect the Whole Language philosophy. A glossary of activities was used to enhance the Whole Language curriculum. Many sessions were managed as a team (co-facilitation). Constant informal feedback from the program coordinator changed the classroom dynamics in the use of the Whole Language philosophy.

DAILY OPERATIONS MANAGEMENT OF THE PROGRAM COORDINATOR

1. The program coordinator selected materials and equipment, monitored payment of instructors, recruited, recorded and reported attendance.
2. Additional instructional materials and daily classroom management decisions were provided.
3. Individualized (tutorial) instruction was available on Wednesdays for all learners.
4. Instructor and students tracked lessons on a matrix for each day. (Absent students could obtain missed lessons) Two to four concepts were developed during the 75-minute session. Each student had a notebook for reflections on the lessons. The reflections were done to bring closure to the lessons for participants and for monitoring and adjusting the instruction.

One of the benefits for professional growth of the Davis Tool program was team teaching. The instructional process was a shared responsibility. The program coordinator and the instructor planned, evaluated, and assessed the effects of the instruction. They reviewed the pace of the learning and the individual problems students seemed to have during the class. This opportunity to interact daily and problem solve as a team was an important part of the delivery of instruction. A team concept was used to develop the curriculum materials as well. The program coordinator, the curriculum developers and the instructor were involved in curriculum development. As a follow up to instruction, the program coordinator brought back to the curriculum team a report on the progress of instruction. This team effort was a significant part of the project. It was an effective approach that improved the quality of instruction. Open sharing and support from the curriculum team and the involvement of the instructor seemed to indicate that successful program development happens when all resources are used collaboratively. *Overall, the collaborative nature of the project afforded multiple opportunities for professional growth of the ALERT staff.*

Course start-ups and curriculum development had to be accomplished in a very compressed time frame. Insufficient time to train the instructor and insufficient time to address all the individual needs of the learners meant there were times of frustration for some students and the curriculum staff. Therefore, the following steps were taken to support the instructional process:

- Literature about Whole Language was given to the instructor during the first interview
- Thirty minutes per week was spent reviewing strategies and lesson results.
- Program Coordinator attended every session on site to model strategies for using questions to activate prior knowledge and to develop interactive lessons
  "What do you know about this...?"
  "Tell me what you are thinking."
  "Explain to your group what you think this means"
  "Why is that your answer?"
  "Tell me what you are thinking as you work this problem (math/space relations)

STUDENT PARTICIPATION - RETENTION OF STUDENTS

The instructor was able to determine some of the student needs in math by pre-testing with a TABE Survey Form D. The instructor randomly selected math problems to specifically review the learners' skills. Care was given not to overwhelm a new participant with "testing" at the first meeting. It is usually difficult for adults to admit that they have learning differences/deficiencies.

Voluntary attendance programs present problems for retaining learners. A mix of problems were reported to the program coordinator who made personal contacts at the plant or by phone. Family illness, problems with transportation before or after work, baby sitting for a spouse who also needed to accommodate a work schedule, and fatigue from working over- time were some of the major problems. Some students reported of their attendance problems to the instructor. Learners were encouraged to get their work when they were absent and most returned their completed assignments or attended the tutorials. The instructor reported that the students liked to receive comments and corrections on their work. This was provided. However, those who attended regularly seemed to be highly motivated and participated willingly after the first five classes.

Participant motivation was inconsistent. It was hoped that the safe supportive atmosphere of the Skills Enhancement Center, the personal contact with the instructor and the program coordinator were enough to encourage the students to attend regularly. This did not happen as we expected.

Feedback from the union chair and from management was free of negative comments but the learners who remained were pleased that they had the opportunity to attend. Those who attended regularly were highly motivated and participated willingly after the first 5 sessions. We learned that it took time for them to accept an instructional environment. As the learners became comfortable with the instructor, questions were asked freely and students helped each other. The Whole Language philosophy was partially evident in the following ways. The participants worked in small groups, were interactive during instruction, and accessed prior knowledge.

As the project progressed there appeared to be a serious change in the level of support given by key players, i.e. the human resource director and the union chairman. Rumors about lay offs and

downsizing staff or plant closure flourished. Rumors that the plant may close could have discouraged some that did not realize the value of building skills for the future. The key players just did not seem to have time to perpetuate and advertise the value, purpose, and content of instruction. The positive climate for continuing success and growth had definitely changed by the end of the 1st class. The plant personnel appeared to be dealing with internal pressures; therefore, the effectiveness of communication was weakened. The human resource director told the program coordinator that the plant owners were not pleased with the HR director's primary job performance. A reduction in support staff made his workload excessive and decreased his availability for support for Project ALERT.

PROGRAM COORDINATOR RESPONSIBILITIES

Job Description:

- day-to-day management of the workplace sites including hiring and supervision instructors
- recruiting and gathering information about students
- maintaining all student records for the grant
- evaluating the instructors, tutors, and all instructional programming
- selecting and ordering instructional materials
- developing orientations and training sessions for all instructional staff
- coaching and modeling instructional delivery techniques

As the grant progressed additional duties and responsibilities were added. These included:

- Assist in developing a model for external implementation
- Maintain high quality customer service contact with all of the companies
- Provide on site orientations for supervisors
- Maintain written and verbal contact with sites
- Develop interviewing and recruiting procedures with UAW liaisons
- Create IEP or students and curriculum materials
- Coordinate planning with UAW National Training Center representatives
- Edit, submit, and report payroll
- Prepare presentations for local and outreach dissemination of the program
- Substitute for instructors
- Maintain ongoing log of instructional process

Instructor training concentrated on helping the teacher develop the skills needed to present a Whole Language curriculum with a metacognitive focus. Instructor comments guided the discussions for staff development i.e. "It seems like they need more time on math, analogies, and space relations -"I wonder how the program will affect their jobs". " Do they feel better about themselves?"

Other questions that were considered for staff development are as follows:

To what extent are there indicators of program effectiveness on the learners jobs.
Is the program going to impact on their ability to seek other jobs in other plants?
Does the program help employees adapt to a reconfiguration of their work?

Inservice took place informally when classes ended each day. At first, there were limitations in the instructor's Whole Language delivery because his instructional techniques were not using the W.L. philosophy. Key aspects of Whole Language that were not part of the instructor's repertoire were: activating prior knowledge, small group interaction, think-alouds, and sufficient time to process the learning. Eventually, these were incorporated into most lessons. The students were asked to write a brief note in their journals as a reminder of their learnings. Time to process in this way was useful to both the instructor and the learners. Restating or sharing the concepts recorded in the students' journals reinforced the learning.

In order to complete the curriculum within ten weeks, the instructor felt pressured to get through all of the lessons. During the staff development meetings, the program coordinator and the teacher reviewed the following concerns:

Pace of instruction required for ten-week curriculum
Pace of student learning
Additional materials needed to teach all of the skills

Since the instructor had a great deal of experience working with adults the meetings were more conversational than instructional. Nevertheless, considerable time was needed to review strategies from the glossary and the lesson plans in the curriculum. We concluded that the ten-week block of time allocated was insufficient for complete instruction. It was also inadequate time for staff development.

During the 10-week program, the coordinator was highly visible in the plant and kept management and union representatives in touch with the program development. She was also a link to the project team. In order to maintain continued support from all stakeholders, it is essential that communication and feedback be on-going.

MATERIALS AND COURSE SET UP

The class was scheduled to provide instruction for both shifts. The first class was for the afternoon shift. The second class was for the day shift. Participants attended before or after shift. The same program was presented to both classes during the week. A third day was also scheduled for those who wanted additional review of the lessons or individualized instruction. Anyone in the plant could request instruction on the third day. Only three workers came to the Skills Enhancement Center who were not registered for the class. The extra session was not heavily attended, but those who continued in the classes were pleased that the session were available. Pairs of students worked together on common concerns or individuals worked with the instructor during the tutorial sessions.

All students were pre / post tested by a standardized test -Test of Adult Basic Education (TABE) and a customized pre / post DAT. The 20 sessions (ten weeks twice a week)- 75 minutes of instruction allowed for the development of two to three specific objectives at each class. Approximately 20 minutes was spent on a content specific skill needed to pass the Differential

Aptitude Test (DAT). This test is a pre-requisite for apprenticeships for skilled trades. Davis Tool was eager to develop a pool of workers for these skilled jobs.

On going assessments of students' needs for additional basic skills were essential to bringing the course objectives increasingly in line with the needs and capabilities of the learners. The teacher selected random problems as a mini assessment for the students. This helped him modify the lesson plan.

Math instruction took a great deal of time. Students needed considerable help in reviewing math. Therefore the math lessons overwhelmingly focused on the workplace and provided repeated practice. Strategies that seemed to be most effective were "self-talk" and team or pair problem solving. The emphasis was helping learners become aware their thinking (metacognition). Learners who were experiencing math anxiety were able to gain some skills in thinking through the lessons or listening to the instructor or the other students thinking aloud.

CURRICULUM DEVELOPMENT

Curriculum development included the review of other model workplace curricula. For seven months before instruction began, the curriculum team worked toward a common knowledge base that combined theory and practical application.

The pre /post customized practice DAT was developed with sample problems which represented all sections of the test.

The curriculum developers designed the instructional materials after the needs assessment was analyzed. These materials were created to reflect the skills needed to pass the DAT. Text books were used to introduce some of the lessons. These lessons were essential to building prior knowledge. Relatively few materials from the plant were usable for instruction. In addition, considerable time was spent adding supplementary materials as individual needs for reinforcement became known. Many of the materials needed to be upgraded to accommodate multi-level classes. The curriculum team made materials that were most effective and yet the most time consuming to develop.

Twenty specific lessons were developed to provide instruction for the first delivery of the course. Supplementary materials were inserted into the curriculum for the final model. No specific text for W.L. is available. The development of an entire W.L. curriculum took an intensive amount of time. The customized curriculum provided coherent instructional materials and assessment tools that were deemed to be important to successfully teaching in the workplace. On-going revisions and supplements were necessary to enhance the curriculum.

It was essential throughout the grant to keep curriculum and instruction closely linked. These 2 areas have a reciprocal effect rather than a sequential relationship. One product from the grant was the curriculum itself. Therefore, the philosophy statement, goals, and objectives needed to reflect the scope of instruction needed to meet all stakeholders' needs.

PUBLICITY AND KICK OFF

Davis Tool arranged an introductory orientation for all shifts. Before the orientation sessions, the union chair and management encouraged worker participation and helped explain criteria for registration, participation, and eligibility for apprenticeships. They also made sure that announcement flyers were posted and available on a regular basis. The workers asked union and management questions about the classes. One of the hourly workers became an advocate for the program. He also let people know about the way to get involved in the classes. Enthusiastic workers encouraged others to register by saying, "Come on let's sign-up". A sign-up sheet with workers' names and class preference (time and days) was collected at the orientations.

The orientations were held in the cafeteria, which is next to the production area. The noise level created a problem for the program coordinator who spent approximately twenty minutes explaining the program to groups of 40-60 workers. The sessions were held at different times and days to accommodate all shifts. The union chair and the human resource director attended each session, which demonstrated their interest and support.

Since the Skills Enhancement Center could only accommodate 24 people, a lottery was used to determine which workers would be in the first class for the day shift. The remaining workers were placed on a list for the second phase in the fall. Twenty-seven workers registered and tested for the day shift class. Seventeen registered and tested for the afternoon shift.

Approximately, 20 participants completed registration forms and took the pre-tests then dropped the program. Many reasons were given. All of them were encouraged from phone calls to sign-up for the fall class (phase 2). Opportunities for makeup time or drop - in was available for all workers. This provided an opportunity for those who were not registered for classes but wanted to find out about how we ran the program. At various times during the 10 weeks the program coordinator went to job stations to ask workers how we could assist with makeup lessons. In addition, the program coordinator called the absent students to determine any need for remedial or advanced instruction. None of the calls resulted in expression of negative attitudes toward the program. Neither management nor the union chair indicated that there was negative feedback. Yet limited numbers of students, usually 3-4, took advantage of Wednesday tutorials or individualized lessons. *Generally, it seems as though voluntary attendance presents inherent difficulties for maintaining participation, follow-up testing, and record keeping.*

Only twenty-three workers became the core group for the 10 weeks. Even though every precaution was taken to assure workers that the records and tests were confidential, it still remained a major concern for many workers.

RECORD KEEPING - REPORTING

Individual learner records of instruction and attendance were kept on a matrix of the lessons. These were kept at Davis Tool. Daily sign-in sheets were tabulated on Mathematica Attendance Rosters as well. All other records, testing and survey sheets were kept at W.S.U.

Confidentiality was guaranteed. All participants were assured that no progress reports or assessments results would be divulged. Union and management were not told any information about the skill levels for specific workers. Information was offered as needed but no names were involved except for attendance. The company needed an account of who attended each class because some workers signed in before or after shift starting time. The payroll office wanted clarification for overtime calculations. A copy of the class sign-in sheet resolved the problem for the payroll department.

Anecdotal records kept by the instructor helped us understand some of the difficulties involved in the instructional process. The instructors notes supported the observations made by the program coordinator. There were considerable difficulties building basic math skills. Spatial relations presented additional problems. The curriculum team prepared a variety of materials to supplement instruction. This information was recorded but not available for supervisors nor the union.

It appears that the number of person hours spent in planning the curriculum, reaching decisions etc. was a good deal higher than the actual number of learner contact hours. The project records indicated that some lessons may have taken 8-10 hours to develop. The instruction of these lessons may have only been 1-2 hours.

STUDENT NEEDS ASSESSMENT

The instructor was able to determine some of the student needs in math by pre-testing with a TABE Survey Form D. Another brief review of skills was done after the first week also. This preview of skills was taken from a GED math textbook. Care was given not to overwhelm participants with testing at the first class meeting. It is difficult for adults to admit that they have learning deficiencies, "learning differences". Testing can produce anxiety and resurrect old bad feelings about school. Test taking anxiety was a part of the curriculum and seemed to be a necessary part of the instruction.

COURSE EVALUATION:

The pre/post DAT and pre/post TABE were used to determine group as well as individual needs and starting and ending skills levels. Every effort was made to match learning materials with ability levels. The transfer of learning to other aspects of job performance can be difficult to measure. Three participants in our DAT prep class passed the official test. They were added to the company's pool of apprentices. Other workers who had previously failed the DAT also passed the test.

The first course became a twelve-week model instead of the ten weeks planned, which allowed for building basic skills that the instructor identified. The official DAT copies were purchased by the grant. We intended to give the official test at the end of the first class and then seal the results from the workers until the 2nd class was completed. A variety of unforeseen events changed this plan. The official DAT was to have been given on Nov. 19, 1995 but it was canceled 2 days before it was scheduled. The test was finally given many weeks after the

classes because the skill trades workers did not want the other employees to have this opportunity. The reasons for this resistance was not clearly understood. Therefore, a series of review classes were scheduled due to the delay in actual testing. Eight sessions were offered. All workers could attend the sessions as well as the official testing.

Several issues surrounded the timely and consistent delivery of instruction. General barriers that adults experience when they try to add class time to their life's schedules affected attendance patterns. Rumors about plant closings or possible lay offs, which eventually created a need for overtime was not, clearly understood by the program coordinator. Several mixed messages from management caused frustration for workers whose main concerns were about having a job not about maintaining regular class attendance.

In spite of all the difficulties, the official DAT produced not only the three apprentices that Davis assigned for apprenticeship training but also some workers reported that they had gone on to college to further develop their skills.

Some information from the Six-Month Follow-Up survey is given below for the overall course ratings for each class section. The data show a positive perception of the classes.

Rate DAT-Prep

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	9	21.4	52.9	52.9
	Good	5	11.9	29.4	82.4
	All right	2	4.8	11.8	94.1
	Poor	1	2.4	5.9	100.0
	Total	17	40.5	100.0	
Missing	N/A	2	4.8		
	System Missing	23	54.8		
	Total	25	59.5		
Total		42	100.0		

Overall, the company appreciated the opportunities Project ALERT provided for their employees. Discussion about how to continue offering the courses and about contracts that would support continuation have been realized one year later.

Other data from the Learner Enrollment and Learner Assessment forms are displayed on the following pages. These items were especially created for this project and do not overlap items in the standard forms.

Learner Enrollment Job Perceptions

Course Label		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
Apprentice Prep	Mean	2.59	1.77	3.95	2.92	1.92	2.43	1.21
	N	61	61	61	61	61	60	61
SPC Prep	Mean	2.80	2.40	3.67	3.40	2.60	2.93	1.93
	N	15	15	15	15	15	15	15
Total	Mean	2.63	1.89	3.89	3.01	2.05	2.53	1.36
	N	76	76	76	76	76	75	76

Learner Enrollment Academic Perceptions

Course Label		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
Apprentice Prep	Mean	3.38	2.54	3.62	2.67	3.12	2.89
	N	60	61	61	61	60	61
SPC Prep	Mean	4.07	3.27	4.27	3.13	4.13	3.20
	N	15	15	15	15	15	15
Total	Mean	3.52	2.68	3.75	2.76	3.32	2.95
	N	75	76	76	76	75	76

Learner Assessment Job Perceptions

Course Label		I am satisified with my job	I am satisified with my job performance	I feel cared about by upper management	I think my work area supervisor understands what it takes to do my job	I feel that my cultural background is accepted here	I believe that technology is changing my job	I enjoy learning new things that will help me with my job
Apprentice Prep	Mean	2.60	1.83	3.69	3.32	1.94	2.26	1.24
	N	35	35	35	34	34	35	34
SPC Prep	Mean	2.33	1.89	3.67	2.89	1.67	2.44	1.33
	N	9	9	9	9	9	9	9
Total	Mean	2.55	1.84	3.68	3.23	1.88	2.30	1.26
	N	44	44	44	43	43	44	43

Learner Assessment Academic Perceptions

Course Label		I am a good test taker	I learn new things easily	I think I am computer literate	I am good at reading	I am good at math	I am good at writing
Apprentice Prep	Mean	3.26	2.56	3.57	2.41	2.94	2.94
	N	35	34	35	34	35	34
SPC Prep	Mean	3.67	3.50	4.33	2.44	3.44	2.89
	N	9	8	9	9	9	9
Total	Mean	3.34	2.74	3.73	2.42	3.05	2.93
	N	44	42	44	43	44	43

Attachment to Impact Research Report

Data Collection Instruments

List of Instruments

Learner Enrollment – additional questions to Standard Form
Learner Assessment– additional questions to Standard Form
Learner Expectation Summary
Six-Month Employee Survey Form
Six-Month Employee Interview Schedule
Twelve-Month Employee Interview Schedule
Twelve-Month Supervisor Interview Schedule

Not included, but used for data collection:
The Adult Basic Education (TABE) test (reading and math portions)
Customized pre-test/tests for each course are included in the Instructor Guides

Learner Enrollment – **additional questions to Standard Form**

21. How many years since you have had formal schooling? _____ years
22. Educational background: (Check those that apply)
    ____ High school graduate
    ____ GED
    ____ Some college- - - - - - - - Number of courses completed _____
    ____ College degree - - - - - - - -Degree earned _____
    ____Trade/Vocational school - - - - - -Number of courses completed_____
    Certificate _____
23. Have you held other jobs here? (Circle one) No Yes
    If yes, list other jobs and number of years/months on each.
    _____ _____ years/months

    _____ _____ years/months

    _____ _____ years/months

24. Have you done this kind of work at other companies? (Circle one) No Yes
    If yes, how many years? _____
25. Did you have any training connected with this job? (Circle one) No Yes

If yes, What training?

_____

_____

When did it occur?_____

_____

_____

How was the training conducted? (Circle those that apply)

Small group *Instructor led* *Video*

Individual *Computer-based* *Other*

_____

Was the training helpful? (Circle one) Yes No

Comments:_____

_____

_____

What did you like best about the training?:

_____

_____

_____

For questions 26-40, circle ONE response for each statement.

Example: Summer is my favorite season. almost always usually frequently sometimes almost never

Questions 26-32 are about the job you do here.

26. I am satisfied with my job. almost always usually frequently sometimes almost never

27. I am satisfied with my job performance almost always usually frequently sometimes almost never

28. I feel cared about by upper management. almost always usually frequently sometimes almost never

29. I think my work area supervisor understands what it takes to do my job. almost always usually frequently sometimes almost never

30. I feel that my cultural background is accepted here. almost always usually frequently sometimes almost never

31. I believe that technology is changing my job. almost always usually frequently sometimes almost never

32. I enjoy learning new things that will help me with my job. almost always usually frequently sometimes almost never

Questions 33-40 are about your life in general.

33. I am a good test taker. almost always usually frequently sometimes almost never

34. I learn new things easily. almost always usually frequently sometimes almost never

35. I am good at reading. almost always usually frequently sometimes almost never

36. I am good at writing. almost always usually frequently sometimes almost never

37. I am good at math. almost always usually frequently sometimes almost never

38. I think I am computer literate. almost always usually frequently sometimes almost never

39. I like using computers. almost always usually frequently sometimes almost never

40. I use a computer at home. almost always usually frequently sometimes almost never

Thank you. You have completed this form. Please return it to your instructor.

For the following questions, circle ONE response for each statement.

Example: Winter is my favorite season. almost always usually frequently sometimes almost never

Questions 6-12 are about the job you do here.

6. I am satisfied with my job. almost always usually frequently sometimes almost never

7. I am satisfied with my job performance. almost always usually frequently sometimes almost never

8. I feel cared about by upper management. almost always usually frequently sometimes almost never

9. I think my work area supervisor understands what it takes to do my job. almost always usually frequently sometimes almost never

10. I feel that my cultural background is accepted here. almost always usually frequently sometimes almost never

11. I believe that technology is changing my job almost always usually frequently sometimes almost never

12. I enjoy learning new things that will help me with my job. almost always usually frequently sometimes almost never

Questions 13-20 are about your life in general.

13. I am a good test taker. almost always usually frequently sometimes almost never

14. I learn new things easily. almost always usually frequently sometimes almost never

15. I am good at reading. almost always usually frequently sometimes almost never

16. I am good at writing. almost always usually frequently sometimes almost never

17. I am good at math. almost always usually frequently sometimes almost never

18. I think I am computer literate. almost always usually frequently sometimes almost never

19. I like using computers. almost always usually frequently sometimes almost never

20. I use a computer at home. almost always usually frequently sometimes almost never

Thank you. You have completed this form. Please return it to your instructor.

Learner Expectation Summary

Please complete this form up to the dotted line when you begin a course.

Name: _____ Date: _____

Course name: _____ Class time/days:

_____

Job title: _____ ❒ Male ❒ Female

English spoken at home? ❒ Yes ❒ No If no, what language is spoken at home?

_____

(Check the area in which you are most interested.)

❒ Math Improvement
❒ Reading/ Writing Improvement
❒ Communication skills improvement
❒ Test-taking skills
❒ Computer skills
❒ Other (What?) _____

_____

Specifically, what would you like to improve?

_____

_____

_____

Please complete the bottom of this form when you have completed a course.

Did you learn what you expected to? ❒ Yes ❒ Almost ❒ Some ❒ No

If not, why?

❒ Absence
❒ Didn't understand the work
❒ Time schedule/ work and school
❒ Other _____

_____

Would you be interested in other courses? ❒ Yes ❒ No

If yes, what would you like to learn next? _____

_____

ect Course # _____

Follow up #: 1

Participant ID #: _____

Wayne State University -- Project ALERT

We are involved in a special program designed to help employees improve their skills. Today we are collecting information from those who took the _____ classes that were held at _____. The questions have been approved by union and management representatives. All of the information you give is confidential. We will use the information in reports, but no names will be used. In any case, you can choose to skip any questions that you don't want to answer. If you have any questions about this project, we will be happy to answer them for you now or you can call either our project director, Dr. Dale Brandenburg (577-1427), or Dr. Peter Lichtenberg (577-1628) at Wayne State University to find out more about your rights as a participant in this project.

Participant Directions:

Please draw a **circle** around the number of the response that best describes how you feel about the question being asked. If the question does not apply (N/A) to you draw a circle around the number 0.

Example: Since you took the _____ class, do you think you are **better** at the following things?

	Circle **one** number for **On-the-Job**							Circle **one** number for **In Your Everyday Life**					
	On-the-Job							**In Your Everyday Life**					
	always	usually	sometimes	seldom	never	n/a		always	usually	sometimes	seldom	never	n/a
	1	2	3	4	5	0		1	2	3	4	5	0
1. expressing your ideas	1	2	(3)	4	5	0		1	(2)	3	4	5	0

Employee Survey

Since you took the _____ class, do you think you are **better** at the following things

	On-the-Job						In Your Everyday Life					
	always 1	usually 2	sometimes 3	seldom 4	never 5	N/A 0	always 1	usually 2	sometimes 3	seldom 4	never 5	N/A 0
1. Reading	1	2	3	4	5	0	1	2	3	4	5	0
2. Listening	1	2	3	4	5	0	1	2	3	4	5	0
3. Doing math	1	2	3	4	5	0	1	2	3	4	5	0
4. Speaking in public	1	2	3	4	5	0	1	2	3	4	5	0
5. Speaking in private	1	2	3	4	5	0	1	2	3	4	5	0
6. Taking tests	1	2	3	4	5	0	1	2	3	4	5	0
7. Understanding words	1	2	3	4	5	0	1	2	3	4	5	0
8. Solving problems	1	2	3	4	5	0	1	2	3	4	5	0
9. Following directions	1	2	3	4	5	0	1	2	3	4	5	0
10. Understanding your responsibilities	1	2	3	4	5	0	1	2	3	4	5	0
11. Expressing your ideas	1	2	3	4	5	0	1	2	3	4	5	0
12. Using a computer	1	2	3	4	5	0	1	2	3	4	5	0

Employee Survey

Since you took the _____ class, are you **more confident** in the following things?

	On-the-Job						In Your Everyday Life					
	always	usually	sometimes	seldom	never	N/A	always	usually	sometimes	seldom	never	N/A
	1	2	3	4	5	0	1	2	3	4	5	0
13. Reading	1	2	3	4	5	0	1	2	3	4	5	0
14. Listening	1	2	3	4	5	0	1	2	3	4	5	0
15. Doing math	1	2	3	4	5	0	1	2	3	4	5	0
16. Speaking in public	1	2	3	4	5	0	1	2	3	4	5	0
17. Speaking in private	1	2	3	4	5	0	1	2	3	4	5	0
18. Taking tests	1	2	3	4	5	0	1	2	3	4	5	0
19. Understanding words	1	2	3	4	5	0	1	2	3	4	5	0
20. Solving problems	1	2	3	4	5	0	1	2	3	4	5	0
21. Learning new things	1	2	3	4	5	0	1	2	3	4	5	0
22. Expressing your ideas	1	2	3	4	5	0	1	2	3	4	5	0
23. Using a computer	1	2	3	4	5	0	1	2	3	4	5	0
24. In general	1	2	3	4	5	0	1	2	3	4	5	0

Employee Survey

Since you took the _____ class, have you done any of the following things? Please **circle** the **one** best answer.

	a great deal 1	frequently 2	some 3	very little 4	not at all 5	n/a 0
25. Used the information on your job?	1	2	3	4	5	0
26. Used the information in everyday life?	1	2	3	4	5	0
27. Shared the information with others?	1	2	3	4	5	0
28. Decided on new career goals?	1	2	3	4	5	0
29. Decided on new education goals?	1	2	3	4	5	0
30. Have you taken more responsibilities on your job?	1	2	3	4	5	0
31. Felt that you are more likely to get a better job?	1	2	3	4	5	0
32. Felt more satisfied with your job?	1	2	3	4	5	0
33. Felt that you are a better worker?	1	2	3	4	5	0

	excellent 1	good 2	all right 3	poor 4	bad 5
34. Thinking back, how would you rate the _____ course?					
35. Would you recommend this course to others	yes 1	no 2			
36. Since taking the class, has your position changed?	yes 1	no 2			
37. Would you be interested in taking other classes?	yes 1	no 2			
38. Would you be willing to be interviewed about the _____ class?	yes 1	no 2			

39. Do you have any general comments about the _____ class?

Project Course # _____

6 Month Follow up Employee Interview

We are involved in a special program designed to help employees improve their skills. Today we are collecting information from those who took the _____ classes that were held at _____. The questions have been approved by union and management representatives. All of the information you give is confidential. We will use the information in reports, but no names will be used. In any case, you can choose to skip any questions that you don't want to answer. If you have any questions about this project, we will be happy to answer them for you now or you can call either our project director, Dr. Dale Brandenburg (577-1427) or Dr. Peter Lichtenberg (577-1628) at Wayne State University to find out more about your rights as a participant in this project.

You recently completed a participant survey form that indicated you were willing to be interviewed. We thank you for being part of this evaluation. Your responses and comments will help make future training programs more effective. This interview is being conducted in an attempt to get more detailed information about the _____ class that you completed about six months ago. This will take about 30-45 minutes. Please feel free to give examples and detailed descriptions of your impressions of the _____ class.

1. Overall, what did you think of the _____ class? Please explain.
2. What do you feel were the strengths of the class? Explain
3. What were the weaknesses of the class? Explain
4. Were you satisfied with the conditions/ location of the classroom? Please explain.
5. After completing the class, did you feel well prepared to take the actual _____test? Why or why not?
6. How has your morale changed since you took the class? Explain.
    a. What about other workers who took the class? Do you think their morale has changed since taking the class? In what way?
    b. If so, do you think the change in morale will have an impact on the organization? How? Can you give examples?
7. Do you think your performance on the job has changed since you took the _____ class? Please explain.
    a. What about other workers who took the class? Do you think that their on-the-job performance has changed since taking the class? In what way?
    b. If so, do you think the change in job performance will have an impact on the organization? How? Can you give examples?
8. What is your reaction to the instructor's teaching techniques?
    Prompts: Lecture Team work Group discussion
    Individualized tutoring Demonstration Self-paced learning
    Practice exercise Computer-based learning Hands-on activities Others
    Note to interviewer: Only use prompts that apply to the site.
9. Do you think the instructor built upon things you already knew? In what way? How was this technique helpful?
10. What was you opinion of the instructional materials? Can you give specific examples?
    Hand-outs Videos Participant's guide Chalkboards
    Other (Note: Use only those prompts that apply to the course.)
11. Has taking the _____ class changed your personal life in any way? Explain how.

Prompts: For example, helping kids with their homework or determining the amount of tip to leave at a restaurant?

12. Do you think you are more likely to get a better job as a result of taking the _____ class? Why?
13. Do you have any other comments you would like to make concerning this program?

Thank you very much for your participation.

Interviewer will rate how much employee remembers about their class based on the depth of information in their answers.

Project Course # _____

Six –Month Supervisor Interview

We are involved in a special program designed to help employees improve their skills. Today we are collecting information from those who took the_____ classes that were held at _____. All of the information you give is **confidential**. We will use the information in reports, but no names will be used. In any case, **you can choose to skip any questions that you don't want to answer**. If you have any questions about this project, we will be happy to answer them for you now or you can call either our project director, Dr. Dale Brandenburg (577-1427), or Dr. Peter Lichtenberg (577-1628.) at Wayne State University to find out more about your rights as a participant in this project.

Your responses and comments will help make future training programs more effective. This interview is being conducted in an attempt to get more detailed information about the class your employees completed about six months ago and should take about 30 minutes. So please feel free to give examples and detailed descriptions. Thank you for your participation in Project ALERT.

Project Course # _____

If you are ready, let's begin.

1. What were your original needs when you agreed to send your employees to this training?

2. What were your incentives to send employees to the class? (Classes were free, location, timing, etc.)

3. Overall, what did you think of the class? Please explain.

4. What do you feel were the strengths of the class? Explain.

5. What were the weaknesses of the class. Please explain.

Were you satisfied with the conditions / location of the classroom? Please explain.
(Prompts: Give location and any details you have to refresh memory)

6. Looking back, what do you think were the most important things that were taught in this class? Why?

7. Do you think your employee's performance on-the-job has changed since they took the class? Yes No Please explain.

7a. If so, do you think the change in job performance will have an impact on the organization. Yes No How? Can you give examples?

8. What feedback did you get from the employees about the instructor?

9. Has taking this class changed any of the employees' personal lives in any way? Yes No Explain how.

Prompts: For example helping kids with their homework, or using computers in new ways?

10. Do you have any other comments you would like to make concerning this program?

11. Would you recommend this instruction to other companies?

12. What would be a fair value (your cost) that you would pay for this training?

13. Would you agree to serve as a reference for this training?

Thank you very much for your participation!

Project Course # _____

12 Month Follow-up Employee Interview

We have been involved in a special program designed to help employees improve themselves and benefit the company. Today we are collecting information from those who took the ____ classes that were held at ____ last year. The questions have been approved by union and management representatives. All of the information you give is confidential. We will use the information in reports, but no names will be used. In any case, you can choose NOT to answer any questions that you don't want to answer. If you have any questions about this project, we will be happy to answer them for you now or you can call either our project director, Dr. Dale Brandenburg (577-6674) or Dr. Peter Lichtenberg (577-1628) at Wayne State University to find out more about your rights as a participant in this project.

You were willing to be interviewed after 6 months and we are asking for a few more minutes of your time. We thank you for being part of this evaluation. Your responses and comments will help make future training programs more effective. This interview will take about 15 minutes. Please feel free to give examples and detailed descriptions of your opinions relating to the _____ class.

Participant Code _____ Date of Interview_____

1. Looking back, after one year, what was your reaction to the _____ class?

   _____

2. What motivated you to attend this training?

   _____

3. Did the company or union encourage you in some way to participate?

   _____

4. How did you learn about the classes? Who contacted you?

   _____

5. What is your opinion about the process for signing up for classes?

   _____

6. Do you have any suggestions that could improve it?

   _____

7. Did you think that both union and management supported this training? Why or Why not?

   _____

   _____

8. Do you think your performance on the job has changed since you took the _____ class? Please explain.

   _____

9. I know this may be difficult, but please don't mention any names when you answer the next question.

What about other workers who took the class? Do you think that their on-the-job performance has changed since taking the class? Yes No _____

In what way?

_____

If so, do you think the change in job performance will have an impact on the company? Yes No _____

How?

_____

Can you give examples?

_____

_____

10. After completing the class, did you feel better prepared to take the actual DAT test?
Yes No

Why or why not?

_____

_____

11. Do you think you are more likely to get a better job as a result of taking this class? Yes No
Why? or why not?

_____

_____

12. Has taking this class changed your personal life in any way? Yes No
Explain how.
Prompts: For example, helping kids with their homework or determining the amount of tip to leave at a restaurant?

_____

13. Do you have any other comments you would like to make concerning this program?

_____

_____

Thank you very much for your participation.

Project Course # _____

12 Month Follow up Supervisor Interview

Project ALERT at Wayne State has been involved in a special program designed to help employees improve themselves and the company. Today we are collecting information about the DAT-Prep classes that were completed about a year ago at Davis Tool.

This is not an evaluation of individuals who participated in the classes, but an attempt to measure changes that you may have observed since the program began. The questions have been approved by union and management representatives. Your responses and comments will help make future training programs more effective. Please try to give examples and detailed descriptions of your impressions but do not name specific workers. All of the information you provide is confidential. We will use the information in reports, but no names will be used. In any case, you can choose not to answer any question.

If you have any questions about this project, we will be happy to answer them for you now or you can call either our project director, Dr. Dale Brandenburg (577-6674) or Dr. Peter Lichtenberg (577-1628) at Wayne State University to find out more about your rights as a participant in this project. This interview will take about 15-25 minutes.

1. Are you aware that we had classes at Davis to help prepare employees for the apprenticeship testing? Yes No (If no, end interview)
2. What is your job title?_____
3. How long have you held this position? (End interview if less than 18 months)

   _____
4. How long have you been at Davis

   Tool?_____

   At Davis, we recruited by holding 6 information sessions with 30-60 employees. Employees had an opportunity to hear about the program and ask questions. Sign up sheets were distributed to employees at that time.
5. Do you think that the method of recruitment with workers at Davis was effective? Yes No
6. Do you have any suggestions to improve recruitment in the future?

_____

At Davis, employees attended classes on their own time, before the afternoon shift or after the day shift. The incentive to take the class was to prepare for the apprenticeship test.

7. Do you think the incentive was effective? Yes No
8. If yes, why?

   _____

   _____

9. If no, why not?

_____

_____

10. Do you have any suggestions for other incentives that could be used to improve future programs?

_____

_____

We hoped our program would help employees learn as well as benefit the company.

11. In your opinion, do you see any difference in productivity in your area? Yes No

12. If yes, do you think this change happened, in part, because of the classes? Can you give examples.

_____

_____

13. If no, is there any way these classes could have made a difference in productivity?

_____

_____

I know it may be difficult to think in general terms, but we ask you not to mention any names as you answer the following questions.

14. Looking back after one year, have you noticed any changes in the way employees perform their work? Yes No Possible prompts: A willingness to take training or an interest in learning new things?

15. If yes, do you think this change happened, in part, because of the classes? Can you give examples.

_____

_____

16. If no, is there any way these classes could have made a difference ?

_____

_____

17. In general, have you noticed any changes in employee attitudes toward self improvement? Yes No

18. If yes, do you think this change happened, in part, because of the classes? Can you give examples.

19. If no, is there any way these classes could have made a difference in employee attitudes toward self-improvement?

20. In general, have you noticed any changes in how employees work together? Yes No

21. If yes, do you think this change happened, in part, because of the classes? Can you give examples?

22. If no, is there any way these classes could have made a difference in how employees work together?

23. Have you noticed any changes in on-the-job behavior like attendance and punctuality? Yes No.

24. If yes, do you think this change happened, in part, because of the classes? Can you give examples?

25. If no, is there any way these classes could have made a difference in on-the-job behavior?

26. Have you noticed any differences in how employees take responsibility on the job or tried new tasks on the job? Yes No

27. If yes, do you think this change happened because of the classes? Can you give examples?

28. If no, is there any way these classes could have made a difference?

_____

_____

29. Have you heard any comments regarding how classes made a difference in employees' personal lives? Yes No

30. If yes, can you give examples?

_____

_____

31. If no, is there any way these classes could have made a difference in their personal lives?

_____

_____

32. Do you have any other comments you would like to make concerning this program?

_____

_____

Thank you very much for your participation

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

REPRODUCTION BASIS

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").