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ABSTRACT

Four community colleges in North Carolina cooperated to provide workplace literacy education to employees of eight plants in the state. The target population for the program was 710 adults who had not completed high school or who were functioning below high school level who were employed at one of the industry sites. The Comprehensive Adult Student Assessment System Employability Competency System was used to assess basic skill levels of students/employees along with criterion-referenced tests developed for the customized curriculum. Classes were provided on site during regular work hours, and employees were compensated for their time. The program proved successful in the following areas: recruiting more than the targeted number of employees, improving the basic skills levels of those employees who participated in the program regularly, improving job-related literacy skills, improving productivity and quality of work, improving attendance, continuing curriculum development, providing orientation to teaching staff, and meeting individual employees' needs for job-related education (resulting in job promotions and increased proficiency). An outside evaluator determined that the workplace literacy program had been successful and suggested changes in administrative structures. (KC)

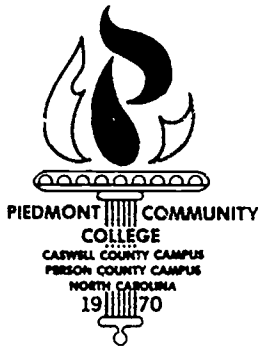
PARTNERS for EMPLOYEES' PROGRESS

1992-1994

A National Workplace Literacy Project

FINAL REPORT

MAY 1994



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Partners for Employees' Progress (PEP)
National Workplace Literacy Project
June 1992 - February 1994
FINAL REPORT

By

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Contents

EXECUTIVE SUMMARY

Overview

In June 1992, Piedmont Community College in Roxboro, North Carolina received an eighteen month National Workplace Literacy Grant from the United States Department of Education. This project, entitled Partners for Employees' Progress (PEP), was to replicate and continue Piedmont Community College's (PCC) workplace literacy model developed under a previous National Workplace Literacy Grant (1990-91) with Collins & Aikman Corp. and Burlington Industries. The project was awarded $990,466 for this purpose.

Four Collins & Aikman (C&A) plants and four Burlington Industries (BI) plants were the workplace partners in North Carolina. Three additional community colleges in North Carolina joined the partnership to serve as the workplace literacy providers to these industries in their counties. They were: Alamance Community College in Burlington, whose partner was BI; Randolph Community College in Asheboro, whose partner was BI; and Central Carolina Community College in Siler City, whose partner was C&A. PCC expanded to one additional site, C&A's Weave Plant in Roxboro. Total, there were four community colleges and eight plants involved in central North Carolina. PCC served as the grant administrator of this workplace consortium project.

Customized basic skills curriculum was developed for PCC's BI and C&A plants under a 1990-91 National Workplace Literacy Grant. Due to its success, additional BI and C&A plants wanted to replicate the model to their sites. Because PCC cannot provide services outside of Person and Caswell Counties (its service area), the colleges serving those interested industries were recruited to become partners. (See the Organizational Chart and Map on pages 12 and 13.)

In addition to serving as the model site and grant administrator, PCC served as a resource center for the other partners in the project providing training, technical assistance and project monitoring. This was done through a Technical Assistance Team (TAT) composed of the staff from PCC's original workplace literacy project.

The target population to be served by this grant was 710 adults who had not completed high school or who were functioning below a high school level and were employed at one of the industry sites. The Comprehensive Adult Student Assessment System (CASAS) Employability Competency System (ECS) was used to assess basic skills levels of students/employees as was criterion-referenced tests developed for the customized curriculum.

The Executive Summary describes the project's goals, activities and achievements. It is a summary of the internal evaluation. The Site Reports in the Final Report were written by each subrecipient and are their evaluations.

The External Evaluation was conducted by Dr. Eunice Askov, the Director of the Institute for the Study of Adult Literacy of Penn State University. Dr. Askov has worked with numerous workplace projects, conducted research and authored many articles on the topic. It was an honor to have her as the external evaluator.

The Appendix includes a list of dissemination activities and anecdotal comments. A materials list of both publisher and customized materials is given to aid those who are seeking teaching materials. Anecdotal comments from students/employees and the employers are provided as further testimony to the success of the program.

Goals & Results

GOAL ONE: 310 employees of BI would participate in the workplace literacy program at their plant site. Alamance, Piedmont and Randolph Community Colleges were responsible for meeting this goal collectively.

RESULTS: 380 non-duplicated employees of BI were enrolled in the workplace literacy program at their plant site. This 23% increase over the goal can be attributed to several factors: 1) employees attended classes on company time when possible and were compensated their hourly rate of pay; 2) when not able to attend during shift, they attended before or after shift and received their average hourly wage; 3) recruitment was an ongoing process with several plants having "waiting lists" of employees interested in attending; and 4) plant management was committed to the program and rewarded participants with recognition and incentives.

GOAL TWO: 400 employees of C&A would enroll in a workplace literacy program at their plant site. Piedmont and Central Carolina Community Colleges were responsible for meeting this goal.

RESULTS: 605 non-duplicated employees of C&A participated in the workplace literacy program at their plant site. This 51% increase over the goal can be attributed to the same factors as listed for BI. In addition, the grant was extended from 18 months to 21 months so that all goals could be met. (This was a no-cost extension -- no additional federal monies were allocated.)

GOAL THREE: 95% will test higher in basic skills using standardized test results.

RESULTS: According to Dr. Askov, significant gains were made consistently by students/employees. See External Evaluation Report. The Comprehensive Adult Student Assessment System (CASAS) Employability Competency System (ECS) was the standardized tool used to assess employees upon entrance into the program and to monitor their basic skills progress. Post-testing occurred generally after 70 hours of instruction.

Other tools used to measure progress were Informal Reading Inventories, Slosson Oral Reading Test, GED Practice Tests, and Sight Word Lists.

Using the Information Form submitted quarterly by PCC to the USDOE, 623 employees improved their basic skills. This was 68% of those entering the program. When considering the 95% goal, the 399 participants who left the program before completion need to be considered. (See Learner's Reasons for Leaving PEP Program, page 15). If the 623 who improved

in basic skills were compared with the 511 who were still active participants until the grant ended, the percent becomes 122% who improved basic skills.

GOAL FOUR: 90% would improve in job-related literacy skills.

RESULTS: Criterion-referenced tests were created for the customized job related and job specific curriculum. Again, refer to the External Evaluation of this report for an analysis of these test scores.

Using the Information Form submitted quarterly by PCC to the USDOE, 490 employees improved in job related literacy skills. This was 54% of those entering the program, or 96% of those 511 who were active participants until the grant ended.

GOAL FIVE: Productivity and quality of work would improve by 15%.

RESULTS: Productivity and quality of work was monitored quarterly by the participants' supervisors. Each quarter, supervisors completed a survey and submitted it to the educational partner. The educational partner summarized the information and reported it to the project director at PCC. It was then combined with the same data from each program site and reported on the Information Form submitted quarterly by PCC to the USDOE. According to those reports, 498 or 55% improved productivity or quality of work.

GOAL SIX: 25% would improve their attendance at work.

RESULTS: Attendance was not a problem at most of these industry sites due to their strict attendance policies. Attendance was monitored and reported quarterly using the same procedure as reported on Goal Five. According to the Information Form submitted quarterly by PCC to the USDOE, 353 or 39% improved attendance at work.

GOAL SEVEN: The customized curriculum developed for PCC's BI Plant during 1990-91 would be reproduced and distributed to other BI plants as applicable.

GOAL EIGHT: The customized curriculum developed for PCC's C&A Plant during 1990-91 would be reproduced and distributed to other C&A plants as applicable.

RESULTS: Due to the different manufacturing functions of each of the industrial sites, the customized curriculum developed by PCC for BI and C&A during the 1990-91 grant was not transferrable. Although the entire content could not be used, some parts were extracted and modified for use by the educational partners. At most, PCC's customized curriculum provided a model upon

which educational partners could use as they developed customized curriculum for their industrial sites.

GOAL NINE: Job analyses and curriculum development would occur at six industrial sites and continue with PCC's two industrial partners.

RESULTS: Job task analyses occurred at all sites because workplace curriculum development is a continuous process. No workplace curriculum is finite - it changes as jobs, functions, processes, and procedures change in the work environment.

The Comprehensive Adult Student Assessment System (CASAS) Job Analysis Profile was used as the instrument to identify the basic skills required for the jobs or departments in each plant. This checklist was used as a reference point before, during, or after observing and interviewing employees and their supervisors on that job. Print materials utilized on the job were also incorporated into the analyses.

Once a list of basic skill competencies was generated for the job or department, it was validated by a Task Force. This group was composed of employees and supervisors from that job or department. After the competency list was validated and prioritized, a customized curriculum was developed by the workplace educational staff. A draft copy of the customized curriculum was field tested in the classroom or learning lab and validated by students before being put into its final form. Thus, employer, employees, and educators worked together as a team to create a customized curriculum for each worksite.

The curriculum content common to all eight plants was Health and Safety. Therefore, one customized curriculum was crated in a software version for all plants. Because of time constraints and lack of trained staff in an authoring software program, PCC contracted with Interactive Knowledge in Charlotte, NC to produce the customized software. The educational partners in the PEP workplace grant teamed together to generate the reading material from which the software was developed. Interactive Knowledge used that text to develop activities and reading text for the software package. To give each industry location a sense of its own Health and Safety curriculum, Interactive Knowledge used each company's (BI's or C&A's) name and logo for each plant's version of the software. The industry partners and employees were thrilled with this product.

GOAL TEN: PCC would provide orientation training to the new workplace educational staff and technical assistance in order to replicate PCC's workplace models.

RESULTS: A two week pre-service training was conducted in Roxboro, NC at PCC in July 1992. PCC's workplace staff who had been employed during the

first workplace grant of 1990-91 conducted the orientation. This group, the Technical Assistance Team (TAT), consisted of the project director, a site coordinator and an instructor from PCC's C&A site, and a site coordinator/instructor from PCC's BI site. Incorporated into the training were site visits and job shadowing at PCC's BI and C&A sites.

As a follow-up to training, the project director made informal visits during August and September 1992 to observe and offer assistance.

The TAT generated a list of questions to ask employees/students, the educators, and the employer during their quarterly site visits. This was later converted into a checklist in January 1993 and was used for each quarterly visit to each site as a monitoring tool of timeline goals and as a programmatic evaluation.

In addition to quarterly visits, the TAT provided technical assistance via telephone, personal visit, mail, or fax throughout the project. Answering machines were purchased and distributed to all educational partners housed in industry and the project director had a private telephone line installed at PCC. These were attempts to provide better channels of communication between the TAT and its educational partners.

GOAL ELEVEN: Employees would receive basic and technical literacy education so they could become more proficient in their current jobs, prepare for job changes, move laterally or upward in the workplace, and/or obtain a high school credential.

RESULTS: Basic skills, job related basic skills, and high school level skills were woven into each employee's individual program of study. This was done to meet the employer's and employee's needs.

Any employee who tested below a 245 CASAS scale score on Level-D Survey Test of the reading or math portion of the Employability Competency System could be counted for FTE purposes in the college's Adult Basic Skills Program (NC Department of Community Colleges). Those employees who placed out of Adult Basic Skills (scored 245 or above in both Level-D Reading and Math Survey tests) but who did not score 80% correct on their criterion referenced pre-tests for the customized curriculum were enrolled in the PEP project. These students/employees did not count for FTE purposes; thus, they did not contribute to the earnback formula for the colleges to be able to afford these programs after grant funds ended. This was a gap discovered during implementation of the grant.

Outcomes of the PEP project were measured internally by quarterly supervisor surveys, GED Tests passed, job promotions or lateral job

moves, and by the number of participants who pursued their education beyond this program. In addition, participants completed exit surveys to evaluate the program. Twenty-seven participants received their GED credential during the project as a result of their program of study.

The number of lateral moves or promotions was 108 or 12%. Those who were more proficient in their jobs as a result of program participation numbered 478 or 53% of the total enrolled.

PEP Time Line 1992-94

June - August 1992 (Start-Up Phase)

1. Advertise, interview and employ staff.
2. Conduct/participate in pre-service orientation at Piedmont Community College with TAT and USDOE (Project Director).
3. Conduct/participate in industry orientation.
4. Identify jobs/departments/functions for the Job Task Analyses and begin Job Task Analyses.
5. Obtain copies of PCC's Job-Specific Curriculum as applicable for each plant and utilize.
6. Promote program and recruit participants and establish selection criteria.
7. Establish an Advisory Council (representatives from industry training department, department heads/supervisors, plant manager, employees enrolled or graduated from program, site coordinator, project coordinator, instructor, Dean of Continuing Education).
8. Submit quarterly reports to PCC.

Items #4 and 7 occurred during the second quarter. Job Task Analyses and Advisory Councils were delayed due to the new sites and new staff needing more start-up time.

September - November 1992

9. Conduct Job Task Analyses and develop curriculum.
10. Purchase and obtain materials.
11. Conduct classes (begin with individual assessment, individual prescription, monitor progress, evaluate) with traditional and job-specific material. Field-test job-specific curriculum.
12. Conduct Advisory Council meeting (chaired by site coordinator with minutes recorded and distributed by Secretary to project).
13. Host site visit for TAT.
14. Submit quarterly report to PCC.

Delays in #9 and 11 occurred at several subrecipient's sites due to the newness of the task. Job-specific curriculum development did not occur but job-related curriculum development had occurred.

December 1992 - February 1993

Repeat Steps 9-14.

15. Conduct quarterly recognition of students' accomplishments.
16. Host site visit for External Evaluator.
17. Assist with developing project brochure and video.
18. Assist with developing project presentation for conference/s.
19. Check your progress! Half-way through project! How do your numbers look?

Quarterly recognition was not feasible at all sites; therefore, some industries scheduled recognition ceremonies every six months.

March - May 1993

Repeat Steps 9-15.

Video (#17) was completed in May 1993 and distributed to partners. CCCC's Television Department produced the video. The only charge to PCC was for their travel and blank video tapes. This was done in this manner due to limited funds budgeted for this video.

20. Project Director, Site Coordinators and Industry Representatives attend COABE Conference and present project (April in New Orleans).

Conference was rescheduled for June 1993. Presentation of the PEP Project was delivered during COABE in New Orleans.

In April 1993 one of the partners, Burlington Industries Pioneer II Plant in Burlington, closed. Due to this plant's closing a grant extension was later requested to try to meet the grant's goals.

June - August 1993

Repeat Steps 9-15.

21. Host site visit for External Evaluator at end of August or during next quarter for final evaluation.
22. Assist with compiling final report.
23. Consultation between educators and industry to determine direction of program at each site after project ends November 30.

Items #21 and 22 were rescheduled due to a 90-day extension given the grant. Project's new end date was February 28, 1994; therefore, item 21 occurred in January 1994. Item 22 occurred from December 1993 - May 1994.

September - November/December 1993

Repeat Steps 9-15.

24. Finalize final report.
25. Project Director and one industry representative attended NWLP Close-Out Meeting.
26. Collect bids on printing final report and requisition (by second week of November).
27. Classes supported by grant funds end November 30, 1993.
28. Grant spending ends November 30, 1993.

Due to a new end date of the project, items #24, 26, 27 and 28 did not apply to this time frame.

January/February 1994

Repeat Steps 9-12; 14-15.

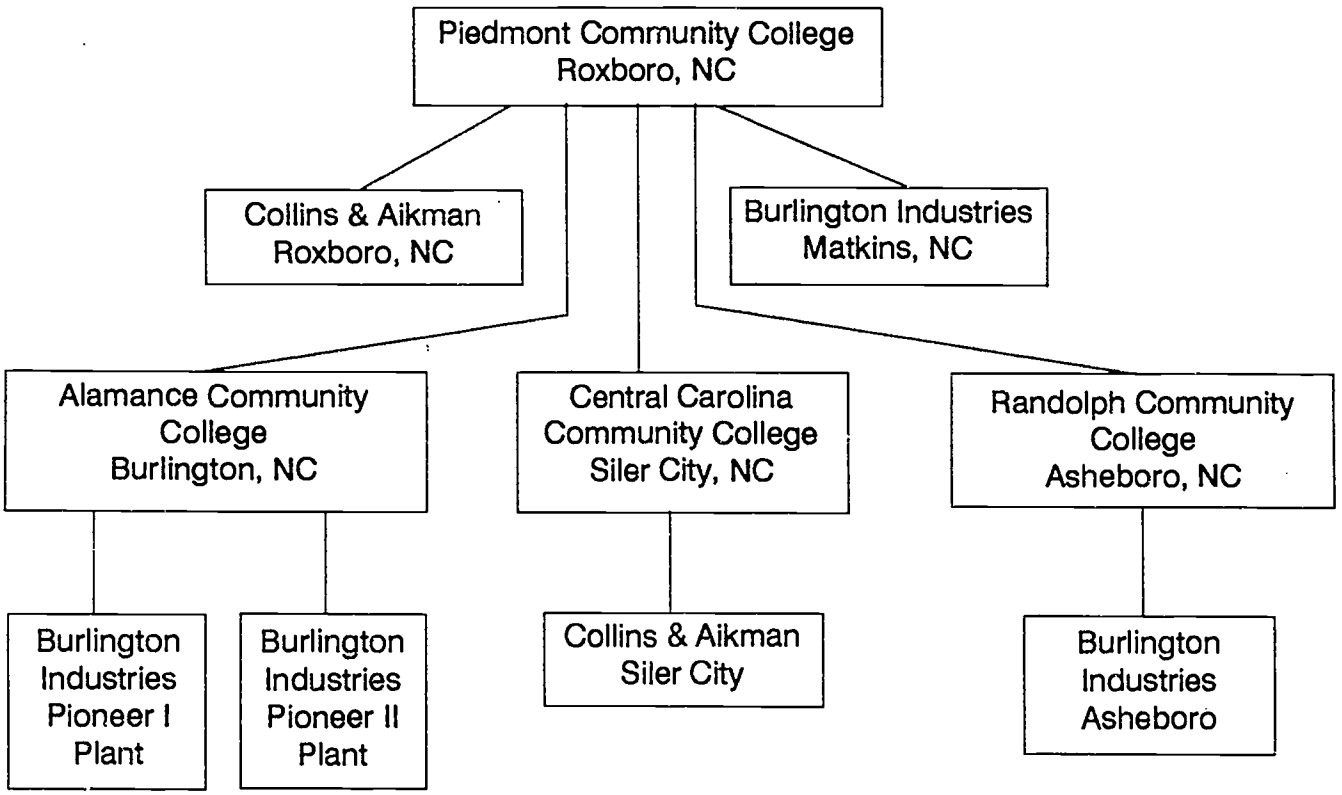
TAT (#13) did not evaluate site during the last quarter.

29. Print and distribute final report.
30. Schedule External Evaluator's site visits.
31. Project Director presented the PEP project during a CASAS Workshop in Greenville, South Carolina, January 10-12, 1994.
32. Host site visit for External Evaluator.
33. Project Director conducted a presentation on the PEP project at the Adult Basic Skills Directors' Institute in Raleigh, January 26, 1994.
34. Collect bids on final report printing (PCC).
35. Classes supported by grant funds end by February 10, 1994.
36. PEP Educational Partners Meeting at PCC on February 18, 1994 to work on the final report, award certificates of recognition to staff, and preview external evaluator's evaluation.
37. PEP project ends February 28, 1994.

Educational Partners meetings were conducted at PCC during appropriate time frames and Consortium Partners (Education and Industry representatives) meetings were conducted at PCC during appropriate time frames.

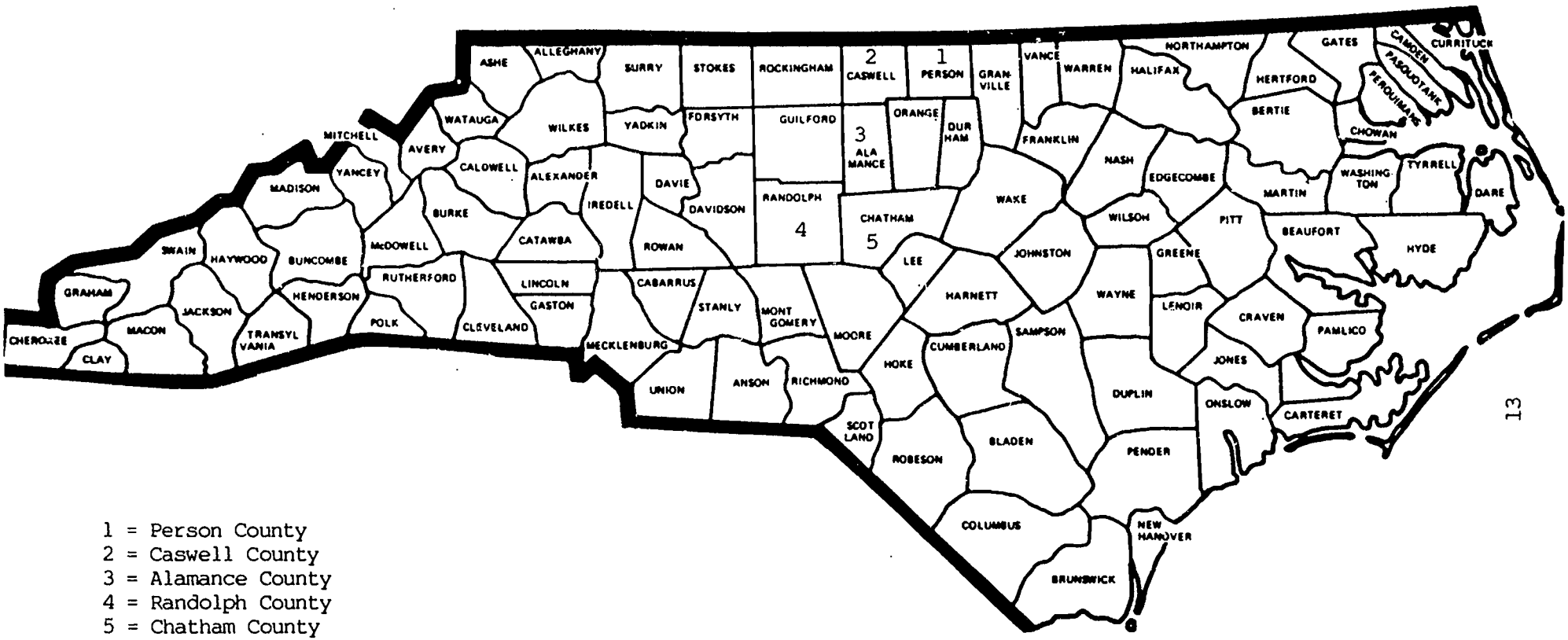
PARTNERS FOR EMPLOYEES' PROGRESS (PEP) CONSORTIUM ORGANIZATIONAL CHART

1992 - 1994



A National Workplace Literacy Project funded by
The United States Department of Education, Adult Education Division
(June 1992 - February 1994)

Map of PEP Sites in North Carolina



1 = Person County
2 = Caswell County
3 = Alamance County
4 = Randolph County
5 = Chatham County

13

Learner Characteristics

1. Total Number to be Served 710
2. Total Number Served 910 non-duplicated
3. Mean Age of Participants 42
4. Sex: Males 473 Females 437
5. Race/Ethnicity: Number Who Are:

White	Black	Hispanic	American Indian	Asian/Pacific Islander
491	412	2	1	4

6. Number Single Head of Household 168
7. Limited English Proficient 4
8. Years With Company:

0-5	6-10	11-15	16+
319	166	111	314

9. Placement Upon Entrance Into the Program:

Basic Skills	GED	ESL	Customized Curriculum	AHS*
515	84	4	733	293

10. Program Outcomes: Improved

Basic Skills	Communication Skills	Productivity	Attendance	Self-Esteem
623	683	498	353	618

*This labeling was defined by the North Carolina Department of Community Colleges, Adult Basic Skills Division. Those labeled AHS were those students/employees who had a high school diploma but who scored below a 245 scale score on either the Reading or Math CASAS, Level-D Survey Tests.

Profile of Average PEP Student/Employee

Age: 42
Sex: Male
Race: White
Years with Company: 0-5 years

Learner's Reasons for Leaving PEP Program

REASONS	ACC/BI	CCC/C&A	RCC/BI	PCC/BI	PCC/C&A	Totals
1. Employment Terminated	2	23	11	6	19	61
2. Lack of Interest	2	2	8	18	9	39
3. Personal Problems		22	3		12	37
4. Expectations Not Met			11		1	12
5. Retirement			1			1
6. Job Conflict	3	21	5	7	35	71
7. No Comment			2		8	10
8. Management Decision			11			11
9. Met Goal(s)	6	59	19		2	86
10. Health Reasons	1		1	8	13	23
11. Transferred to another class location	1		1	1	4	7
12. Leave of Absence or Lay Off				1	2	3
13. Transportation Problems		5			1	6
14. Plant Closed	31					31
15. Death					1	1
TOTALS	46	132	73	41	107	399

TYPES OF TECHNICAL ASSISTANCE PROVIDED BY PIEDMONT COMMUNITY COLLEGE PARTNERS FOR EMPLOYEES' PROGRESS

June 1992 - February 1994

Type of Technical Assistance	By the Project Director	By the Site Coordinators (Two)	By the Instructors (Two)
1. Visit to model workplace sites in Person & Caswell Counties	X	X	X
2. Staff training/orientation	X	X	X
3. Newsletter		X	X
4. Teaching strategies & materials (publisher's materials; customized and job related curriculum, group activities, etc.)	X	X	X
5. Telephone assistance	X	X	X
6. On-site visits	X	X	X
7. Troubleshooting and/or negotiating between colleges & industry partners	X		
8. In-service training	X		
9. Written summary of on-site visits to host site	X	X	X
10. Development of customized courseware	X	X	
11. Development of Public Relations/Dissemination of Project Information	X	X	X
12. Assessment & placement of students	X	X	X
13. Quarterly project assessment and planning meetings for all educational partners	X		
14. Budget monitoring and advisement	X		
15. Review & disseminate literature about workplace literacy	X		

OVERVIEW OF WORKPLACE SITE EVALUATION VISITS

DATE	ACTIVITY
1-8-93	Conduct a meeting of the educational partners involved in the PEP grant. Presented the workplace evaluation checklist to be used during the Technical Assistance Teams' visits to their sites each quarter. Asked them to review it and offer suggestions/feedback. None was received during this meeting. Encouraged participants to call with comments later.
1-20-93	Conducted a meeting of all partners (educators and industrialists). Reviewed the workplace evaluation tool with all.
2-8-93	TAT evaluated Alamance Community College's workplace program at Burlington Industries.
2-17-93	TAT evaluated Central Carolina Community College's workplace literacy program at Collins & Aikman Corp.
2-18-93	TAT evaluated Randolph Community College's workplace literacy program at Burlington Industries.
3-4-93	Conducted a staff meeting with Technical Assistance Team to review the results of our first evaluation visit and to evaluate how well the checklist worked.
4-19-93	Technical Assistance Team (TAT) visits Siler City's Collins & Aikman Plant where Central Carolina Community College is the workplace provider. Evaluate program.
4-20-93	The TAT visits Burlington Industries in Burlington where Alamance Community College is the workplace provider. Evaluation is conducted using the checklist.

DATE	ACTIVITY
4-21-93	Discussed TAT visits with the Vice President of Adult and Community Education at Piedmont Community College.
4-22-93	TAT visits and evaluates Burlington Industries' workplace program delivered by Randolph Community College in Asheboro.
4-28-93	Summarized winter quarter (December 1992-February 1993) TAT evaluations. Wrote memos to accompany evaluations.
7-27-93	TAT conducts an evaluation visit at the Siler City Plant. Jackson Elliott, Vice President of Adult and Community Education, substitutes for the Director, Debra Harlow, while she is on educational leave.
8-2-93	TAT to Burlington's Asheboro Plant to evaluate the program. Debra Harlow was on educational leave.
8-6-93	While on educational leave, Ms. Harlow summarized all of the TAT members' checklists for spring quarter into one evaluation for each site. A memo was written to accompany each.
8-10-93	TAT evaluated the Burlington workplace program in Burlington. Debra Harlow was on educational leave.
10-18-93	TAT evaluates the Burlington Asheboro Plant's workplace literacy program.
10-19-93	TAT evaluates the Collins & Aikman Siler City Plant's workplace literacy program.
10-21-93	TAT evaluates the Burlington Industries workplace program in Burlington.
10-25-93	Ms. Harlow summarized fall quarter evaluation visits into one report for each site and sent it with a memo.

Program Costs

COST ANALYSIS
PEP 1992-94

Federal Grant Award	$ 990,466
Federal Grant Spent	975,221
College & Industry In-Kind Costs	549,389
Release Time Value (employees received hourly wage to attend class)	568,702
Additional Sources Contributions (Industries & College Foundations)	4,449
Total Value of Project	$2,097,761
Average Cost Per Student (910 students/employees served)	$ 2,305

ADDITIONAL FUNDING

Institution/Plant	Amount	Source	Purpose
CCCC/C&A	$ 549	CCCC Foundation	Purchase Motherboard and hardware upgrade for computers.
CCCC/C&A	500	C&A Siler City	Second-hand copier for LLL program.
Sub-total	$1,049		
PCC/C&A/BI	$ 600	PCC Foundation	To purchase software for desktop publishing so students could produce own newsletter. Also paid costs for reproducing newsletter.
	600	C&A	
	600	BI	
PCC/C&A/BI	$1,600	PCC Foundation	To purchase CD-ROMs for computers at three plant sites so students could use latest technology.
Sub-total	$3,400		
TOTAL	$4,449		

Recommendations and Conclusions

Burlington Industries and Collins & Aikman in partnership with their educational providers in this grant (Alamance Community College, Randolph Community College, Central Carolina Community College and Piedmont Community College) have developed local cost-sharing plans to continue the PEP project at all sites. This attests to the success of the program and to the partners' commitment to its continuation.

To avoid redundency, those items or characteristics that attributed to the project's success or weak areas which have been addressed by the External Evaluator will not be discussed here again. (See External Evaluator's report, pages 23-50). Note that the director concurs with Dr. Askov's recommendations and conclusions. Only those items that are different will be included here.

The original timeline drafted for the project was idealistic. It did not allow for variables unforeseen such as: a plant closing; turnover in industry and college personnel; turnover in part-time teaching staff; automony at each community college in their policies and procedures; and changes in industry work schedules (layoffs and seven day work weeks). It is recommended that future timelines be less task oriented and goals be realistic in order to allow for such variables.

For a consortium of many community colleges to operate smoothly, all must agree to follow the lead institution's policies and procedures. This was not done in this grant project. Each college's autonomy interferred with either the grant's philosophy and/or timeline. Examples of this were personnel policies and purchasing procedures which caused conflicts that took months to resolve.

Staffing at each site catered to the industry's needs. If an industry had three or four shifts, classes were offered for each shift. It is important for all shifts to feel important -- no one gets more attention or service than another.

Staffing issues faced in this grant included turnover among third-shift instructors who were part time. This was rectified by using full-time teachers for third shift as much as possible and part-time teachers for the remaining shifts.

Another issue was that full-time workplace staff felt isolated. They felt no sense of belonging to the college or industry. This was despite daily contact with the industry representative assigned to the project and weekly contact with the college. A way to improve this may be to involve them at the college more often. (They were instructed to maintain the classes on site rather than attend meetings and socials on campus.)

At the start-up of a new workplace literacy class site, it is recommended that an additional instructor or aide be assigned to assist with the establishment of classes and orienting students. For one instructor to have a total of 60 to 90 new students with ten each in a one-hour session is overwhelming at first! College and grant information must be collected on each, assessment of learning level, a learning plan developed, and orientation to the program and its facilities and

equipment, etc. must be accomplished in two or three one-hour classes. To accomplish this and meet students' needs requires an assistant. This was learned after the fact.

Schedules of the education and industry partners conflicted at times which caused problems for educational staff assigned to work at the industry. It is important for each to outline holidays, quarter breaks or class cycles, and when staff may take annual leave. It is also important to establish lines of communication for staff schedules, class cancellations, and the usage of substitute teachers.

The PEP project developed involved all the stakeholders -- educators, employees, and employers. This was important to curriculum development, recruitment, retention, evaluation, project management, etc. It is a recipe all workplace literacy projects need to incorporate in order to be successful. PEP was a success because all the key players were involved in planning, implementation and evaluation.

EXTERNAL EVALUATION

Evaluation Report:

Partners for Employees' Progress (PEP)

Piedmont Community College (Awardee)

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Building on a previous National Workplace Literacy Program (NWLP) grant to Piedmont Community College (PCC) in 1990-91, this project consisted of a consortium of four community colleges working in eight industry sites. The ambitious project had the following objectives: 1) maintain the current workplace literacy programs developed under the 1990-91 grant which would serve as models for training and technical assistance while continuing to provide a job-related basic skills program; 2) develop three additional Burlington Industries (BI) sites which would replicate the Burlington Industries' model currently operating at the Williamsburg Plant; 3) develop two additional Collins and Aikman (C&A) plants which will replicate the model currently operating at the Roxboro Main Plant; and 4) expand the current Workplace Literacy (Lifelong Learning) Program at the Roxboro Main Plant to include the Knit Plant.

The project proposed to serve 710 textile employees which represents 19 percent of the total workforce at the eight potential industrial sites for this project. This goal was met or exceeded. Employment at these locations totals 3,762 employees in five North Carolina counties.

Initially, the plan was for the new sites to use the job-specific curricula developed during the original project. New C&A sites would adopt the curricula developed at the C&A original site; similarly, new BI sites would use the BI curricula to avoid potential conflicts in proprietary interests. However, personnel at the new community colleges soon discovered that the job-specific curricula were not appropriate because the operations in the other plants were not the same. The project, therefore, had to replicate the process of curriculum development rather than replicate the use of specific curricula. The focus was on implementing the model which had been developed in the first project.

A two-week training period was held during the summer at PCC to teach the staff at the other community colleges how to replicate the model and the process of developing job-specific curricula. A Technical Assistance Team (TAT), consisting of the project director, site coordinators, and full-time instructors from the original sites, was on call to provide assistance in addition to making quarterly visits.

The letter summarizing the initial evaluation visit in December 1992 is attached in Appendix A. In general, the start-up phase and early implementation were on schedule and appropriate. Corrective actions resulted from that evaluation letter to remedy what had been problems. The evaluator received an update on the project by attending a symposium on PEP at the conference of the Commission on Adult Basic Education (COABE) held in New Orleans in June 1993. It was also an opportunity to talk to college and industry staff as a midpoint between visits.

A final site visit occurred in mid-January 1994. The evaluator met with site coordinators, instructors, industry trainers, and plant/division managers in the new sites. (She was unable to visit the original BI and C&A sites due to inclement weather; however, information was received through telephone interviews and written surveys.)

The questionnaires shown in Appendix B provided the basis for interviews with program stakeholders. The project director was asked to review the questions in advance and modify them. She distributed them prior to the visits to give stakeholders opportunity to think about their responses. The interview responses were well thought out; some personnel had even made notes of points to be covered.

Responses of Stakeholders

Stakeholders were unanimous in their support of the program. In fact, in every site the program will continue with joint support: Industry will match instructional hours to support an equal number of non-instructional hours that cannot be provided by state adult educational funding. It is a testimony to the quality of efforts that industry recognizes the importance of non-instructional time in addition to continuing to give the workers released or paid time to attend classes. The full-time instructor at each site will be retained as well as a part-time, third shift instructor (paid by state adult education funds). The issue of further curriculum development and revision/updating of the existing materials remains unresolved. The extensiveness of future data collection and reporting is also uncertain although it is recognized that the college and industry both want some of the information that is currently collected for the federal government (NWLP).

Students

Regardless of job classification, seniority, age, race, or gender, students were overwhelmingly positive about the program. Some saw it as a help to advancement in the company, one or two saw it as a way out of the company to a better job, but most were motivated by the desire for self-improvement. They consistently mentioned the importance of their teacher, the individualized instruction and assistance, and the opportunity to use a computer in learning. Most reported that they were able to use what they learned in class on the job and at home, and that they brought literacy-related problems from the job and home to class for instructional help.

One of the benefits to the program often cited was learning more about the company. They now understood the "big picture" and saw their role in a better perspective. They reported being able to read material related to their welfare that previously they could not understand (for example, the chart showing results of hearing tests conducted at the worksite). They expressed gratitude to the company for being able to attend "school" during work time. They reported that their supervisors were supportive and their co-workers envious but also supportive of their opportunity. (Most of the sites have waiting lists for attending classes.)

Many of the students said that they hoped to get their GED and, in fact, were studying for it outside class. Some were beginning or planning to begin classes at the college. Most said that they would not have taken adult education classes on their own time. (In fact, an earlier offering of ABE/GED onsite after work hours at one college was not successful in attracting students.) However, now they described themselves as wanting to learn more and willing to put in some of their own time. While no one used the word *empowerment*, that seems to describe the feeling of the students interviewed. One student even described herself as having a "glow" about her now that gave her a positive outlook on the rest of her life.

Industry CEOs, Trainers, and Supervisors

All were unanimously positive about the program. Although some initial difficulties had been encountered in arranging work coverage for students and adjusting to the college "culture," they saw the benefits to the students. They felt that the PEP grant period was too short to be able to

quantify the results, but they saw evidence of enhanced morale and communication skills. (In the plants which are organized into teams, management noted that students were able to participate in ways that they could not prior to classes.) Because students are selected on the basis of job type and seniority, they are drawn from different departments, making it difficult to evaluate impact on productivity, quality, and so forth. One manager, however, observed that safety must have improved since it provided the context for one module of instruction in basic skills. Anecdotally, the fact that students came in from vacation just to attend class was considered enough evidence of the effectiveness of the program.

The importance of basic education as a prerequisite for technical training was emphasized. In fact, in one of the companies the name of the *training director* position has now been changed to *education director*! Basic education appears as an essential building block on the chart showing how the company will become a high performance work organization for the next century.

The industries initiated participation in PEP following the success of PCC in the initial BI and C&A plants. They approached their local community colleges to participate in the PEP proposal. The industries have made substantial contributions to the program, including released or paid time for students, dedicated space for the program, and the purchase of computers in most sites. Given this heavy commitment in this division of both companies, they are pilot sites for the other divisions within both companies.

College Project Coordinators, Site Coordinators, and Instructors

PEP has opened up new opportunities for collaboration between the college and local industries. The colleges have offered other classes onsite as well as at their own locations as a result of this relationship. College staff have also developed job-specific curricula and classes for other industries following the PEP model. All expressed that the strong industry support had been an essential part of the success of the program. Working with the students and watching their progress were mentioned most often as the highlight of PEP.

Advisory councils helped communicate information about the program as well as advise on the implementation. A video was created to describe the PEP model. Specially devised software was

contracted for basic skills in health and safety. Supervisors and trainers provided feedback on curriculum development to ensure accuracy in the technical (contextual) aspects.

Each college has autonomy and hence implemented the PEP model somewhat differently but within the federal guidelines of the NWLP. Some difficulties did arise when the college systems did not operate with the same policies. The project director expressed frustration that the college personnel did not always follow through appropriately. At one point in the grant period PCC had to withhold funds until a college complied with the grant requirements. While this situation created stress for the project director, it did not seem to undermine the quality of the resulting programs.

In most of the sites the reporting relationships within the industry were clear. However, in one or two sites college personnel reported to multiple industry people which changed periodically, causing some frustration among college workers. Likewise, in one site the college project coordinator who was the liaison to the college was thought to be not in close touch with the PEP program. This personnel issue was still being reviewed at the time of the final evaluation visit.

Some of the sites expressed a feeling of being disconnected from the regular college program. (This seemed to be a function of physical distance from the college.) Although employed by the college, these college personnel said they had difficulty getting even routine classroom supplies. Perhaps when the program becomes operated solely by the college and industry apart from the federal grant, this situation will be ameliorated.

Some college personnel mentioned that they found the CASAS testing and reporting burdensome, and yet they liked the resulting Individualized Educational Program (IEP) structure provided by CASAS for their students. They expressed frustration over "paperwork," and yet they were unsure of what they will eliminate after the grant period.

To keep the colleges moving on schedule, the project director asked TAT to assist in doing an internal evaluation during each quarterly site visit. She devised an extensive checklist of project activities, divided by quarters, as part of project management and monitoring. During the quarterly site visits the instructors met with the other instructors, the site coordinators with other site

coordinators, and so forth, to review progress in accomplishing the activities targeted for each quarter.

However, TAT received mixed reactions; the evaluative role which TAT assumed during quarterly visits may have overshadowed the technical assistance role. College staff in some locations were reluctant to ask for technical assistance which they felt was given in an evaluative spirit. However, the structure that the project director imposed did, in fact, keep the sites on target. Expectations for each quarter were clearly laid out; each site received a follow-up report on the progress that had been made in the areas of administration, curriculum development, and instruction. While this showed excellent project management—and did keep the new sites on schedule—unfortunately technical assistance may have suffered.

All college personnel expressed that the resources and training provided by TAT were excellent. All suggested that the training should have been interspersed rather than all upfront. They expressed that periodic sharing sessions would have been useful. In fact, BI trainers drove site coordinators and instructors for meetings at various locations to encourage sharing. College staff found this very helpful.

Data Analyses

The data gathered by the colleges were collected at PCC and sent to the Institute for the Study of Adult Literacy where they were analyzed.

CASAS Results

The Comprehensive Adult Student Assessment System tests were used as a standardized measurement of progress in basic skills. Some students, however, were assessed with other measures if, for example, they functioned too poorly for the CASAS. Table 1 shows the descriptive statistics for all sites combined and for each site separately.

(Refer to Table 1 here)

Students were assessed at the beginning of their instructional programs (Time 1) and after 70 hours of instruction (Time 2). A few students were reassessed, but most instructors used the Time

Table 1

CASAS: Descriptive Statistics

READING

	Time 1			Time 2		
Site	N	M	SD	N	M	SD
Combined	546	230.31	15.09	431	235.88	14.90
Asheboro	78	226.67	15.35	50	232.00	15.74
D&F/Knit	75	228.30	18.56	64	237.30	19.27
Pioneer	102	227.53	15.21	98	232.76	12.89
Siler City	39	235.10	8.98	38	247.45	10.74
Weave	143	234.65	13.03	85	239.66	10.67
Williamsburg	109	229.83	14.80	96	232.85	14.24

MATH

	Time 1			Time 2		
Site	N	M	SD	N	M	SD
Combined	515	225.77	15.16	416	228.68	15.89
Asheboro	74	225.49	16.42	51	229.39	13.84
D&F/Knit	62	225.92	17.62	62	231.56	17.89
Pioneer	99	219.90	13.83	97	222.32	14.36
Siler City	30	234.00	9.02	27	245.07	5.82
Weave	143	229.60	14.86	86	232.12	16.26
Williamsburg	107	224.65	13.10	93	225.63	14.38

READING

	Time 3			Time 4		
Site	N	M	SD	N	M	SD
Combined	151	231.72	17.25	148	235.45	17.24
Asheboro	13	232.38	17.56	13	236.31	16.80
D&F/Knit	23	237.52	18.40	26	248.23	18.88
Pioneer	44	221.80	19.52	39	223.95	16.16
Siler City	2	235.50	10.61	2	235.00	8.48
Weave	39	240.49	9.43	38	245.55	11.47
Williamsburg	30	228.80	14.49	30	230.27	14.44

MATH

	Time 3			Time 4		
Site	N	M	SD	N	M	SD
Combined	157	226.00	14.54	164	229.45	15.14
Asheboro	17	227.76	15.18	17	226.29	15.62
D&F/Knit	24	231.00	18.32	28	237.50	16.08
Pioneer	39	217.90	12.58	42	224.50	14.30
Siler City	7	238.00	5.23	7	243.86	6.07
Weave	39	231.62	11.27	40	235.48	11.27
Williamsburg	31	220.81	12.76	30	219.87	14.31

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2 scores as the pretest (Time 3) for the next instructional period. After another 70 hours of instruction students were again tested (Time 4).

Considerable attrition occurred as some students completed their goals during the first 70 hours of instruction. As the plants moved to around-the-clock shifts seven days per week, it was difficult for those students who were paid to participate outside work hours to continue. Some students may also have felt that they were needed in production as business improved.

In evaluating the changes that took place, one can look at the distribution of the test levels of the CASAS—across time. With each administration the numbers shifted upwards toward more difficult tests. For example, in *Reading* at Time 1, the majority of students (347) were assessed with Level C. At Time 2 fewer (234) were assessed with Level C, and 28 additional students were assessed with Level D. (The greatest attrition also occurred at Level C.) A similar pattern occurred for *Math*. A similar shift also occurred between Times 3 and 4. The fact that students were assessed with more difficult test levels indicates progress that was perceived by their instructors who assigned the test level for assessment.

The scores were compared by paired *t*-tests. The *t*-test statistic measures the likelihood of change occurring by chance. Usually a *p*-value of $\leq .05$ is considered significant, or not happening by chance, in educational measurement. The *Combined* data is the most reliable given the larger numbers. However, some of the sites also had large enough numbers to be considered accurate statistical tests.

(Refer to Table 2 here)

The highly significant gains in *Reading* at all sites between Time 1 and Time 2 are noteworthy. The gains in *Math* at all except one site were highly significant. The gains of the *Combined* sites were also highly significant in both *Reading* and *Math* between Times 3 and 4. (Again, the low numbers in some of the sites make this comparison questionable at the site level.)

The comparison between Times 1 and 4 is particularly interesting since it represents approximately 140 instructional hours. The *Combined* sites gains in *Reading* and *Math* are highly significant, indicating that these gains could not be obtained by chance.

Table 2

CASAS: Paired t-tests

READING

MATH

Time 1 vs. Time 2

Site	Mean Dif.	DF	t-Value	p-Value	Mean Dif.	DF	t-Value	p-Value
Combined	6.01	439	15.28	≤.0001	3.77	422	8.55	≤.0001
Asheboro	4.96	49	5.11	≤.0001	4.86	50	2.30	≤.0256
D&F/Knit	9.00	63	10.20	≤.0001	5.64	61	8.17	≤.0001
Pioneer	4.44	97	4.92	≤.0001	2.38	95	3.34	≤.0012
Siler City	13.38	36	10.36	≤.0001	8.48	26	10.25	≤.0001
Weave	6.16	84	6.35	≤.0001	4.26	85	3.85	≤.0002
Williamsburg	3.22	95	4.84	≤.0001	1.38	92	1.72	≤.0896

Time 3 vs. Time 4

Site	Mean Dif.	DF	t-Value	p-Value	Mean Dif.	DF	t-Value	p-Value
Combined	2.58	128	4.13	≤.0001	3.45	138	3.89	≤.0002
Asheboro	3.92	12	2.91	≤.0130	-1.47	16	-1.26	≤.2268
D&F/Knit	5.56	8	1.78	≤.1123	16.40	9	1.98	≤.0792
Pioneer	.18	37	.16	≤.8709	5.30	36	4.10	≤.0002
Siler City	-.50	1	-.33	≤.7952	5.86	6	2.32	≤.0599
Weave	5.08	36	4.13	≤.0002	3.32	37	3.02	≤.0045
Williamsburg	1.79	28	1.80	≤.0821	-.77	29	-.57	≤.5708

Time 1 vs. Time 4

Site	Mean Dif.	DF	t-Value	p-Value	Mean Dif.	DF	t-Value	p-Value
Combined	9.64	148	11.24	≤.0001	8.15	162	8.92	≤.0001
Asheboro	10.85	12	5.15	≤.0002	7.82	16	1.24	≤.2310
D&F/Knit	14.73	25	8.21	≤.0001	11.40	24	10.66	≤.0001
Pioneer	2.95	38	1.99	≤.0543	8.10	41	7.72	≤.0001
Siler City	10.50	1	3.00	≤.0248	15.57	6	3.78	≤.0092
Weave	15.37	37	10.42	≤.0001	9.42	39	7.06	≤.0001
Williamsburg	5.70	29	3.17	≤.0036	2.30	29	1.14	≤.2620

Job-Specific Test Results

The site coordinators developed job-specific tests to assess learning in specific modules. No statistical tests could be performed on these results, given that they were from different tests. The percents correct on these tests were averaged. Clearly, the students showed gains in the basic skills assessed within the context of specific jobs. Also included are the assessments of job-related instructional materials, such as the module on health and safety.

Table 3

Job Specific Test Scores

	Average Percentages	
Sites	Pretests	Posttests
Combined Sites	65%	89%
Asheboro	77%	87%
D&F/Knit	50%	86%
Pioneer	73%	96%
Siler City	65%	95%
Weave	55%	82%
Williamsburg	71%	86%

The quantifiable results demonstrate the gains the students, college staff, and industry personnel reported. PEP appears to have produced gains on both standardized tests and locally-developed assessments.

Conclusions and Recommendations

The PEP model is a good one which is being institutionalized on a local level in the BI and C&A plants. The structure of the consortium, however, is being reconfigured for the next grant cycle. Without external funding the consortium cannot be institutionalized because no infrastructure exists for its support. The consortium might have become part of the state workplace literacy

effort, with those who have been trained in turn training others. However, the state does not have an institutional structure for the "train the trainer" model. It also has been relatively uninvolved since PEP was funded by a federal grant.

Any consortium that has financial obligations and requirements, as do NWLP grants, must have strong leadership. Ideally, the strongest and most experienced should lead. In this case, the smallest, most rural of the community colleges was in the lead position by virtue of its previous NWLP grant. The two industries wanted the program spread to other sites. Because community colleges can serve only their locality, the colleges near the other BI and C&A plants were asked to join the consortium. While the project coordinator was strong and well organized, she was a peer to the other college directors and lacked support at PCC to back up her leadership. (PCC has, in fact, decided that it should stick with its local mission and not try to lead a future consortium of colleges.) A future consortium should try to find a way to become institutionalized even if it is within the industry rather than in the colleges.

The idea of the TAT made sense. Training should occur throughout the grant period rather than all upfront. Future efforts should separate the evaluation and technical assistance functions so that staff feel that they can ask for help without being evaluated.

Training should have addressed evaluation efforts so that everyone understood what was being monitored. Site coordinators also needed help in developing job-specific, criterion-referenced tests to measure mastery of the basic skills taught.

While the grant does require the creation of job-specific curricula, it appears to this evaluator that the most effective curricula were job-related. For example, the health and safety curriculum was able to be used across sites. Students expressed that they found this instruction particularly beneficial since they were improving their knowledge of those policies and procedures while also working on their basic skills. Similarly, the curriculum related to knowledge of the industry was mentioned by the students as being particularly useful.

Creation of core curricula during NWLP grants makes sense. Being job-related but not job-specific means that they can be used across similar sites (such as in textile industries). If the

curricula are job-specific, they can be used only for those particular jobs usually only in the plant where they were developed. Students also expressed dislike of job-specific materials. ("I'm a _____ all day; why do I have to read about that when I come to class?") Job-related curricula, on the other hand, can expand the students' knowledge while also providing a relevant (functional) context for learning basic skills.

All the programs seemed to be open to students' needs and goals as well as meeting those of the industries. The instructors were highly regarded in all sites for their abilities to meet the students' needs, individualize the curriculum, and relate to industry personnel, policies, schedules, and so forth. Instructors expressed some difficulty in determining the lines between workplace literacy and generic ABE/GED and vocational education (computer training). They said that most students came to class wanting help with life skills or getting their GED. Released time appeared to be preferred to paid time before or after work hours, especially given that some plants are operating all shifts seven days per week.

The individualized educational plans seemed to work well. Students are responsible for recording their activities and discussing their progress with the instructor. Awards for accomplishing given units of work presented periodically in a ceremony seemed to be motivating. These systems helped with motivation and empowerment. Only with learning disabled students did the staff feel the system did not work well. Perhaps some sort of resource for consultation at a university might be considered.

Both the industry and college staff reported initial feelings of "culture shock." However, all stakeholders worked hard to understand each other. The role of the site coordinator was important with the explicit duty of being the liaison between the industry and the college. The site coordinator's curriculum development responsibilities also meant that she was out in the plant and most in touch with industries' goals and needs. In turn, she helped industry personnel understand the goals and needs of the college teaching staff.

While the position of site coordinator was essential in PEP, several sites mentioned that they thought the line between site coordinator and instructor should be "blurred." While duties should

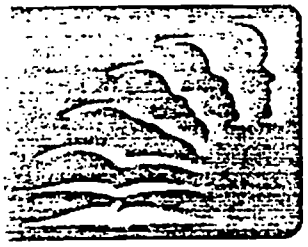
be different, the site coordinators wanted to spend more time observing their curricula being used in the classroom. Instructors wanted more input into curriculum development and more time out in the plant to observe work. Perhaps a longer development phase will permit greater collaboration between curriculum development and instruction.

College staff said that a part-time secretary onsite was important in helping with the record keeping and documentation. Where secretarial help was available only at the college, it was perceived as inadequate. Answering machines and faxes helped with communication among PEP partners.

Finally, some good ideas were observed that might be used in other programs. College foundations proved to be used creatively. Industry donated money to the foundations which, in turn, purchased hardware and software for use in the program. One industry set up a Scholars program to recognize those who had attained a certain CASAS level as well as completed the health and safety unit and a job-specific unit. Another plant had set up a children's library so that students could check out books for their children. They were in the process of also developing an adult easy-reading section of the library.

While the industries were unable to quantify the impact of PEP in terms of productivity, quality, absenteeism and so forth, they are committed to its continuation within each industry site. All have institutionalized the workplace literacy program with considerable financial commitments. These commitments are ample evidence of the effectiveness of PEP.

Appendix A



INSTITUTE
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OF ADULT
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December 21, 1992

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Dear Debra:

This letter provides a follow-up to my visit on December 15-17, 1992, during which time we held onsite interviews with college staff, industry personnel, and a few students in each location. I have also reviewed your grant proposal and first quarterly report in addition to the materials provided by each site.

All objectives for the start-up phase have been accomplished. All sites are operating in classroom labs onsite; all are equipped with computers. Delays in construction of the classroom or receiving computers were temporary obstacles which have now been overcome. Classes are underway in all locations. All have established Advisory Boards which are meeting regularly. The industries are exceptionally cooperative, providing technical assistance in curriculum development, releasing workers to attend the programs on shift (or paying them for attending before or after shift), arranging access to supervisors, workers, and all company materials (including proprietary information).

The cooperating community colleges have "bought into" the project, now seeing the benefits to collaborating with Piedmont Community College's (PCC) leadership. Some are already being asked to deliver credit (fee) courses to those workers who scored too high to participate in the project. This project strengthens already existing relationships. (One industry person described the change in relationship as moving from "dating" to "marriage.")

All partners plan to continue workplace literacy classes after the grant. However, unless the industry pays for the site coordinator position, curriculum development and other coordinating functions will cease. The colleges can provide only onsite instruction through state funding. The industries at this

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point state that they will continue programs, but they are unsure of the arrangements. All industry personnel value the partnerships with the colleges and believe that the programs are stronger as a result of the partnerships.

The training provided by PCC (two weeks during the summer) was rated as excellent by all college personnel. The common comment was that participants were "on overload" and wished that the training weeks could have split with several months between them. They all found the resource materials exceptionally helpful. They have also called upon the Technical Assistance Team (TAT) for help.

The assumption of this grant was that job-specific curricula developed under the first grant could be implemented in other plants of the same companies (Burlington [BI] or Collins & Aikman [C & A]). This has not proved true in any of the new locations. The operations are too different in the various plants to make the job-specific curricula useful; however, the site coordinators who are developing the curricula have benefited from learning about the process of constructing job-specific curricula and from having models available.

However, more use could be made of the existing curricula. While they apparently can't be adopted, they could be adapted in places, such as modifying vocabulary or schematics lessons. There could also be sharing across sites, such as the Health and Safety Curriculum being developed at Central Carolina Community College which could be used with adaptations at other sites.

Most of the sites are still using generic adult basic education materials. Some have created work-related lessons while development of the job-specific curricula is underway. Development of job-specific modules has been slow; they are not yet being used in any of the new sites. While the process is time consuming, site coordinators expressed that they had been busy with other duties, especially "paperwork" and testing. Given that curriculum development is a major task of the site coordinators, this situation needs to be reviewed. Now that data collection processes are established, the half-time secretaries should be able to handle data collection and entry. In one or two cases neither the site coordinator nor secretary has access to a computer except those in the lab; this may have slowed down development. Some of the site coordinators have also assisted in or taught classes in addition to other duties.

All sites appear to need help with developing assessments for the job-specific curricula. My recommendation is to build pre- and posttests for the major units in the job-specific curricula. Project evaluation data will come primarily from the CASAS tests given every 60 hours, completion of the job specific curricula, and supervisor and student surveys.

I also recommend that you explore the feasibility of the development of a few criterion-referenced tests of <u>skills</u> (such as technical vocabulary, interpreting schematics, following directions, reading for the main idea). These skill tests should use materials that are appropriate across all sites to provide project

evaluation data. These could be developed by the site coordinators working together with the TAT to identify common skills and materials. (Materials should be adapted to avoid use of proprietary information.)

I also recommend that industry and college personnel study the issue of gathering impact data in the industries. In one location individual production can be tracked; in others annual performance reviews might be used for studying error detection, promotions, and absences.

Creation of a control group from those pretested and on a waiting list—if tested again after the first 60 hours—would demonstrate the impact of the program on basic skills attainment. (One would hope that the control group would not change while the student group improves.) Comparison to a control group in at least one site will demonstrate the program's effect on basic skills as measured by the CASAS tests.

The community colleges have had to adjust to their different systems. "Paperwork" seemed to be a common complaint; streamlining of the employment and purchasing processes is needed. Personnel problems have arisen from lack of understanding of job roles in spite of job descriptions provided in the grant proposal.

The following observations can be made about each of the locations:

C & A Roxboro/PCC
The main plant is in its second grant; the program is also serving employees from the Knit plant nearby. A separate lab and teacher are at the Weave plant three miles away; C & A purchased new computers for the lab.

The site coordinator is now developing job-specific curricula for the new plants as well as maintaining the curricula developed under the previous grant. She and the experienced instructor have given the new lab all the materials so that the program is replicated there. However, new job-specific curricula are being developed since those for the main plant are not appropriate.

C & A Siler City/Central Carolina Community College
Of all the new locations served by different colleges, this site is the furthest along due to their use of what was already developed by PCC at C & A Roxboro. Not only are they using generic adult basic education materials, but they are also using print and computer instructional materials that are industry-related and beginning to use a job-specific curriculum developed at their plant. This can be attributed to good teamwork among the College personnel and use of the existing materials.

BI Williamsburg/PCC
Although part of the original project, the program has suffered from the inability of the college to replace the site coordinator when he resigned last June. The full-time instructor was supposed to assume the position of site coordinator; however, no full-time instructor was hired to replace her. In

addition, third shift part-time instructors have come and gone, making it impossible for the new site coordinator to do that job. The delay in hiring the full-time instructor has also meant that the new site coordinator could not provide the needed technical assistance at the new BI locations.

BI Asheboro/Randolph Community College
Only generic commercial materials were evident except for one work-related instructional unit. While I did not see the job-specific curriculum being developed (and neglected to ask to see it), it was described as mostly "notes" at this time. The site coordinator said that she had not been able to develop it as fast as necessary due to other duties. She also expressed some insecurity about the task and needs the support of the TAT. Personnel problems and poor teamwork were evident; the source of the problems warrants further investigation.

Another problem expressed was the lack of a part-time secretary onsite. However, in spite of a nice office, no computer is available (other than in the lab for instruction) for the secretary or site coordinator.

The industry trainer expressed great willingness to help, but he felt frustrated by College procedures. The two "cultures" appeared to have some difficulty at this site. My recommendation is to assist the College in solving its personnel difficulties and get on with the development of the job-specific curriculum. The instructor should install (on the computer) and use the industry related instructional materials that are available from the first BI project.

BI Burlington/Alamace Community College
While good teamwork and strong personnel were evident, the job-specific curriculum is not very far along. The site coordinator needs to focus on that development and get help from the TAT. Some industry-related materials were being used.

The problem of the third shift instructor position has been worked out here very well; that individual serves as an aide in the afternoon class, thereby keeping in touch with the full-time instructor.

The computers at this site are the newest and most powerful of all locations. Greater use of this capability should be made by customized instructional materials and newer, more creative commercial materials.

My closing comments focus on the ambitious project that you are undertaking. You are doing an excellent job and are to be commended for the progress that you have made. However, it is difficult for one small, rural community college to lead other community colleges. PCC bureaucracy has had difficulty with this new role for you, not giving you the autonomy that you need to act and respond quickly to project problems.

Your regular staff meetings with project coordinators, site coordinators, and full-time instructors are essential and can facilitate the sharing that should be taking place. I am optimistic about the future of the project as you test the model of industry-education partnerships. Thank you for all your helpfulness during my visit.

Sincerely,

Nickie

Eunice N. Askov
Professor of Education
Director, Institute for the Study
of Adult Literacy

Appendix B

PIEDMONT COMMUNITY COLLEGE PROJECT
Workforce Literacy Project
Supervisor/Training Director Interview Guide
January 18-20, 1994

1. Name of Company:
2. Name of Class:
3. Number of workers who participated _____.

4. How satisfied were you with the class(es)? Why?

5. How did the workers benefit?

6. How did the company benefit?

7. What were the shortcomings of the class(es)?

8. What changes have you noticed in the workers who participated? (productivity, quality, safety, absenteeism, retention)

9. Has participation in the class(es) affected their chances for advancement?

10. How much did the workers talk to you about the class(es)?

11. How did the workers who participated feel about the class(es)?

12. How did the other workers feel about the class(es)?

13. How does this training compare with training the company has done or could do itself?

14. Would you recommend the company continue this kind of training?

15. What are the advantages and disadvantages of working with the College in offering the class(es)?

16. Other comments:

PIEDMONT COMMUNITY COLLEGE PROJECT
Workforce Literacy Project
Staff Interview Guide
January 18-20, 1994

1. How satisfied are you with the project?

2. What were the greatest satisfactions? Least?

3. What factors helped with the success of the project?

4. What factors acted as deterrents to the project?

5. To what extent were there agreements on the goals among all stakeholders?

6. What do you see as the major outcomes? Major disappointments?

7. What factors helped with development of the program? What was a waste of time?

8. How do you feel about your linkage with industry? Will it continue?

9. What was the most difficult part of the project?

10. What would you change?

11. How cost-effective was it?

12. What are your plans for the future regarding this program?

PIEDMONT COMMUNITY COLLEGE PROJECT
Workforce Literacy Project
Learner Group Interview Guide
January 18-20, 1994

1. Place of Employment:
2. Name of Class:
3. How satisfied were you with the class? Why?
4. What was the most important part? Least Important?
5. What did you gain from the class?
6. How did the class help you with your job?
7. How did the class help you outside the job?
8. What was most difficult for you with the class? Easiest?
9. What did you like best about the class? Least?
10. Did the class help you with getting an advancement or a better job?

11. How did your fellow workers feel about you taking the class?

12. Would you recommend others to take the class?

13. Did you get support from your supervisor to attend the class?

14. Do you look forward to any more classes?

15. Do you do any more reading (math or writing) at work than you did before the class? Any more at home? If yes, explain.

16. Other comments.

SITE REPORTS

NATIONAL WORKPLACE LITERACY PROJECT

Alamance Community College - Burlington Industries Partnership

June 1, 1992 to February 28, 1994

BI-PIONEER SITE -- FINAL REPORT

Submitted by Suellyn L. Dalton, Project Coordinator
and
Cathy G. Higgins, Site Coordinator

III. SITE REPORT -- BI Pioneer

A. Overview

The Burlington Industries Pioneer Plant was one of seven sites of the Partners for Employee Progress (PEP) Program, a National Workplace Literacy Project awarded to Piedmont Community College. Alamance Community College, as an educational partner (subrecipient) within the PEP consortium, conducted the program at BI Pioneer. The name PACE (Pioneer Adult Continuing Education) was chosen by Pioneer management for the on-site program.

Pioneer was one of three BI plants involved in the consortium, the others being the Asheboro and Williamsburg plants. There were actually two Pioneer plants at the start of the project period (Pioneer I and Pioneer II) which, because they were located in adjacent facilities, had decided to combine resources to offer one educational lab. Due to the closing of the Pioneer II plant midway through the project period and the resulting small number of Pioneer II participants, this report reflects combined statistics for both Pioneer plants.

B. Program Features at the BI-Pioneer Site

Plant Descriptions

Pioneer I is a yarn preparation plant composed of winding, twisting, yarn dye, warping, and slashing departments, as well as several departments that service these processes. Pioneer II was a weave plant with hundreds of weaving machines. At the start of the project, the two plants employed nearly 700 employees. With the closing of the Pioneer II plant, many employees were transferred to jobs in other BI plants, while some were laid off or took early retirement. Current employment at the Pioneer I plant is approximately 400 employees.

Lab Facility

Since the PACE Lab is located in the middle of the Pioneer complex, it is easily accessible to all employees. The original layout of the lab included a larger room (15' x 24') containing 8 computer workstations, 3 fullsized bookcases, and an 8 ft. conference table. A smaller adjoining room became the instructor's office, complete with desk, file cabinet, worktable, and bookcase. This layout was never ideal, since each class had group discussions and individual computer study going on at the same time, and the group discussions were always a distraction for those working on computer.

Although the students consistently recommended additional space as the one thing that would improve the program, this was not a possibility during the project period. Several months into the project, the instructors decided to reorganize the two rooms. As a result, a smaller conference table was moved into the instructor's office which then became the group discussion area. The larger classroom space then contained the instructor desk, computer workstations, and bookcases. Although this creates some inconveniences, nearly all students remarked that the change was the best solution to the problem.

Class Schedules

At the beginning of the project, 7 classes were scheduled, 10 students per class, with each meeting 3 hours per week (3 classes on first shift, 2 on second, and 1 on third). Due to the closing of Pioneer II, one first shift class was omitted in the 3rd quarter, and the schedule for the remaining 6 classes has continued throughout the project period.

Program Benchmarks

The benchmarks for success were tailored to the three main components of the project -- basic skills as measured by standardized reading & math tests (CASAS), job skills as measured by pre/posttests designed for the customized curriculum, and the GED certificate. Students worked simultaneously on improving their basic skills and job skills, and if applicable, they also worked on passing the GED test.

Program levels corresponded to the CASAS test levels (scores up to 215 were Basic Level; scores of 215-230 were Intermediate level, scores above 230 were Advanced Level). When students scored above 230 on CASAS reading and math, they had completed the basic skills requirements of the program. Additionally, students were expected to take the PACE Curriculum Pretests, to study the PACE curriculum, and then to score at least 85% on posttests. Students who were not high school graduates were given the option of studying for and completing the GED with the standard GED score minimums. Certificates of progress and completion were awarded accordingly.

Progress Reports

Quarterly reports were submitted to the Project Director, which included statistics and narratives, as well as various appendices, such as articles in company newsletters. Additionally, progress was reported quarterly at Advisory Council meetings and in periodic meetings with and memos to managers and supervisors.

C. PARTICIPANT CHARACTERISTICS

Pioneer Site

Total Number of Employees Enrolled: **124 employees**
6/1/92 to 2/28/94 (7 quarters)
Average # hours spent in lab per student: 140 hours

(Completers = completed job-related curriculum)		Non-Completers	Completers	TOTAL	%'s
Race:	Anglo-Saxon	26	13	39	32%
	African-American	53	31	84	67%
	Native American	0	0	0	0%
	Asian/Pacific Isl.	1	0	1	1%
	Hispanic	0	0	0	0%
	Total employees:	80	44	124	100%
Age:	Average Age	47	44	—	—
Educatio	HS Graduate	34	31	65	52%
	Non-HS Grad	46	13	59	48%
Yrs with (	0-5 yrs	10	9	19	16%
	6-10 yrs	11	6	17	14%
	11-15 yrs	11	4	15	12%
	16 + yrs	48	25	73	58%
Sex:	Male	45	15	60	49%
	Female	35	29	64	51%

ADDITIONAL DATA:

Completion of Program Features		
# completed PACE curriculum:		44
# completed all CASAS levels:		57
# completed GED:		9
Average Gain on Tests		
Average gain on CASAS Reading Surveys:		4 points
Average gain on CASAS Math Surveys:		4 points
Average gain on PACE curriculum tests:		28% pts
Placement Levels	**At Entry**	**t Project End**
Adult Basic Educatic	65	55
Adult Basic Educatic	39	45
GED Preparation	5	5
Adult High School	15	19

REASONS for LEAVING PROGRAM (drops)

	Non-Completers
Still enrolled (will complete after 2/28/94	37
Job pressures/job changes	3
Employment terminated	2
Plant closing (job moved/termin.)	31
Met personal goals, didn't want JSC	5
No interest (left <3 wks after enrollment)	2
TOTAL:	80

STATISTICAL DATA of PARTICIPANTS:

Average length of employment when enrolled: 18.5 years

	# empl's	% of total
# lateral moves or promotions:	18	15%
# improved self-esteem:	109	88%
# furthered their education:	8	6%
# improved attendance *:	44	35%
# improved communication:	94	76%
# improved production/quality:	81	65%

* Note: Supervisors reported 49% never had an attendance problem.

EVALUATIONS from Participants (top 3 responses):

1) Increased my self-confidence
2) Helped me gain a better understanding of and ability to do things on my job
3) Helped me to communicate better with my co-workers and my team

EVALUATIONS from Supervisors (top 3 responses):

1) Increased employees' self-confidence
2) Helped them work better as members of a team
3) Helped them to make better, more constructive decisions

D. Personnel

Full-time Project Staff

The college's Director of Literacy fulfilled the position of BI-Pioneer Project Coordinator, committing 25% of her full-time position to project duties. Two other college literacy staff were assigned to full-time work (40 hrs per wk) for the duration of the project. The consistency in these three positions has added stability to the project, which proved invaluable because of the many personnel changes in both part-time college and full-time industry staff.

Suellyn L. Dalton, NWLP Project Coordinator, has a Masters degree in Adult Education and a Bachelors degree in Speech and English, and is in the process of completing a Doctoral degree in Adult and Community College Education. She has several years of experience in directorship positions of adult education programs, including Literacy Programs, Job Cop-Op, Compensatory Education, Vocational Trades, and Training Center for Mentally and Physically Handicapped. She has served on a variety of public service boards and advisory councils.

Cathy G. Higgins, NWLP Site Coordinator, has an Masters degree in Education, along with an undergraduate degree in Music and Education. She has 5 years of varied experience in the field of adult literacy, as an instructor, computer specialist, and workplace program promoter. Her previous trainer/educator experiences ranged from banking to parent/child program settings, and her administrative experiences ranged from educational to business settings.

Mary Gamble, NWLP Lead Instructor, has a Bachelors degree and teaching certificate in English and History, along with graduate coursework in reading instruction. She has extensive teaching experience, including 6 years as an adult literacy instructor, and approximately 15 years as a full-time or part-time teacher in elementary, middle, and high school grades. Additional experiences include volunteer work with schools, church, and community groups.

Part-time Project Staff

During the startup phase of the project, there were three staff assisting with part-time secretarial and instructional requirements -- Betty Hinson, Barbara Barbee, and Lynell Morrow. None of these three were able to continue the project beyond the project's first quarter for various reasons.

Loretta Evans began working with the project at the start of the 2nd quarter, as half-time secretary and as instructional aide, and continued for the duration of the project period. Although

Ms Evans was not working with the project during the initial quarter, she quickly became a valuable part of the project team.

Kami Hardy was hired to instruct the 3rd shift class and to aide in one 2nd shift class. When she left the program in the 3rd quarter on maternity leave, Deirdre Foust was hired to substitute for 2-3 months in her absence. When Ms. Hardy returned from maternity leave, she was not able to continue with the 3rd shift class. Thus, a third instructor, Marie Alston, was hired as the substitute for the summer quarter, while we searched for a permanent replacement. At the end of the summer quarter, Don Tickle took over as 3rd shift instructor and aide in the Monday-Wednesday 2nd shift class. He remained for the duration of the project.

Industry Staff

Four industry personnel were involved with the project from beginning to end -- William Bradham, Division Training Manager; Don Shepherd, PI Plant Manager; David Johnson, PI Personnel Manager; and Ray Foushee, Slashing Department Head. Their continued involvement was important, since there were several changes in other industry personnel.

Due to the closing of the Pioneer II plant, five staff who were all on the Advisory Council, discontinued project involvement after the first few quarters of the project -- Joe Hatzopolous, Plant Manager; Coy Briggs, Plant Superintendent; Jerry Cummings, Training Manager; Gary Miller, Personnel Manager; Gladys Banks, Weave Room Supervisor.

Other changes in industry staffing, involving six more people, were due to job transfers. They included Edward Hull, original PI Training Manager; Connie Crenshaw, new PI Training Manager; Mack Carr, original PII Personnel Manager (replaced by Gary Miller, mentioned above); Michelle Price, PI Personnel Manager; Teri Lundquist, Winding/Twisting Department Head; and Kathy Jones, Yarn Dye Department Head.

E. Lessons Learned/ Recommendations

Staff Training

Although the project training session was well organized and contained much valuable information, both the Site Coordinator and Lead Instructor felt it would have been better to divide the two-week training period into an initial week of training at the start of the project, followed by

a few months of site work before returning for another week of training. This would have allowed time for valuable reflection on actual experience as the project developed.

Customized Workplace Curriculum

Staff at the Pioneer site spent a great deal of time considering the merits and drawbacks of developing a job-specific customized curriculum, especially when faced with actual results in the classroom. Our experiences with this project indicated that the degree of curriculum specificity required for the workplace project was dependent on recognition of the following:

1. It should not be assumed that a job or department-specific curriculum is the actual need, nor should such a curriculum be predetermined by what is written in the project proposal, since the actual skills needs cannot be adequately determined until the project begins.

2. Learners must be respected as capable adults who have learned their jobs through actual experience. An outsider who conducts a task analysis does not gain the same quality or quantity of experience as the learner has about his or her job. Thus, any curriculum that does not incorporate a high degree of learner involvement in an ongoing process of determining curriculum content and context will be of limited effectiveness. Learners must also be respected as employees who have goals that may often extend far beyond their immediate jobs. Attention to these goals can be a primary motivator in their learning and will better prepare them for future changes on the job.

3. Another major determinor of curriculum content is the extent of the company's own training process. It was our experience that a less specific curriculum best fit the needs at BI. They had extensive job training manuals and job materials and did not see the need for the curriculum to use these materials to a great degree. They preferred that the curriculum focus on the commonalities across jobs and departments, so as to allow employees a more plant-wide and company-wide perspective.

Best Use of Project Staff

The arrangement of a Site Coordinator who was responsible for the task analysis and curriculum development and a Lead Instructor who was responsible for implementing the curriculum proved difficult. More overlap of job responsibilities would have allowed for closer collaboration in the curriculum process, producing a curriculum that would be more responsive to actual needs of learners in the classroom.

Advisory Council

The Advisory Council was too "top heavy" with management level staff. With only 2 or 3 employee/students on the council, student representation was inadequate. We recommend a more balance distribution of membership (i.e., 2 managers, 2 front-line supervisors, 4 students, and 2 project staff). We also would suggest that each class elect or appoint a "team leader" who would be responsible for a) facilitating quarterly "team meetings" in class, b) producing a written "team report", and c) delivering the report to one of the employee/student representatives on the council each quarter. In this way, student participation in project decisions would be increased.

Staff Meetings with Supervisors

We found that as part of the task analysis process, initial meetings with supervisors provided only limited information as to their real needs and concerns, perhaps because they had only limited knowledge of the activities and materials being used in the classroom, and thus were not easily able to relate actual practices on the floor to skills that might be taught in the classroom. To address this, we recommend periodic meetings, perhaps quarterly, between project staff and front-line supervisors. This would provide a forum for a) staff to inform supervisors of instructional materials and activities being used in the classroom, and b) supervisors to inform instructors of ongoing concerns and specific needs on the production line.

Employee Recognition

Although the project proposal suggested quarterly recognition of employee progress, we found it better to schedule semi-annual awards ceremonies after each round of standardized progress assessments. These were also events that allowed the program more visibility among all employees in the plant and which better fit into the rhythm of other plant activities. For example, a ceremony was held during the plant's Winter holiday dinner and another in the Summer as part of a yearly "Open House" for the learning center.

Program Evaluation

Although a variety of means were used to evaluate program impact, there was not enough focus on student perceptions of their own progress. Written supervisor evaluations of their employees (ratings on a survey form with supervisor comments added) were solicited each quarter, as required by the project design. However, student evaluations were solicited infrequently and survey forms (such as supervisors used) were not required by the project design. One solution to this low emphasis on student perceptions is to incorporate a portfolio assessment approach into instructional activities. This would provide a consistent and meaningful activity for them and produce a rich set of data for evaluations.

FINAL REPORT

COLLINS & AIKMAN CORP.

AND

CENTRAL CAROLINA COMMUNITY COLLEGE

SILER CITY, NORTH CAROLINA

SUBMITTED BY:

LAURA L. COFFEE
SITE COORDINATOR

Overview/Introduction

Lifelong Learning, or LLL, is an innovative partnership of private industry and public education. The Lifelong Learning lab, located in the Collins & Aikman Mastercraft Division Plant in Siler City, provides job-related and basic skills instruction to textile workers at the plant. Workers are paid by C&A for their time in class. Nearly half the plant has volunteered to participate in LLL, over 400 Associates! Classes are held on all three shifts.

Piedmont Community College in Roxboro, NC received the original National Workplace Literacy Grant in 1990. Due to the success of this effort, it was expanded in 1992 to include a consortium of four community colleges to develop customized basic skills programs for additional Collins & Aikman and Burlington Industries plants. Lifelong Learning in Siler City is one of the "new" sites, a result of this expansion.

LLL is working to enhance the skills of associates to meet the demands of new technology and new employee involvement processes. LLL is helping to prepare associates to meet the Mastercraft Vision for the year 2000 of achieving World Class status. Lifelong Learning objectives include improving basic skills, computer literacy, knowledge of plant processes, critical thinking, problem solving, and teamworking skills. These objectives contribute to associate's self-esteem, morale, productivity, communication skills, efficiency, and the ability to adjust to new technology and decision making requirements.

Program Features

Facility: The Siler City Plant is a weave plant. The participant goal was to serve 108 associates. A total of 229 associates have been served through LLL, exceeding this goal by 121.

Classes began on September 14, 1992. The first classes were held in the plant training room with five computers. LLL then moved to the Lifelong Learning Lab and began classes in the Lab on December 7, 1992. This facility is equipped with eight IBM XT and 286 computers, as well as a printer.

The classroom is located off the main weave room in the plant and is accessible to all associates. The walls of the classroom are covered with photos of associates with their certificates, metric posters, certificate examples, and company and student objective lists. The classroom is well lit and equipped with new and comfortable furniture.

Progress Reports: Monthly program reports were written by the site coordinator and distributed to: 1) the Division Education and Training Manager; 2) the Plant Human Resources Manager and Education Coordinator; and 3) the College Provost for Chatham County and Continuing Education Coordinator. These program reports were an important way the Lifelong Learning partners kept up-to-date on progress in the program.

Monthly computer reports were also written by the Site Coordinator and distributed to industry and college personnel to keep everyone informed on the status of classroom computers. These reports were useful to communicate across the Division regarding upgrades and repairs.

Quarterly reports were written and compiled by the program and site coordinators. These reports were distributed to industry, college, and PEP grant personnel.

Program of Instruction: Lifelong Learning offers four levels of instruction. Students work through each level at their own pace. Pre-tests determine placement and post-tests are given to verify mastery of objectives.

Math and reading instruction and assignments are based on the CASAS Employability competencies for each level. The departmental curricula and Health and Safety curriculum correspond with the CASAS Job Profile competencies developed through job task analyses.

A functional context learning approach is utilized in all four levels. This means that instruction is taught contextually, in ways that reflect actual use on the job and in real-life situations. Work forms, graphs, labels, etc. from plant processes are utilized in the classroom in addition to the departmental curricula. Upon completion of each level, students are awarded a certificate.

Definitions of each program level:

Level A (pre-test = CASAS 200 and below). Master the reading and math objectives for CASAS Level-A Employability.

Level B (pre-test = CASAS 200-214). Master the reading and math objectives for CASAS Level-B Employability. Can begin the Health and Safety Curriculum.

Level C (pre-test = CASAS 215-225). Master the reading and math objectives for CASAS Level-B Employability. Can begin the Departmental Curricula.

Level D (pre-test = CASAS 236-245). Master the reading and math objectives for CASAS Level-B Employability. Continue working through customized job-related curricula.

C&A Scholar Level - CASAS 245 and above on Level-D math and reading. Successfully complete a Department Curriculum and the Health and Safety Curriculum.

Students at all levels work on their own personal learning goals which include topics such as computers, understanding benefits, charts, graphs, schematics, metrics and measurement, basic machine and carpentry math, and basic electronics. (See Appendices for a list of customized curricula developed through the grant.)

Individual assessment, prescription, monitoring of progress, and evaluation are a collaboration between instructor and learner and are an ongoing process in the LLL program.

Average Participant's Profile

Average Age: 39
Sex: Male
Race: White
Years with Company: 0-5 years

PROFILE OF LIFELONG LEARNING PROGRAM
PEP FINAL REPORT-SILER CITY LLL

I. G.1. LEARNER CHARACTERISTICS

CHARACTERISTICS	NON-COMPLETERS	total	COMPLETERS	total
Race:				
Caucasian	496		150	
African Amer.	237		74	
Native Amer.	1		1	
Asian	2		2	
Hispanic	18		2	
		754		229
Age:				
Average age	40.7		39.5	
		754		229
Education:				
H.S. Graduate	566		189	
Non-H.S. Grad.	188		40	
		754		229
Years at C&A:				
0 to 5	360		114	
6 to 10	188		64	
11 to 15	55		20	
16 or more	151		31	
		754		229
Sex:				
Male	426		136	
Female	328		93	
		754		229

Total: Job-Specific Completers 42

Number of Promotions for LLL students during PEP Grant 31

The Adult Education Component documented 229 participants; 3 received their GED through the program.

Personnel

College Personnel

Program Coordinators:
Shea Hensen, June 1992 - May 1993.
Ms. Hensen served as interim Literacy Coordinator for Chatham County while Ms. Karen Allen was on educational leave. Ms. Hensen has a Masters of Science Degree in Adult and Community College Education from NC State University and has taught GED classes in Chatham County.

Karen Allen, May 1993 - present.
Ms. Allen initiated the project before accepting an award to complete her course work towards an EdD in Adult and Community College Education from NC State University. Additionally, she holds a Bachelor Degree in Education from Campbell College. Ms. Allen is an experienced adult literacy instructor and has seven years of progressive experience in program administration, supervision, and planning for adult education programs at the Community College level.

Site Coordinator:
Laura Coffee, June 1992 - present.
Ms. Coffee has coordinated and implemented federal grants through HUD. This involved coordinating family literacy programs and support. She worked as an admissions administration for an international education organization and has taught ESL and tutored adult basic education skills. She holds a Masters of Social Work in Policy and Planning from the University of Michigan, Ann Arbor.

Lead Instructor:
Annie Roach, July 1992 - February 1994.
Ms. Roach has taught GED for three years in Chatham County. She has a special interest in working with new readers. She holds a Bachelor of Arts Degree in Philosophy from the College of Charleston in Charleston, South Carolina.

Part-Time Instructors:

Ann Scott, September 1992 - December 1992
Terry Thomas, December 1992 - April 1993
David Bensen, December 1992 - January 1993
Beth Garner, January 1993 - December 1993
Richard Plaisted, March 1993 - July 1993
Jimmy Brower, December 1993 - present

Industry Personnel

Education Coordinator:
Dale Ray, June 1992 - present.
Mr. Ray has worked at C&A Siler City since 1969. His experience working in various jobs at the plant and his insight into the experience of technological change has been helpful to the LLL program. Mr. Ray holds an Associate Degree in Industrial Management from Central Carolina Community College.

Human Resource Managers:
Joe Jackson, June 1992 - July 1993.
Mr. Jackson holds an MBA from the University of North Carolina in Chapel Hill. Mr. Jackson left his position with C&A to accept a position with another company.

Danny Blackwell, July 1993 - present.
Mr. Blackwell attended the University of South Carolina in Interdisciplinary Studies. Mr. Blackwell came to Siler City from the Mastercraft Division Park Plant, where he initiated a workplace GED program.

Lessons Learned/Recommendations

We feel we have enjoyed an outstanding partnership at our site. What made it work? Communication.

An important aspect of our successful communication has been LLL's efforts at being good listeners and observers. We have listened to industry management, to supervisors, and especially to our students. Informal conversations, surveys, and interviews have facilitated our listening process. In addition to listening, we have observed what is emphasized in the plant. Observation told us that health and safety is a significant concern at our plant. By listening and observing, we were able to respond with a highly successful Health and Safety Curriculum.

Our industry contact persons have been accessible and supportive to the project from the beginning. The contact persons have made a visible presence in the plant in relation to LLL with recruitment, media coverage, and certificates. This has communicated to C&A associates the importance of the program. The industry has included LLL staff in industry meetings and training. This practice provides excellent information for keeping LLL current with industry trends and future program planning.

LLL staff has kept industry and college partners informed and included them in program development and planning. This has created a supportive and collaborative environment conducive to success. Setting program objectives in the very beginning was an important ingredient to success. The objectives were approved by the industry, college, and plant associates.

These objectives created a mutual vision for all stakeholders. This avoided problems such as conflicting objectives between the industry and associates or the college.

Lastly, an important recommendation or lesson learned was to be flexible! In the short time LLL has been involved in the plant, there have been technological changes that required revisions in the customized curricula. Change is constant! Staff must be willing to have flexible schedules adapting to serving three shifts. Students experience shift changes, job changes, layoffs, and job overload. Class transfers and changes are frequent and documentation must be adapted to this situation.

The Lifelong Learning program has been true to its name. A place has been created where educational providers, industry management, and hourly associates have come together in a spirit of cooperation and established a place of continuous learning. Lifelong Learning has enriched the personal and work lives of more than simply the number served by the program. The community, children of associates, the C&A Mastercraft Division, and many others have benefitted from this partnership of private industry and public education.

FINAL REPORT

BURLINGTON INDUSTRIES

AND

PIEDMONT COMMUNITY COLLEGE

Madkins, North Carolina

Submitted By:

Queen Foster-Williamson

Site Coordinator

Workplace Grant Burlington Industries-Williamsburg Plant

Introduction

Burlington Industries is a multi-million dollar textile giant with plants in nine states and one foreign country. Founded in 1923, BI has grown from a small, privately owned company to a competitive manufacturer with forty seven plants employing 23,400 employees in a global marketplace.

The Burlington Industries-Williamsburg Plant, located in rural Caswell County, North Carolina, was built in 1966 as a response to increased demand for the company's products and to accommodate new and more technologically advanced weaving equipment. A company built and nurtured by individuals who understand that a body can be no greater than the sum of its whole, BI management perceived that in order to continue to be a world class leader in textiles, the employees must be prepared to meet futuristic challenges as a literate and skilled workforce.

The company's commitment to its current employees resulted in the visionary development of "The Learning Center" at the Williamsburg Plant. The Learning Center, christened by Robert Sills, Plant Manager, had the formidable task of assisting the employees of the Williamsburg Plant in the refinement of their adult basic academic skills, life skills, personal goals, and improved job related academic skills.

Employing over 550 individuals, the Williamsburg Plant operates on a 24 hour basis, averaging 5 - 6 days per week. This plant has been recognized as one of the most modern textile plants in the United States and it is constantly exploring options that allow it to be more productive while producing first quality fabric. Computers that were once isolated to certain sections of the plant are now sprinkled throughout the entire structure.

Segment I

The Employment of Staff

The workplace grant project began June 1, 1992 with a projected end date of November 30, 1993. A three month extension was requested by Piedmont Community College on behalf of the grant partners from the Department of Education, Washington, DC. This extension was approved which allowed the program to run for another three months, thus moving the final end date to February 28, 1994.

The first segment of the grant had four goals:

1. Employment of staff
2. Training of staff and grant partners
3. Promoting the program and recruitment of students
4. Starting classes and improving the competency and academic level of students

The Williamsburg Plant was already allowing classes to be provided on site to its employees. Classes were running two per shift, three times per week. Each class session was lasting one hour. Thus, the class site was in place. In conjunction with plant specifications, the number of classes would remain at two per shift. Each class would maintain a minimum of eight students with an overall target number of ten. Class length

would remain at 60 minutes per session. This hour would include travel time to and from the classroom.

The classes started June 6, 1992. Sixty students were enrolled. Students were tested using the Comprehensive Adult Student Assessment System (CASAS). North Carolina Dept. of Community Colleges' guidelines determined the next level of the testing process and these scores were used to classify the students as ABE I, ABE II, GED, or AHS.

The chart below gives you the placement scores that were initially used to place students in the program. The CASAS placement scores were changed later at the direction of the project director upon receipt of new placement scores from the NC Dept. of Community Colleges.

CASAS SCALE USED FOR PROGRAM PLACEMENT

CASAS Test Score	Level	Placement
80 -- 214	A	ABE I
215 -- 225	B	ABE II
226 -- up	C	AHS & GED

The Burlington Industries-Williamsburg Plant had identified the plant's personnel director, Patty Gibson, as the contact person to represent the industry and to be a liaison between the industry and the community college. Mrs. Gibson took a leave of absence and when she was due to return to her position, she was promoted and transferred to another industry site. In her stead, Robert Parrott, the plant's training manager, was given the task of fulfilling the role of contact person. Mr. Parrott had been with the plant throughout the college's tenure at the plant and he was familiar with the role of the parties involved in this project.

The site coordinator, David Bess, who was supervising the on-site classes prior to the implementation of the grant, had been identified as a carryover employee. However, the month prior to the startup of the grant, this person resigned. The full time instructor, who was conducting the established classes, continued to teach classes as scheduled. Thus, the start-up of classes was ahead of schedule.

With the resignation of the proposed site coordinator, whose responsibilities included training new part-time instructors, subbing, and revising job related curriculum in addition to the overall supervision of the site, the part-time instructor, who was also an experienced potential carryover employee also resigned to take a full time job. This meant that a new part-time instructor had to be hired and trained for the workplace grant to accommodate students on three shifts in addition to restructuring the site coordinator's duties and responsibilities.

The full time instructor working at the Burlington Industries-Williamsburg Plant had been hired February 5, 1990 and had worked for Piedmont Community College under two prior workplace grants. Competent and receptive to the adult learner, she had been received well at the Williamsburg Plant and was experienced in the field of workplace basic skills. All parties involved -- Piedmont Community College, Burlington Industries-

approval and encouragement. The part-time instructor was from a public school setting and had more expertise in the area of being an authoritarian - a take charge person who had trouble separating and adapting prior experience so that it would be beneficial to the current situation. Without taking into consideration the adult's goals, motives, and needs, the new adult workplace instructor's efforts succumbed to frustration and loss of patience. She submitted her resignation in November 1992. The search began for her replacement.

The plant manager, Robert Sills, and Robert Parrott, the training manager and site contact person, were distressed at the parade of part-time instructors that had come and gone in the course of the programs that had been running at the work site. Mr. Sills expressed a need for a second full time person to be hired to come to the site and teach classes full time. Employees in the classes taught by a part-time instructor were complaining that as soon as they bonded with him/her, the person would resign.

This kept the students in a state of perpetual limbo. They had to adjust to a new face, a new teaching style and a new person to try to explain their goals, aspirations, and shortcomings. The pros and cons of having another full time person on site always revolved back to cost - not what was best for the students. However, at the insistence of the Williamsburg Plant management staff, the funds were made available to fund a full time position for a second person at the worksite.

With the issue of the need for a second full time person resolved, the advertisements went out and a full time instructor came aboard February 1993. The stability and commitment brought to the classroom by an instructor who the students knew would be there longer than a couple of months made a great impression on students, industry personnel, and the site coordinator. Students want loyal, credible, and reliable instructors who they can count on being there to help them with their problems day after day.

The revised setup at the Williamsburg Plant required the site coordinator to continue teaching two of the classes so that the full time instructor could have a schedule that would be less than twelve hours per day. The isolated plant made it unfeasible for the full time instructor to split her work day which would double her driving mileage and travel time. It was critical that the instructor have a schedule that was manageable so that she would be mentally healthy and, hopefully, suppress potential burnout that is so common in Adult Basic Skills instructors.

Staff

Valuable time was lost between the grant startup and the hiring of a second full time instructor. Essentially, the site coordinator was the stabilizing personnel during this "stage of employee change."

The site coordinator/instructor holds a Bachelor of Science Degree in Business Administration from Greensboro College. Currently, she is in the end stage of meeting requirements for a Master's Degree in Adult Education. Ms. Foster-Williamson has been

employed full time by PCC under two prior workplace grants. She was the first full time Adult Basic Skills instructor employed at PCC.

The Williamsburg workplace site shared a full time secretary with the Collins & Aikman work sites in Roxboro, North Carolina. This secretary also served in a clerical capacity to the workplace project director. The secretary was not available to the Williamsburg site as much as the site based staff had hoped.

There were several visits made to the Williamsburg Plant by the workplace secretary. The secretary assisted with filing, coalition of materials, making copies, typing, ordering supplies, and serving as a liaison between the worksite and the project director. However, this was not as productive as it could have been if there had been no restrictions on the type of assistance that she could provide. Clerical assistance was needed at specific times and that specific time dictated what work, forms, or reports were due. In future projects, clerical assistance is needed who can perform any clerical duties or data collection and the clerical assistance employee should understand that he/she is assigned to the work sites which involves travel.

Training of Staff and Grant Partners

The Technical Assistance Team (TAT) was formed and comprised of experienced workplace staff. The TAT members were: Debra Harlow, Project Director, Queen Foster-Williamson and Linda Caywood-Farrell, both Site Coordinators at the Williamsburg Plant and Collins & Aikman, and Brenda Clayton, full time instructor. Together, the Technical Assistance Team is composed of more than twenty five years of teaching experience and expertise. More than half of this experience in the field of adult education.

The Technical Assistance Team began its training of the college partners in July of 1993. Two weeks of concentrated sharing of information was implemented. This training was provided in the form of presentations, written material, visuals, question and answer sessions, on-site visits, and numerous other learning opportunities.

The Technical Assistance Team provided follow up assistance in the form of site visits, telephone calls, faxes, periodic meetings, etc. Sample curriculums were also shared with the site partners.

In an effort to avoid repetition of work done at the individual work sites, the site coordinators for the Burlington Industries plants agreed to meet approximately every six to eight weeks to share information and discuss obstacles that arose. These meetings were sponsored by the industry since the PEP grant had not budgeted travel funds for these trips.

These meetings were held on a rotation basis at the different participating Burlington Industries plant sites. The contact persons for each plant met with the site coordinators so they could be abreast of what was occurring at all the sites. This contributed to the strengthening of the commitment by the grant employees since it allowed workers an opportunity to draw from each other's strengths.

These "get togethers" were also beneficial in that the grant's college employees often kidded themselves as being "ships without home ports." As site based employees, it is natural to become acclimated to the industry where workers spend their workday, even though grant employees are on the payroll of the community college. Employees rarely got to participate in college activities such as college wide staff meetings and other public relations events. The resounding instruction was not to cancel classes because it would result in the loss of FTE.

Dissemination of Information

The Williamsburg Site Coordinator and full time instructor were engaged in many on site disseminations of information to visitors. The Learning Center classroom is a key focal point of all group and individual tours. Visitors are given an itinerary that ensures that they come in the Learning Center before they leave the plant.

The visitors to the Learning Center during this grant were from other BI plants, community colleges, businesses and industries, and community and governmental leaders. Visitors came from Russia, Switzerland, and Texas just to mention a few locations.

All new employees are introduced to the Learning Center and encouraged to enroll. They heard this on their tours and at every plant gathering. The BI-Williamsburg Plant management team, beginning with the plant manager, promoted and supported the program completely.

During these tours, the Learning Center staff gave an overview of the program and answered questions. Literature, schedules, and teaching resource lists were among the many assistance items given to persons who were seeking information to assist them in the start up of their own workplace projects.

The Learning Center staff periodically had "sit down" sessions with the department heads and supervisors on all three shifts to keep them informed on learning activities that were taking place in the classroom. They were also invited to take advantage of the Learning Center and they could come to the classroom anytime the wage employees were not in the room. Absolutely every employee in the plant was eligible for three hours per week of paid classroom time during their working shift.

Enrollment Numbers and Project Characteristics

The Williamsburg Plant classes began on June 6, 1992. Sixty students were enrolled. These students were pulled from a list of employees who had been polled to see if they were interested in enrolling in a class at the site. Initially, a master list, compiled by the site contact person, included approximately 450 out of 550 employees who had indicated some degree of interest. Many of the potential students who indicated they were interested were not sure why they were interested.

This was resolved by announcing to the employees that they could come by the Learning Center and have private conferences with the site coordinator or the instructor. These

conferences served three purposes: (1) It gave the employee a chance to get his/her questions answered in the privacy of an office, (2) It presented an opportunity to further disseminate information about the program by having this employee deliver accurate information to other employees. (Many were reluctant to come forward on their own, but they would talk to other employees.), (3) It gave the staff a chance to show employees that they were concerned about the person as an individual.

The Williamsburg Plant has a "work team" concept where employees are assigned to particular sets of looms. This meant that only a limited number of employees could be pulled from one team per shift. The employees were selected for enrollment by the industry contact person. Employees were selected by job, seniority, and supervisor.

Once the students were identified, they were informed of the time and day the class would meet. When they arrived in class, the students were introduced to the program and registration and testing was started. Once testing was completed (this took a minimum of three class meetings), a conference was held with the student to inform him/her of his/her test scores and discuss the employee's personal goals and reasons for enrolling.

The workplace grant had its own objectives to meet in addition to the personal goals of each student. Many students resented the fact that they had to complete "grant objectives" when they wanted to devote all their classroom time to their own personal agenda. This was very prevalent with GED students. They wanted the traditional GED classroom curriculum in the hopes that they would meet and complete the requirements for the official GED quicker.

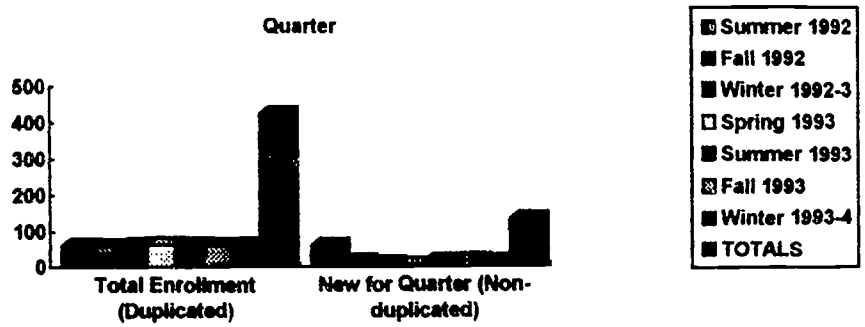
The instructor and site coordinator worked to resolve these issues by adapting material so that it would meet grant and individual student goals. An example of this is the computation of area, perimeter, circumference using the plant floor plan and other industry information.

The Williamsburg Plant had a goal of serving 200 employees. The Learning Center served 134 non-duplicated students. The Enrollment Data chart below shows the quarterly enrollment information.

Enrollment Data

Quarter	Total Enrollment (Duplicated)	New for Quarter (Non-duplicated)	Returning Students
Summer 1992	60	60	0
Fall 1992	58	15	43
Winter 1992-3	62	10	52
Spring 1993	63	4	59
Summer 1993	62	14	47
Fall 1993	60	16	44
Winter 1993-4	61	15	48
TOTALS	426	134	

Enrollment Data Continued



SEGMENT TWO

The next phase of the program consisted of post testing and evaluating the students enrolled in the grant. The Williamsburg Plant has two phases. They are Phase I and Phase II.

Phase I is the initial enrollment of a totally new student/employee in the classroom. The student can be functioning at any level of academic ability. However, new students who are functioning at a CASAS scale score of 235, D-level or greater may be introduced to job related curriculum during Phase I at the discretion of the instructor. Otherwise, students must proceed to a minimum CASAS score of 222 in order for the student to proceed to Phase II.

Phase I students also worked toward their personal goals. This included materials that were appropriate for the GED test. Students were given materials in sequential order when deemed necessary by the instructor and student. Learning contracts were used to give the student and instructor opportunities to plan and follow student progress. Often times, students did not understand why learning contracts were important. They were not cast in stone and numerous adjustments and modifications were made based on student progress, availability of supplies, the introduction of new material (whether custom developed or purchased), and instructor discretion.

Phase I was used to pre-test students, introduce (or reintroduce) the student to the learning process, build trust between student/instructor and student/student. Students were introduced to computers and computer terminology. Computer hardware is placed throughout the Williamsburg Plant and one of the noticeable characteristics of employees was that they were not using this available technology as often as they should. It was felt by some of management that employees had a fear of computers or were overwhelmed by the thought of having to display computer skills that were weak or non existent.

During the course of the grant, supervisors stated that they could observe an employee on the computer and tell if that individual had been enrolled in the Learning Center. Learning Center students were more receptive to using computers and displayed little or no fear.

Phase II of the program was composed of students who scored 222, C or D-level or greater on CASAS post-tests after a minimum of one quarter of enrollment. Other

students were eligible to begin Phase II if they had been in the program for a minimum of two quarters and scored at least 222, B-level on either the reading or math CASAS post test. These students were assigned specifically job related or job specific study materials. There were also students in this category who were GED since that was their personal goal.

Students who scored above 245 on the CASAS, D-Level test were allowed to stay in the program for at least one quarter as part of the industry's participation guidelines. These students were non-FTE earning students for the college and had to be identified as such on all paperwork submitted to the institution.

Other evaluation instruments were used to assist with students who were new or non readers. SORT was used when necessary to facilitate the instructor's assessment of a student's academic abilities.

One drawback of using non-grade levels to report student progress (or lack of progress) was the inability of the industry to correlate CASAS scores and grade levels. Industry representatives understood grade levels and often asked that CASAS scores be translated into grade levels. Students understood grade levels. None of the students had heard of CASAS until it was introduced to them by way of the grant.

There are different opinions about introducing low level students to technical terms used in the workplace. For purposes of this grant, both schools of thought were tried. Students who were reading below ABE I quickly became frustrated. Students who were ABE II or higher had better success and were more receptive to the material.

PROGRESS REPORTS

Students were post-tested every other quarter (approximately 6 months) as a routine practice. This was done about two weeks before the quarter was scheduled to end. This would allow time for testing, correction of tests, and meeting with the student before the quarter ended.

Testing was also done on job related material and scores were distributed to the students with explanations as necessary. Students were also "graded" on their growth in their ability to contribute to group discussions. Although hard to "legitimize" the scoring process, notations were made on five students who were initially shy or failed to interject any comments into group activities.

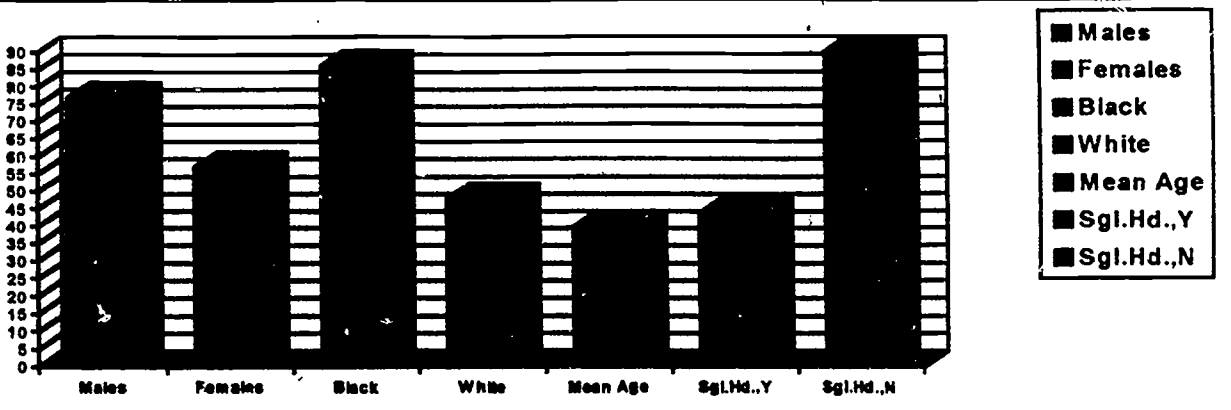
Sample Group

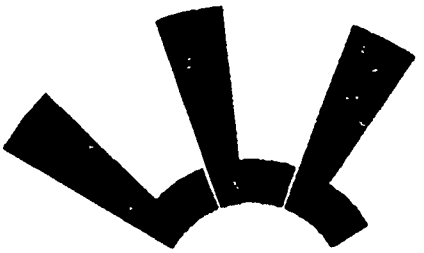
Student	Initial Participation	Improved None	Improved Some	Improved A Great Deal
A	None		Yes	
B	None		Yes	
C	Little			Yes
D	None			Yes
E	Some			Yes

The students who did not ask any questions or make any comments in the early stages of their enrollment were developing confidence, asking questions and making comments. Students in this category participated in an in-house competition entitled "Best of the Best." One of the students was on a team that was successful in winning the in-plant competition before moving to the next level. Many of the students just needed encouragement and praise. There were role playing skits done to add humor and add a change of pace in the classroom. This established student and instructor trust and helped employees relax. Current events sessions were held to give employees the opportunity to demonstrate oral skills in front of small groups. Many had never done any type of presentation whether oral or written. Students were recognized quarterly with framed certificates in front of all of their co-workers.

Student Statistical Data

Males	Females	Black	White	Mean Age	Sgl.Hd.,Y	Sgl.Hd.,N
77	57	86	48	40	44	90





Lifelong Learning
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PARTNERS FOR EMPLOYEE PROGRESS
FINAL REPORT
LIFELONG LEARNING
C&A ROXBORO, NC

PEP FINAL REPORT

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COLLINS AND AIKMAN, CAVEL DIVISION

PIEDMONT COMMUNITY COLLEGE

ROXBORO, NORTH CAROLINA

By: Linda Caywood- Farrell

The Collins and Aikman Cavel Division (a textile industry) consists of three plants: the Dye and Finishing Plant, the Knit Plant, and the Weave Plant. These plants are located in Roxboro, NC and are within three miles of each other. The Cavel Division of Collins and Aikman manufactures automotive, furniture, and speciality fabrics.The Dye and Finishing Plant (D&F) dyes and finishes the woven fabric. The Weave Plant weaves the fabric, and the Knit Plant manufactures knit fabric. The Knit Plant knits, finishes, and in some cases, ships the knitted fabric.

Collins and Aikman, the largest employer in Person County, in 1990 formed a partnership with Piedmont Community College to create a customized workplace program. In 1992 C&A and PCC in partnership with four other community colleges and Burlington Industries received a federal grant, Partners for Employee Progress (PEP). C&A entitled its program Lifelong Learning and used the model class site located at the D&F Plant to expand its program to the Weave and Knit Plants in the Cavel Division and C&A's Siler City Plant. The elements of a successful program were: facilities and classroom operation; key personnel in college and industry; changes in key personnel; results; and lessons learned and recommendations.

Facilities/Classroom Operation

One element of this successful program was the replication of the D&F model to the two other plants in the Cavel Division of C&A . This included facilities; the recruitment of associates; the organization of the classes and Advisory Councils; and the classroom operation.

The facilities were provided by both C&A and PCC. C&A provided two classroom sites. One , the model site, at the D&F Plant and one classroom site at the Weave Plant. The Knit Plant associates attended the D&F Plant class site. C&A provided 9 computers for the Weave class site and 8 computers for the D&F class site. In addition

PEP FINAL REPORT

Facilities/Classroom Operation

C&A provided phones, printers, heat/AC, housekeeping, maintenance for the class sites , one office site for the site coordinator located at the D&F Plant, and office and classroom furniture. PCC provided classroom materials, office supplies, two computers for the D&F class site, one computer for the Weave class site, one computer and printer for the site coordinator's office, two answering machines, file cabinets, instructional materials, and software.

Recruitment of associates for the new plants took place throughout the life of the program. On August 5, 6 and 10, 1992 recruitment meetings and testing sessions were held for the Weave Plant class site. C&A personnel, the instructor, site coordinator , and present students from the model D&F class site met with all associates on all three shifts to recruit associates for the classes at the Weave Plant. A total of 193 associates volunteered for the classes at the Weave Plant. The Knit Plant recruitment meetings were held on September 10 and 11. C&A personnel, the class instructor, site coordinator, and former students met with all associates at the Knit Plant to recruit for the classes at the held at the D&F class site. Twenty- seven associates volunteered for the classes. Other recruitment efforts included: buttons; walking tours by C&A management; bulletin boards; flyers; one on one meetings; and posters.

The Weave and D&F class sites were organized with 10 associates per class at the Weave and 9 per class at the D&F, and schedules were arrived at on a percentage basis, depending on the number of volunteers each department had. The classes met twice a week at both sites. There were a total of ten classes at each site (see class schedule app.). Associates attended both on and off shift and were paid their regular rate of pay while attending classes. Advisory councils were established for both class sites. They included C&A management, C&A Human Resources personnel, present and former students, C&A Training personnel,PCC Instructors, Basic Skills Director, Site Coordinator, Workplace Secretary, and PCC's Dean of Adult Continuing Education. The Weave Advisory Council met for the first time on October the 8th, 1992, and the D&F/Knit Advisory Council met for the first time August 19, 1992.

PEP FINAL REPORT

Classroom Operation

The LLL program at C&A, Roxboro has four levels. These four levels roughly correspond to the CASAS competencies found in levels A, B, C, and D. The CASAS testing system is used in the LLL program. The classroom operation is paramount to the success of the program. There are three aspects of the classroom operation; they are: Entry and placement; progress through levels; and exit or completion of program or goals.

The entry of associates into the LLL program is voluntary. They are paid their regular hourly rate for attending the class either on or off shift. Volunteers come from all departments and either are recruited by C&A and PCC's efforts or told of the program by department managers/supervisors. The associate then gets his/her supervisor to agree to a time that they can attend class. The supervisor then checks with the instructor to make sure there is an opening in that class period. The associate then brings the volunteer form to the classroom. The instructor enrolls him/her in the class and introduces him/her to the goals and purposes of the program. A CASAS Appraisal Test is given and according to the score on that test, the correct survey test is then given.

The next aspect of the operation of the classroom is the progress of associates through the levels of the program. After testing and observation, an associate is placed in the proper level of the program. Level 1 roughly correlates to CASAS Survey Test Level A. Level 2 of the program correlates to CASAS Survey Test Level B and so on through the four levels of the program. Most of the job-related material and curricula are estimated to be at or above Level 3 in the program; however, customized job-related material is available to some extent for lower-level associates. All job-specific curricula has a pre and post-test and a Cloze test. The pre-test is used to ascertain whether or not an associate is ready to begin that curriculum. It is also used to measure progress.

The associate and the instructor create a Learning Contract to identify the associate's goals and needs and plot a course to accomplish those goals and needs. The associate works through the levels of the program and scores 80% or better on all post tests to

indicate mastery. The associate works both independently on the computer and with the class as a group. Once an associate has completed a level, a certificate is presented by PCC and the industry for that level. The associate progresses through the level on which he/she was placed through level 4 of the program. The associate is tested approximately every 60 hours of class time or as needed to document his/her progress.

The final aspect of the classroom operation is the exiting of associates after completing level 4. All associates will complete level 4 in BASE; all job-related curricula pertaining to his/her specific job; reading and critical thinking software; and other software indicated by the instructor. All post-test scores must be 80% or better. Upon completing the program, associates are presented with a certificate and treated to a dinner with C&A's management.

JOB TASK ANALYSES/CURRICULUM DESIGN

Using CASAS Job Profile Sheets, the site coordinator performs job task analyses for jobs in a specific department. Each job is analyzed by asking questions, observing all three shifts on that particular job, and identifying what skills are needed to perform that particular job. Once the specific skills are identified, the site coordinator can begin to design specific curricula for those jobs in a particular department.

The curriculum for specific C&A departments was organized to follow the product flow and each job position or process in order of its contact with the product. All materials used came from the department such as manuals, diagrams, charts, graphs, forms, invoices, piece tickets, pictures, etc. The curriculum was broken down into lessons and objectives were written for each lesson to meet academic and technical goals of both C&A and PCC. All curricula contained a pre and post-test, a Cloze Test, and quizzes on each lesson. These were used to measure progress .

PEP FINAL REPORT

JOB TASKS ANALYSES/CURRICULUM DESIGN

In addition, general units of job-related curricula were designed for C&A associates such as: Health and Safety (which was customized by Interactive Knowledge and placed on software); SPC; Wage and Time Cards; Insurance; etc. These curricula were customized for C&A and directly relate to all personnel at C&A. C&A's materials were used and pre and post-test were developed for these units.

Key personnel/Changes

The LLL program at Collins & Aikman owes its success in a great part to the key personnel that were dedicated to making the program work. Both PCC's personnel and C&A's personnel made tremendous efforts in behalf of LLL. The Key personnel were: (PCC'S PERSONNEL) DEBRA HARLOW-The Project Director for the PEP consortium, Debra also served as director for PCC workplace sites. Debra was the TAT Team leader; LINDA CAYWOOD-FARRELL- The site coordinator for all three plants at the Cavel Division of C&A, performed Job Task analyses and wrote job specific curriculum, served as member of TAT team, and assisted with start up of other sites. In addition she served as liaison and administrator for the program at C&A Roxboro; BRENDA CLAYTON - The Lead Instructor for the model site at the D&F Plant, was a member of the TAT team and trained other PEP personnel, wrote job-related curriculum and assisted with start up of C&A sites; MARY SULLIVAN - The Lead Instructor at the Weave Plant, helped to start up the classes at this new class site; (C&A'S PERSONNEL) A.KHANANI- The Vice President of the Cavel Division of Collins & Akiman, supported the program with dedicated consistency; JERRY LEE- The Human Resources Director for the Cavel Division, was instrumental in initiating the program and offered support throughout the program; ROBERT CAMPBELL- The Training Director for the Cavel Division, offered guidance and help through the life of the program; LARRY SHOE - The Plant Manger for the D&F Plant encouraged his employees to attend LLL; TERRY PHILLIPS- The Weave Plant Manager, also supported the program; DAVID YATES- The Knit Plant Manager, was also key in the success of the program.

The Changes in Key Personnel were Tommy Hackett, the Weave Plant Manager who was instrumental in starting the program, left C&A in June of 1993. Terry Phillips, the Knit Plant Manager, took his place at the Weave Plant and David Yates became the Knit Plant Manger. This change caused some difficulty for the program.

PEP FINAL REPORT

LIFELONG LEARNING PEP RESULTS

From June of 1992 until February of 1994, Lifelong Learning at C&A, Roxboro served a total of 301 associates. There were 35 associates who completed the program and 78 associates who completed one or more levels in the program. There were 284 associates who completed Job Specific and/or Job Related curricula with 80% or better scores. Twenty associates enrolled in LLL received lateral moves or promotions. Seven associates received their GED's.

JOB TASKS ANALYSIS/CURRICULM DESIGN

Lifelong Learning at C&A Roxboro was a very successful program. There were 98 jobs analyzed in 9 Departments. The Departments were: Weaving; Weave Beaming; Knit Beaming; Tie-In, Winding; Yarn Stores; Shipping; Receiving; Knitting, and Coating. There were 7 Departmental Curricula designed containing 71 Jobs. They were: Weaving; Weave Beaming; Knit Beaming; Shipping; Receiving; and Coating.

C&A LLL IMPROVEMENTS STATISTICAL DATA

AREA OF IMPROVEMENT	WEAVE	D&F	TOTAL	PERCENTAGE
Lateral moves or Promotions	5	15	20	6.6%
Improved Self-esteem	133	126	259	86.1%
Furthered or Coninuing Education	8	7	15	4.9%
Attendance	80	75	155	51.6%
Improved Communication	133	125	258	85.6%
Improved Productivity/Quality	113	106	219	72.7%

PEP RESULTS

Profile of Workplace Literacy Trainees

Date: February 28,1994

Total LLL PEP # Registered/Pre-Tested Job -Related / Job Specific : 301

Characteristics	Non-Completers	Total	Completers	Total
Race: Anglo-Saxon Afican Amer. Amer. Indian Asian Hispanic	9 8	17	151 133	284
Age: Average Age	39.7		40.4	
Education: H.S. Grad. Non-H.S. Grad.	10 7	17	222 62	284
Yrs. C&A: 0—5 years 6—10 " 11—15" 16 + "	5 3 2 7	17	79 43 38 124	284
Sex: Male Female	7 10	17	119 165	284

Total Job-Specific/Job Related Completers: 284

Total Program Completers: 35

Obtained GED : 7

Level Completers: 78

Total served : 301

All 301 participants were involved in Basic Skills Education including the 284 who completed Job Specific and/ or Job Related curricula. Both Job Specific Curriculum (Curricula designed by job and department) and Job Related Curriculum (Curricula designed using C&A's materials and meeting the need of all C&A associates. ie. Insurance, SPC, Handbook and C&A rules and Regulations, etc.) were designed using C&A materials and were customized to the industry's needs.

PEP RESULTS
C&A, ROXBORO

REASONS FOR LEAVING THE PROGRAM (DROPS)	
REASONS	NUMBER
Transportation/Car Problems	1
Family Problems/Personal Reasons/ Illness	24
Shift Change/New Job/Over-time	39
Employment Terminated	19
Childcare problems	0
Other (Lack of Interest)	9
No Reason Given	8
Total Drops:	**98**

LLL staff had no means to intervene in most of the drop occurrences; however, perhaps intervention was possible in the last two categories listed above involving 17 associates. This gives LLL a 5.6% addressable drop rate.

The Statistical Data for LLL improvements (page 6) was gathered from evaluations by Department Managers and supervisors. LLL also used Student Exit Surveys to evaluate the program as well as standardized CASAS test scores and Job-related/Job specific test scores. Also, progress was measured with level completions and program completions.

A summary of the results of the student Exit survey is reported on the next page.

PEP FINAL REPORT

PEP RESULTS

Participants Exit Survey Results

QUESTIONS	RESPONSES		
	Very Effective	Effective	Not Effective
Rate the LLL Program's effectiveness in meeting your needs	20	14	1
	Yes	No	Somewhat
Did you benefit from the program in your personal life?	28	2	5
Did you benefit from the program in your work life?	29	2	4
Would you recommend the program to other employees?	34	0	1
Did you enjoy the classes?	33	0	2
Do you plan to continue your education?	19	1	15(MAYBE)

There were 35 associates who completed the program. Of that 35 , 57.1% rated LLL as Very Effective in meeting their needs and 40% rated the program as Effective in meeting their needs; 80% said that hey benefitted from the program in their personal lives; 82.8% of the associates said that the program benefitted them in their work lives; 97.1% said that they would recommend the program to other associates; and 54.2% said that they planned to continue their education. Over-all the completing associates found the program both effective and of great benefit.

TEST RESULTS

For results of Job Specific /Job Related and Standardized Tests (CASAS) see Dr. Askov's evaluation.

Lessons Learned & Solutions

As with any new undertaking the PEP grant participants, learned many lessons in the effort to meet their goals. Some lessons had solutions that could be implemented and some lessons were only solvable with hindsight and others remain unsolvable.The three major areas where lessons were learned were: PEP Operation,, LLL C&A , Roxboro, and TAT Team duties.

One area where lessons were learned was the PEP Operation. The lesson learned was that each plant and each college had a different method of operation and a distinct personality. Meshing these different operating procedures and personalities was accomplished; however, it took a concerted effort of all parties and strong leadership by Debra Harlow to accomplish a unified effort.

Another area where lessons were learned was the operation of the C&A LLL program in Roxboro , NC. The first lesson learned was that when starting classes with over 100 associates enrolled, the teacher needs help such as an aid or part-time teacher. We learned this lesson after we started the classes at the Weave Plant with only a full time teacher. The students told us that Mary could not be everywhere at once and did not have the time to give each student to help him/her get started. We then hired a part-time teacher/teacher aide and the situation was resolved. Another lesson learned is that one site coordinator cannot effectively do job tasks analysis and design curriculum while administering the program for three plants with an office in only one of the three plants. Linda Caywood-Farrell did an excellent job; however, it is recommended that each site have its own site coordinator. The last lesson learned at LLL was that classrooms be measured and fitted to make sure that they are large enough to contain all the students, materials, teacher's desks and files. One classroom, the D&F, was and is not large enough for all of this.

The final area where lessons were learned was the TAT Team. The TAT Team provided two weeks of training at the onset of the grant period. Upon reflection it would have been much better to spread the training out over a period of time so as not to over-whelm the trainees with too much information at one time.

EMPLOYEE LEARNING CENTER

Randolph Community College
and
Burlington Industries' Asheboro Weave Plant

Partners For Employees' Progress, NWLP
FINAL REPORT

Christine Holt-Hudson, Site Coordinator

June, 1992 - February, 1994

INTRODUCTION

As a part of the National Workplace Literacy Grant awarded to Piedmont Community College on June 11, 1992, Randolph Community College and the Asheboro Weave Plant worked together to enhance the basic skills of Burlington's employees in a functional context. Work related materials were used and job specific curricula written to address these needs.

The Asheboro Weaving Plant is a part of the Decorative Prints Division of Burlington Industries. This plant located at 1947 North Fayetteville Street in Asheboro, NC was built in 1947. The Asheboro Plant has over 250 employees operating a seven day schedule with four shifts. Greige fabrics are made here. Products are not finished here, but are sent to other plants for completion, or sold directly to other manufacturing firms.

In reviewing the Job Descriptions / Requirements Manual for the Asheboro Weave Plant, the following information proved relevant for our purposes:

1. Every wage job lists as a "preferred qualification" a high school education or equivalent. This is a requirement for some jobs.
2. "Competent reading and writing skills" are also listed as educational or experiential prerequisites for many jobs.
3. 53% of wage employees at this plant do not have a high school credential.

Problem solving, listening, negotiating, learning how to learn, and working with other people are also becoming skills each worker needs to contribute for a company to be successful in today's global economy. Our goal was to provide working adults with a foundation of basic skills, thereby improving their ability to learn other skills as needed.

GOALS

To the fulfillment of consortium goals, our site contributed the following. These results were derived from pre- and post-test figures and supervisor evaluations.

	Grant Projection	May 1993	Feb 1994
Number Testing Higher in Basic Skills	**95%**	**98%**	**79%**
Improved Job-Related Literacy Skills	**90%**	**88%**	**55%**
Improved Productivity/Quality	**15%**	**14%**	**43%**
Improved Attendance	**25%**	**5%**	**33%**
Number Obtained GED	____	**1**	**1**
Number Enrolled in College Courses	___	**1**	**2**
Number People Served	**50**	**109**	**122**

*Curricula developed for Piedmont will be reproduced and distributed.

We left the initial training with complete copies of the work written for the Williamsburg Plant. However, very little of the material was transferable to this work setting. Looms were different and processes were distinct. Some job related materials proved helpful, and the work was certainly used as a model.

**Job analyses and curriculum development will occur at six new sites*

All jobs in the Preparation and Weave Departments were analyzed. Related and specific curricula were then written based on competencies identified and needs expressed by managers and supervisors.

**Orientation and technical training will be provided by Piedmont Community College.*

As partners in this project, we were taught how to conduct job task analysis and given technical assistance by Piedmont personnel on a regular basis, as well as when needed via phone or fax.

**Employees will receive basic and technical literacy training so that they can become more proficient in their current jobs, move laterally or vertically in the workplace, and/or obtain a high school credential.*

Basic and technical literacy training was provided to all participants. In September of 1993, it was determined that 26% of our students had demonstrated an increase in job proficiency, 15% had moved laterally or vertically, and 2 had successfully completed GED testing. In addition, three are in the process of testing.

In addition to the goals listed above, the grant proposal suggested that student-employees would master the basic critical thinking skills demanded in a complex and competitive economy. It also asserted that this program would help business and industry adapt to technological change. This project has met the goals projected in the grant application. Student work and comments were used as significant evidence that this literacy project has succeeded in improving their basic skills.

PLANT GOALS

At the beginning of the grant period, Burlington Industry managers met and decided on their goals for this project. These goals, listed below, were shared with student-employees on all shifts during the orientation process.

"We are very fortunate to be a part of and associated with the National Workplace Literacy Program in cooperation with Randolph Community College. We would like to see an improvement in the following areas through the federally funded grant.

1. Assist those employees who lack the basic necessary skills to function in everday

society.

2. Upgrade the overall educational levels of employees.
3. Enhance individuals' analytical and decision making skills.
4. Create more competitive employees by preparing them for advances in technology.
5. Understanding the concept of teams and teamwork through group participation.
6. Develop educational manuals that will reflect job specific needs.
7. Create an understanding of our Hazard Communication program, Material Safety Data Sheets, and safety programs.
8. Upgrade educational levels of MPACT employees to provide them skills for success and completion of the MPACT program.

These goals can be measured, although some will require our subjective evaluation. We will look at employee morale, communication skills and how our employees are involved in day-to-day contact as we operate our facility. It's our employees who are the foundation of our operation and we will be looking to them for good sound analytical and decision making skills to keep us competitive and a world class leader that will carry us into the 21st century."

PROGRAM OPERATIONS

Student Recruiting

Randolph Community College and Burlington Industries had already worked together to provide ABE and GED classes on site. Through this effort, a list of interested employees had been generated. Employees were invited to participate based on seniority and job description. Each employee enrolled in our program attended two one-hour classes each week. A decision to attend class remained completely voluntary. Additional recruiting was done through individual surveys, open houses, word-of-mouth contact, employee meetings, posters, and daily contact with industry workers.

Initially, shop employees studying MPACT were tested with CASAS. We expected to help them with the basic math skills needed to complete their work on the company training manuals required for anyone interested in working in maintenance. It was later determined that this was not feasible; these employees were already using four hours of each work week to study the MPACT materials.

Classroom Arrangement

Classroom and office spaces at our site were more than adequate. The ample space allowed the teacher's assistant to work privately with the new readers during several class periods. Private consultations with students regarding learning contracts or test results were easy to accomodate.

Eight IBM compatible computers, two Macintosh computers, three printers and two CD-ROMs were purchased by the college foundation as a result of a gift from the industry. Access to computer based education motivated many of our students to

work on their basic skills in an innovative manner. The approach we used focused on individualized, self-paced instruction. This should not imply that the skills of communicating with others and teamwork were ignored, but rather that these topics were introduced in conjunction with primary competencies.

Instruction

A variety of instructional methods were displayed in the classroom by our instructors. Groups of students participated in role plays, simulations, and case studies. Smaller groups of two or three were involved in tutoring and working as computer pairs. One-on-one instruction, in-basket exercises, cloze forms, computerized educational materials, traditional texts, customized software, writing experience, and planning and delivering speeches were implemented when appropriate.

Each student's folder was the center of instruction. These folders contained assignments, test results and needed competencies, and the learning contract between teacher and student. Completed work was placed here by the student, and returned by the instructor after grading. Students were required to write in a journal each time class met.

During the last half of this project, as we learned more about portfolios, we encouraged our students to evaluate their own work. Because the learning contract listed specific performance objectives and a time frame for completion, a student could learn to assess his/her own progress. Initially, we thought this would work best for our higher level students, and were amazed to learn that it was our lower level students who valued this approach - not so surprising when you realize their progress is often harder to see through traditional testing methods.

Since September, 1993, the ELC offered an Open Lab each Wednesday from 2:00 pm - 4:00 pm. Students came in before or after shift, and an instructor was there to help as needed. Also, in that same month, we began offering the BI Book Shop which encouraged students/employees to read magazines, journals, newspapers, and children's books. All the materials in the Book Shop were supplied through the generous donations of workers/learners, other Burlington Industry employees (who are not in the program), and college representatives.

Assessment

The Employability Competency System (ECS) of CASAS (Comprehensive Adult Student Assessment System), a standardized testing tool, was used to measure learning gains. CASAS provided a means for placement, management of class work, and monitoring of progress. Instruction reflected competencies identified using the individual profile.

In May of 1993, we revised the placement of students based on a directive from the North Carolina Department of Community Colleges. Many students showed a backward movement as a result of this change in the CASAS scale.

Curriculum Development

Thr curricula for this program was the result of job task analysis. CASAS provided the "Workplace Literacy Job Analysis Profile" for this purpose. Materials specific to the learner's work were used. In addition, skills needed to perform the job were identified and presented. This ensured the student-employee would gain an understanding of vocabulary, forms, math, and other skills used on the production floor everyday. This functional context approach allowed students to apply known content as they learned new information. Pre- and post-tests, and quizzes measured progress. Initially, students needed to know 95% of the materials on the pre-test to be exempt from studying a unit. This was later revised so that students making less than 80% on a pre-test were required to work through assigned lessons.

During initial meetings with managers at our local site, the scope of curriculum development was discussed at length. Their decision was to focus our efforts on a Preparation analysis and a Weave Room analysis.

1. *Employees will benefit by understanding other functions in their department, and how their work fits into the production goals of that area.*
2. *Employees will readily understand the divisions in the curricula because they mirror company divisions.*
3. *Skills required in these two departments are too dissimiliar to be combined.*
4. *The Preparation Department may soon be moving toward formalized work teams, and our project can provide support for employees who will be working under this concept. Teams will also require cross-training, so a general knowledge of other jobs in the area will improve understanding.*

A complete study guide detailing each section allowed students to keep track of their own progress. Instructor notes and detailed answer keys aided teachers in further defining the purpose of a lesson. Instructors revised assignments to meet the individual students' needs. Students began to work with these assignments when they had reached a "C" reading level in CASAS. "Words at Work," a series of lessons using work words, was written primarily for lower level readers, but it was also used with other students to practice correct spelling.

Careful attention was paid to keep this work separate from training needs within the company. Information taught in the curricula was in no way meant to meet legal or other standards for training employees. The educational value of this material was as a preliminary step before training, if a lack of basic skills was identified.

Industrial partners created technical teams to review specific portions of each curriculum as it was completed. This, coupled with field-testing results from the classroom, allowed for revisions to clarify lessons. Authoring software was used to customize vocabulary and other lessons for use with the computer.

Evaluation

The technical assistance team visited our site each quarter. During site visits, they reviewed curricula and student folders, met with industry partners, visited classes and often interviewed students. We came to view these visits as evaluations rather than assistance. Helpful ideas were at times shared during the visit, but most often relayed through written correspondence later. Because feedback from TAT evaluations was not received for several months, it was difficult to react to their suggestions before the next visit. However, these team members were readily available to assist us when we had specific concerns.

Our site was visited on December 15, 1992 by the external evaluator. Dr. Eunice Askov from Penn State University reviewed the early work at our site during her first visit and concluded that much of the curriculum was work related, rather than job specific. She sensed conflict between college employees and recommended that efforts be made toward resolution. Her follow-up visit was conducted on January 19, 1994. Curricula had been completed since November and was being used in the classroom. During this visit, she interviewed project staff, industry representatives, and select students.

An Advisory Council Board was established during the first quarter. This forum approved criteria set for the program and received quarterly updates at each meeting. The college and the industry had equal representation (seven), with two students participating on behalf of the wage employees at Burlington Industries. This forum proved to be very supportive of the ELC. The Advisory Council completed surveys, as did students, supervisors and managers. Supervisors were reluctant to make a subjective evaluation. They were aware of training and other factors that contribute to an employee's work and were not comfortable stating that progress had been made as a result of the ELC. A typical response was, "Ask me in 2-3 years and I will know if education has impacted our productivity."

Students filled out informational surveys as they began class. This gave us valuable insight as to their personal goals and expectations. When a student dropped out of class or completed our program, they were again asked to complete a list of questions. In addition, surveys were conducted several times during the course of their time in the ELC. Students sometimes balked at completing surveys. After questioning students, we realized that to ask them if class had improved their performance on the job indicated that perhaps they were giving less that 100% prior to the ELC experience.

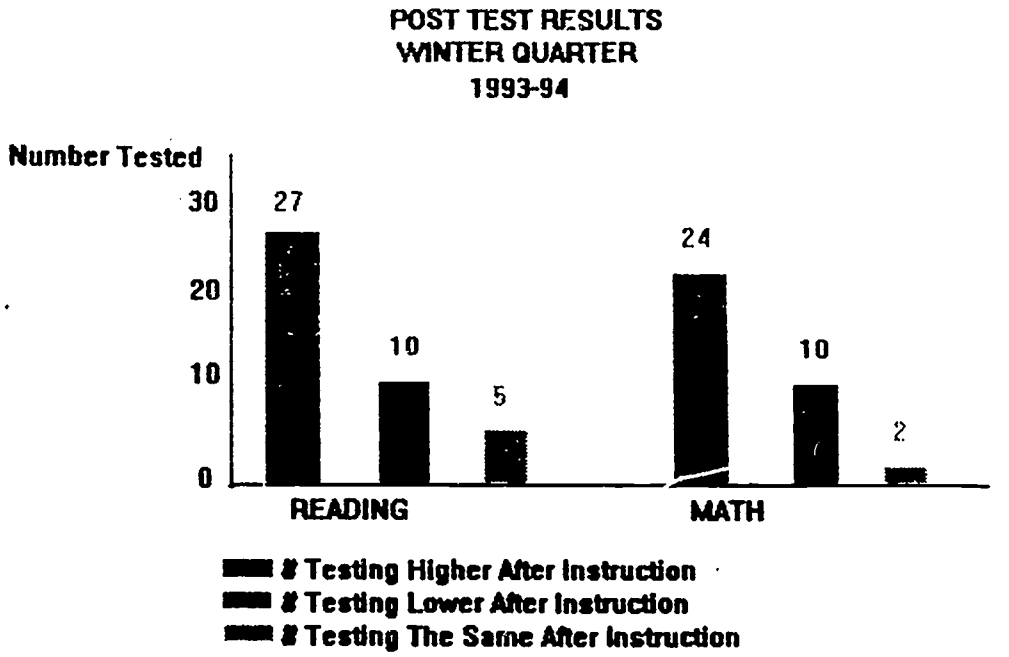
PARTICIPANT CHARACTERISTICS

The total number of participants served over the duration (seven quarters) of the grant was 592 . This figure represents a duplicated count (122 non-duplicated count).

Improvements Gained in CASAS

In May 1993, CASAS post-testing was conducted after 60-70 hours of instruction. With a total of 44 students post testing, 43 employees improved in either reading or math, or in both areas. 36 improved in the reading portion of the CASAS test and 8 had lower scores after instruction. 32 had higher scores in the math portion of the tests, 9 had lower math scores, and 2 had scores that remained the same. CASAS results were very positive, 98% of the students improved in reading or math or both.

The results from CASAS post-testing conducted in January and February 1994 are depicted in the following graph:



Job Specific Curriculum Progression

Most of our students have completed a portion or portions of the job specific curricula; 68 students have worked on curriculum I; 51 students have worked on curriculum II; 37 students have worked curriculum III; 20 students have worked on curriculum IV; and 1 student has worked on curriculum V. Also, 20 students have completed Words at Work.

Personnel

The Site Coordinator, Karen Briles and the Full-time Instructor, Christine Holt-Hudson were hired on July 17, 1992, and later in the same month the Secretary, Cheryl Blakely (Gaskins) was hired. A night-time Instructor, John Canoy was employed in early September, 1992. This position was difficult to maintain and three individuals filled this role. Tim Mellon has been the night instructor since September, 1993. Marie Cox, a teaching assistant was added to our staff on January 4, 1993, and she primarily worked with the new readers in our classes.

Our staff underwent drastic changes during the last quarter of the grant. The Site Coordinator, Karen Briles and the Secretary, Cheryl Gaskins resigned at the end of the next to the last quarter of the grant. These positions were filled by Christine Holt-Hudson (former full-time instructor) and Sylvia Inman respectively. John Canoy (former night-time instructor) assumed the role of full-time instructor.

The in-house contact person at the industry was the Training Manager, James Bronson. The entire management staff was very supportive throughout the duration of the grant period.

CHALLENGES

Our program met its first challenge as industry employees (wage and salary) misunderstood the basic premise of the grant. The employees mistakenly assumed that computerized instruction would allow students to study anything they wanted. In addition, many interpreted "computer-aided instruction" to mean computer programming. As we attempted to implement a program teaching adult basic skills with a job specific component, students felt they were being treated unfairly. Industry and college personnel met with each class to redefine the constraints of our program, although this issue continued to resurface.

The first eight computers purchased through the grant arrived at the end of September, 1992, and were installed six weeks after classes had commenced. Software and hardware components needed to use the computers required further delays. The industry had difficulty understanding these delays.

Communication between partners was a challenge until we learned to speak the same "language." Daily decisions were not difficult as dialogue was maintained with industry personnel on issues related to the program. Long term planning was unsatisfactory at times, and industry representatives would have preferred a more consistent communication process.

The grant proposal states on page 17 that "*. . . instruction in a workplace literacy program should be related to specific job tasks but should also include a core group of basic skills necessary for functioning in most jobs.*" Although "generic" skills and

general literacy instruction were endorsed. Many students would have liked more consideration directed towards their personal goals.

Ironically, the antithesis of the above was also a concern. Our directive was to be job specific without infringing upon the industry's duties of training. This caused difficulties when the personal goal of several of our employees was to learn keyboarding skills. This was categorized as training, although it is also a very important skill when using a computer.

RECOMMENDATIONS

A basic computer course offered off-shift might have been a viable option. Several managers expressed an interest in a textile class that was offered years ago by RCC. Due to student interest and computer availability RCC and BI should consider these options.

Because the goal of the grant was to use job specific materials, lead time to learn about the plant and some of its processes would have been helpful. We spent the first two quarters attempting to catch-up and modify job related materials for classroom use. Instructors had little time to spend on the floor learning about employees' jobs. If the instructors could have spent more time on the floor learning the jobs, this could have aided them in teaching the job specific curricula.

Students accomplishments were recognized with certificates presented by ELC instructors. Meetings were held after BI monthly birthday parties when needed. It is our recommendation that this presentation always include an employee's supervisor and co-workers when possible.

154 of 304 employees at this site do not have a high school diploma. They did not have one when they were hired and many see no reason to work towards a credential. In an effort to improve the basic skills of the workforce, industry managers and supervisors must continue to encourage employees by helping them recognize the need for further education. We also could have encouraged greater supervisor participation by including them on the Advisory Council. Their input was valuable and initially we failed to ask them for it.

CASAS proved very useful in customizing an individual plan of study for our student-employees. There are several alterations which would increase its adaptability for our purposes: 1) CASAS competencies on job task analysis forms are numbered differently from competency and task numbers on individual profiles, although worded similiarly; 2) The jump from level AA to A in testing was very difficult. Students tested out of AA without being able to read, but were not prepared for the next level. This resulted in improvements that were not reflected in test scores. Several students felt that the AA test was inappropriate for adults; 3) We have used the D level as a benchmark for placing students into the GED

category. This did not accurately indicate a readiness for the GED exam. There were students in our program registered in ABE II, based on a C CASAS score, who had successfully completed GED testing; 4) The math portion of the CASAS system required significant reading abilities as most questions were presented in the form of word problems; and, 5) The CASAS test should better evaluate writing abilities.

Some issues resulted from registration policies which may not be suited to off-campus industry classes. For example, work constraints and training requirements often prevented employees from attending a class at the scheduled time for several weeks. If a registration plan could be formulated that allowed students to attend one of several class times, although maintaining the number of class hours, industry would have benefitted from the flexibility, the students would have had continuity in their studies, and the college would have achieved a greater number of attendance hours.

At the start, we were not certain that we were using our powerful computers at an optimum level. Due to the fact that none of our literacy staff was proficient in the purchase and use of system hardware and software, it is recommended that a person with extensive computer knowledge be hired to assist with such decisions.

There was a narrow margin between meeting learners' needs and adhering to considerations of the college, grant administrator and workplace constraints. Yet, the real goals of these entities was realized when the learner remained motivated and interested in the topic of study. There is a place for both, job specific curricula and basic skills in the scheme of educating adults. However, it lies in a blending that would prove more efficient in completing grant requirements, as well as student goals. Many "generic" materials provide innovative resources to teach adults the foundational skills of reading and writing. These materials should be used in conjunction with job specific materials.

We were not convinced that job specific materials alone will best meet the needs of our students. They did not clearly understand the relationship between job specific curricula and basic skills. The following is a direct quote from the exit survey of one our students as he completed the program.

"I think that math and reading skills should have the highest priority whether they involve part of your job or not. I think that everyone needs a certain amount of basic skills in these areas. I know that the grant requires that the classes have to be job related but you have to have a basic skill in these areas before any job manual or job curriculum can be understood. You have to be able to add simple numbers and read simple sentences before you can understand about degrees on the loom or percentages in production."

Other employees have said, "We <u>know</u> our jobs. We've studied them for 18 years. I simply want to work on fractions (or spelling, understanding what I read," etc.)

For many students, working through the curricula has enlarged their picture of textile manufacturing, helped them understand processes at this plant, or taught them proper terminology. Yet, they wanted control of their own work. One thing we have learned is that grant requirements and, student goals and needs must be addressed at the same time.

The one hour class period was often too short to complete a task. This was the most frequently cited complaint of the program by students. Longer class times are difficult to manage in an industry setting, but thirty more minutes would be an advantage to the learner. Additionally, students seemed to prefer individual blocks of study. Their objective was mastery of basic skills - one skill at a time.

APPENDIX

PEP

Dissemination Activities

COLLEGE Piedmont Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	Charles Davis Fieldcrest Cannon Eden, NC	DBH	C	6/92
2.	Lori Daye Rowan-Cabarrus Comm. Coll. Salisbury, NC	SG	C/L	9/10/92
3.	Carol Hollar Roane State Comm. Coll. Harriman, TN	DBH	L	9/17, 18/92
4.	COMBASE Conference Baltimore, Maryland	President, PCC	CF	9/24/92
5.	Joe Alley NCDCC Raleigh, NC	NCDCC	M	10/6/92
6.	Roxboro Area Chamber of Commerce Leadership Conf.	President, PCC	CF	10/23/92
7.	Ann Sally Auburn University Auburn, AL	DBH	C	11/12/92
8.	Mona Baker Salem Company Charlotte, NC	DBH	C	11/17/92
9.	Roddy Gray Piedmont Tech College Greenville, SC	DBH	L/C	11/17/92
10.	President's Club - PCC	Plant Manager	CF	11/19/92
11.	Sally Averitte Auburn University Auburn, AL	SG	C	11/23/92
12.	NCDCC Adult Education Association	NCDCC	M	Fall 1992

* FORMAT: Media, Workshop, Conference, Call, Letter
M W CF C L

PEP

Dissemination Activities

COLLEGE Piedmont Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	John Higginbotham Spectrum Dye & Yarns Kings Mt., NC	DBH	C/L	12/10/92
2.	Aradyne Flags Brookshire, TX	DBH	C	12/11/92
3.	Anna L. Dent Springfield & Clark County Joint Voc. Sch. Springfield, OH	DBH	L	4/7/93
4.	Jason Githeko College of Education Campaign, IL	DBH	L	4/12/93
5.	Dorenda Bryant Cont. Ed. Dept. Pitt Community College	DBH	L	5/14/93
6.	Elaine Matthews Rural Ctr. of NC	DBH	C	5/25/93
7.	Mary Bauer Enterprise State College Enterprise, AL	DBH	L	6/7/93
8.	David Rico El Professor Manuel De La Rosa, Inc. El Monte, CA	DBH	L	6/22/93
9.	Mary Bauer Enterprise State Jr. College Enterprise, AL	DBH	L	7/21/93
10.	Leigh Wolfe Valley Regional Ad. Ed. Ctr. Shelton, CA	DBH	L/C	9/13/93
11.	Sabrina Garrett Rockingham Comm. Coll. Reidsville, NC	DBH	C	9/13/93
12.	JoAnn Stern Chemeketa Comm. College Salem, OR	DBH	L	10/26/93

* FORMAT: Media, Workshop, Conference, Call, Letter
M W CF C L

PEP

Dissemination Activities

COLLEGE Piedmont Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	Lori Daye Rowan Cabarrus Comm. College Salisbury, NC	DBH	C	10/26/93
2.	CASAS Workshop Greenville, SC	DBH	CF	1-10-12/94
3.	Presentation at ASU's Director's Institute Raleigh, NC	DBH	CF	1/25-27/94
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

* FORMAT: Media, Workshop, Conference, Call, Letter
M W CF C L

A. Dissemination Activities -- Alamance Community College

TO WHOM	BY WHOM	FORMAT	DATE
Other BI Plants:			
BI Richmond Plant	C. Higgins	C	10/31/92
BI Richmond Plant	C. Higgins & M. Gamble	V	11/6/92
BI Smithfield	C. Higgins & M. Gamble	V	4/22/93
Other Textile Companies:			
Aiken Tech. College & Graniteville Co., Graniteville, SC	C. Higgins	C	12/1/92
Sara Lee Hosiery, Gastonia, NC	C.Higgins	C	9/10/92
Sara Lee Hosiery, Gastonia, NC	C. Higgins & M. Gamble	V	1/5/93
Flynt Fabrics, Burlington, NC	C. Higgins	V	12/1/93
Publicity:			
ACC R & D Highlights (news brief)	college dev't office	M	Aug 1992
ACC college newsletter w/ photos	C. Higgins & M. Gamble	M	10/28/92
ACC Annual Report	college dev't office	M	1992
BI Pioneer I newsletter	Program staff	M	June 1992
BI Pioneer II newsletter	Program staff	M	June 1992
BI Pioneer I newsletter	Program staff	M	Oct 1992
BI Pioneer I newsletter	Program staff	M	Dec 1992
BI Pioneer I newsletter	Program staff	M	Oct 1993
BI Burlington Look newspaper	BI training mgr	M	Sept 1992
Burlington Times News	college dev't office	M	6/11/92
Callers & visitors regarding computer hardware & software:			
Bob Brown, Clear Choice	C. Higgins	C	9/17/92
Caldwell Community College, Hudson, NC	C. Higgins	C	11/16/92
Kayser Roth Corporation, Greensboro, NC	C. Higgins	C	1/7/93
Kayser Roth Corporation, Greensboro, NC	C. Higgins	L	1/14/93
Hart Inc., Asheville, NC	C. Higgins	V	9/17/92
Central Carolina Community College, Sanford, NC	C. Higgins	C	8/10/92
BI Smithfield Plant			

Format:
M = media W = workshop CF = conference C = call L = letter V = site visit

PEP

Dissemination Activities

COLLEGE Central Carolina Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	Pre Service-Part-time Instructors recruitment/ Interviews	Laura/Annie	W/I	1/11/93
2.	Open House (Community)	Annie/Laura/Joe	M/I	1/28/93 1/29/93 1/30/93
3.	Recruitment-all shifts & weekend shift	Joe/Laura/Annie	I	8/19-22/92
4.	Western Piedmont CC Isothermal CC	Laura/Dale	I	2/18/93
5.	Lt. Gov. Wicker Gov. Hunt	Laura	L	3/15/93
6.	Rep David Price	Dale/Laura/Annie/Joe Rodney/Students	M/I	4/6/93
7.	Industry/LLL Visioning	Laura/Annie	I	4/15/93
8.	Steering Committee	Laura/Joe/Students	I	4/27/93
9.	Mastercraft Division	Laura/Joe	I	4/26/93
10.	COABE Conf.	Laura(w/PEP reps.)	CF	6/8-13/93
11.	Small Business Center	Laura/Dale	I	6/17/93
12.	Lee Co. Industry Rep Don Baldwin	Laura/Dale	I	6/13/93

* FORMAT: Media, Workshop, Conference, Call, Letter, Informational
M W CF C L I

PEP

Dissemination Activities

COLLEGE Central Carolina Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	Morganton Plant Mastercraft	Laura	I	8/19-20/93
2.	Quebec Plant C&A Maureen Patrick	Laura/Annie	I	9/10/93
3.	Charlotte Todd Gen:Assembly-Senior Analyst	Laura/Charles White	I	9/29/93
4.	Lisa Valerta Mastercraft Process Engineer	Laura/Annie	I	10/15/93
5.	Harry Schoene C&A President	Laura/Steve Whitley	I	10/22/93
6.		PUBLIC RELATIONS DOCUMENTS		
7.	C&A Newsletter		M	Quarterly
8.	Sanford Herald		M	9/92
9.	Textile World News		M	8/92
10.	Wyndle Kingsmore, Division Human Resource Director, Rodney Smith, Plant Manager, Earl Smart, Division Director, Joe Jackson, Human Resources		L	3/5/93
11.	Business N.C.		M	3/93
12.	Chatham News/Record		M	4-15-93

* FORMAT: Media, Workshop, Conference, Call, Letter, Informational
M W CF C L I

PEP

Dissemination Activities

COLLEGE Central Carolina Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1.	The Chapel Hill News		M	10/18/92
2.	CCCC Quarterly		M	Fall 92
3.	Chatham News/Record		M	6/25/92
4.	LLL Floor Plan		I	6/3/92
5.	LLL Interest Slip		I	
6.	Press Release	Laura Coffee	L	2/3/93
7.	Chatham News/Record		M	1/28/93
8.	CCCC & C&A Roundtable	Laura Coffee	I	
9.	Meeting Sample Questions		I	
10.	Laura Coffee Annie Roach	Charles White	L	10/30/92
11.	NCCCAEA Newsletter		M	Fall 92
12.				

* **FORMAT:** Media, Workshop, Conference, Call, Letter, Informational
M W CF C L I

Piedmont Community College and Burlington Industries Learning Center Dissemination of Information/Tour Data June 92 - February 94

DATE	GENERAL DESCRIPTION	#VISITED
7/22/92	Vladimiz Ozdin Russia, St. Petersburg	1
7/28/92	PEP Educational Partners form Randolph Community College, Asheboro, N.C.	2
8/4/92	BI Corporate Executives. TX, TN, MD, CA	5
8/4/92	BI Customer Tour: Sealy Corporation, Cleveland Ohio	4
8/20/92	Citizens for Education	4
9/1/92	BI Customer Tour: Rowe Furniture, Salem VA	4
9/1/92	Burlington Finishing Plant	1
9/1/92	Trust Co. Bank, Atlanta GA	6
9/23/92	Group of Executives from N.Y., Chicago.	4
9/30/92	Burlington Finishing Plant	2
10/13/92	La-Z-Boy Corporation Representatives	3
11/19/92	Caswell Co. Leaders Appreciation Dinner	7
11/19/92	Piedmont Community College President, H. James Owen	1
2/3/93	BI Executive Trainee	1
2/3/93	Abely & Margolis, New Members of Board of Directors	4
2/9/93	BI Bankers Tour	50
2/22/93	Visitors from DCCC	3

2/23/93	Alamance Community College Business Division Instructors	6
5/17/93	BI Intern Management Trainees	2
5/18/93	Regional BI Executives from New York, Mooresville, Halifax, South Boston, Greensboro Plants.	6
5/21/93	BI Smithfield Plant Representatives	4
6/11/93	Alamance Community College Computer Repair Expert	1
10/14/93	BI Legal Department	10
10/26/93	BI Customer Tour: J.C. Penney Co. Dallas, TX	10
12/2/93	Staubli Corporation Representatives South Carolina, France, Switzerland	7
	Total # of People	**148**
	Total # of Tours	**25**

- The Caswell Messenger, a local newspaper, usually prints a quarterly feature story on the Learning Center and its' students.
- All new BI employees are given a tour of the Learning Center during their orientation process.

PEP
DISSEMINATION ACTIVITIES

COLLEGE PIEDMONT COMMUNITY COLLEGE, ROXBORO, NC
Collins & Aikman

*FORMAT: Media, Workshop, Conference, Call, Letter
M W CF C L

TO WHOM	BY WHOM	* FORMAT	DATE
1. SHEA HENSON	LINDA FARRELL/BRENDA CLAYTON	CF	7/28/92
2. LAURA COFFEE	LINDA FARRELL/BRENDA CLAYTON	CF	7/28/92
3. ANNIE ROACH	LINDA FARRELL/BRENDA CLAYTON	CF	7/28/92
4. LYNN GLASNER	LINDA FARRELL	W/CF	7/29/92
5. TOM CUTLER	LINDA FARRELL	W/CF	7/29/92
6. DEBBIE LEE	LINDA FARRELL/BRENDA CLAYTON	CF	9/1/92
7. 15 PERSON HIGH SCHOOL TEACHERS	BRENDA CLAYTON	CF	9/14/92
8. PHILLIPPE R. FORTON	BRENDA CLAYTON	CF	9/23/92
9. DAVID YATES	LINDA FARRELL	CF	10/15/93
10. TOM HANNAH & C&A EXEC.	LINDA & BRENDA	CF	7/93
11. LINDA BRIGGS	MARY SULLIVAN	CF	11/3/93
12. MAUREEN PATRICK	LINDA FARRELL	CF	9/9/93
13. VISITORS FOR C&A 150TH	LINDA/BRENDA/MARY	CF/M	10/19/93

PEP

Dissemination Activities

COLLEGE Randolph Community College

	TO WHOM	BY WHOM	* FORMAT	DATE
1	Faculty/Staff of RCC.	Learning Skills Center	M	July, 1992
2	Employees of Burlington Ind.	Plant Management	M	10/01/92
3	Employees of Burlington Ind.	Burlington Ind.	M	Nov., 1992
4	COABE	Angela Moore & James Bronson	W	June, 1993
5	Employees of Burlington Ind.	Burlington Ind.	M	Aug., 1993
6	Faculty/Staff of RCC	Learning Skills Center	M	July, 1993
7	Sara Lee & Ramtex	Karen Briles & James Bronson	CF	Sept., 1993
8	Employees of Burlington Ind.	Burlington Ind.	M	Oct., 1993
9	Citizens of Randolph COunty	Dr. Larry Linker	M	Oct., 1993
10	Technimark, Inc.	Christine Holt-Hudson	CF	01/25/94
11.				
12.				

* FORMAT: Media, Workshop, Conference, Call, Letter
M W CF C L

PUBLISHERS' MATERIALS
Partners for Employees' Progress
Piedmont Community College

Materials	Publisher
Essential Skills for the Workplace (Series) Math Skills that Work, Books 1 & 2 Number Power (Series) Reading Skills that Work, Books 1 & 2 Real Number Series: Estimation 1 - Whole Numbers and Decimals Real Number Series: Estimation 2 - Fractions and Percents The Write Stuff: Life Skills Writing Exercise Book Viewpoints: Nonfiction Selections Communication Skills that Work, Books 1 & 2 Lifescenes: Developing Consumer Competence Work Wise (Tactics for Job Success) Ready to Work (Winning at the Job Game) GED Series (Math, Science, Social Studies, Writing and Literature and the Arts) Critical Thinking with Math Algebra Basics Geometry Basics Tables, Graphs & Data Intepretation Analyzing Data Study Smarts Spelling simplified Getting It Down Memorizing Made Easy Note-Taking Made Easy Test Taking Strategies Ready, Set, Study: Building Your Study Skills Ready, Set, Study: Improving Your Study Skills Number Sense: Discovering Basic Math Concepts (Series)	Contemporary Books 180 N. Michigan Ave. Chicago, IL 60601
Math Matters for Adults (Series) Communication for Today (Series) Reading for Tomorrow (Series) Working with Numbers - Consumer Math Reading for Today (Series) Phonics Skills Comprehension Skills Books Reading & Critical Thinking for Adults Language Skills Books (Series) Practical Occupational Reading Skills (Series)	Steck Vaughn P.O. Box 26015 Austin, TX 78755

Materials	Publisher
Target Spelling	
Spelling Steps (Series)	
Math Skills Books	
Real Numbers: Developing Thinking Skills in Math (Series)	
Spelling Steps (Parts 1, 2 & 3)	
Adult Reader	
Gateways to Correct Spelling	
Mathematics in Daily Living (Series)	
Teaching Reading to Adults	
Essential Math for Live (Books 1, 2, & 3)	
First Impressions, Volumes 1 & 2	New Readers Press
More Than a Job: An Anthology	P.O. Box 888
Remembering (Books 1 & 2)	Syracuse, NY 13210
Laubach Way to Reading (Skillbooks & Workbooks 1-5)	
Laubach Way to English (Book 1)	
Books for Adult New Readers	
Using Readability	
Litstart	
I Wish I Could Write	
Puzzles Plus	
Writing Activities for Newspaper Readers	
You Are Here	
Workplace Basics Training Manual	
Challenger (Series)	
Help Yourself	
Math Stories - Fractions, Decimals and Percents	
Practical Mathematics	Globe Fearon
Measuring	P.O. Box 2649
Career Math Makes Sense	Columbus, OH 43216
Number Skills for Life and Work	Simon & Schuster
Reading Skills for Life and Work	15 Columbus Circle
Document Skills for Life and Work	New York, NY 10023
Make Your Money Grow	
Be Credit Wise	
Insure Yourself	
Master Your Money	
Math Skills by Objective (Books 1 & 2)	
Pay By Check	

Materials	Publisher
Math for the World of Work Writing for the World of Work Work For Literacy Skills for Jobs 2000 How to Get a Job and Keep It Life Skills Reading (Books 1 & 2)	Educational Design 47 West 13th Street New York, NY 10011
Signs in Buildings Warning Signs Punctuation, Capitalization and Spelling Writing Sentences & Paragraphs	Media Materials, Inc. 1821 Portal Street Baltimore, MD 21224
Not By Myself	Literacy South Snow Bldg, Room 202 331 West Main Street Durham, NC 27701
Reading in Manufacturing Series Mastering Reading - Learning About Manufacturing (Books 1-4)	Delmar Publishers Box 15015 Albany, NY 12212
Pre GED Writing Skills Read It! A New Approach for Adult Readers Reading for Survival in Today's Society Becoming a Supervisor	Scott Foresman 1900 East Lake Ave. Glenview, IL 60025
Automotive Trades Office Technology Electricity & Electronics Technology Knowledge Base Math Skills Workbook Construction Trades: Math Skills Workbook Reading Skills Workbook	Tom Sticht Glenco Division MacMillan/McGraw Hill 936 Eastwind Drive Westerville, OH 43081
Computer Literacy Success Kit Handling Your Money Your Checking Account Steps to Good Grammar Understanding and Using Good Grammar Find the Errors 200 Words you Need to Know Job Writing Skills Logic Problems for Student Groups Better Reading for Better Jobs	Clear Choice Educational Products P.O. Box 745 Helena, GA 30545

Materials	Publisher
Writing Better	
A Dictionary of Educational Terminology	
Metric Refresher Pack	
Passwords to Success: A Life Skills Vocabulary Program	
Tales of the Odd and Unexpected	
What's the Question? 50 Understanding & Thinking Exercises	
Thinking Skills	
Challenges in Business Math	
Geometry Practice Exercise	
Geometry Puzzle Fun	
Using a Calculator: Easy Lessons & Practice Activities	
A Few Week of Calculus	
Confidence Building Trigonometry	
Survival Reading Skills	
Survival Reading Flash Cards	

SOFTWARE

Partners for Employees' Progress
Piedmont Community College

Software	Publisher
Burlington Industries - Williamsburg Plant	
Metric Skills I & II On the Job Calendar Skills	Hartley P.O. Box 419 Dimondale, MI 48821
Math in the Workplace Using Graphs, Charts and Tables Measuring in Traditional and Metric Units Working with Lines and Angles Math for Everyday Living Ratio and Proportion How to Read for Everyday Living	Educational Activities P.O. Box 392 Freeport, NY 11520
Motivation: Go For It Expectations on the Job Positive Attitudes Toward Work Living With Your Paycheck	Educational Associates 8 Crab Orchard Road P.O. Box Y Frankfort, KY 40602
Skills Bank II	Softwriters Development 825-D Hammonds Ferry Linthicum, MD 21090
New Reader Bookstore	Interactive Knowledge P.O. Box 560865 Charlotte, NC 28256
Following Directions	BLS Tutorsystems, Inc. 5153 Woodmill Drive Wilmington, DE
Autoskills	Entry Publishing 27 West 96th Street New York, NY 10025
Word Attack	Davidson & Associates P.O. Box 2961 Torrance, CA 90509

Software	Publisher
The Comprehension Connection	Milliken Publishing 1100 Research Blvd. P.O. Box 21579 St. Louis, MO 63132
Reading and Critical Thinking	Queue 338 Commerce Drive Fairfield, CT 06430
Burlington Industries - Pioneer Plant	
GOAL Reading & Vocabulary	Davidon & Associates P.O. Box 2961 Torrance, CA 90509
Critical Reading/GED Reading for Adults Math for Adults (Tiers I, II, III) Project Start I-II	Hartley P.O. Box 419 Dimondale, MI 48821
Milliken Math Sequences	Milliken Publishing 1100 Research Blvd. P.O. Box 21579 St. Louis, MO 63132
New Reader Bookstore The Ready Reading Course	Interactive Knowledge P.O. Box 560805 Charlotte, NC 28256
Skills Bank II	Softwriters Development 825-D Hammonds Ferry Linthicum, MD 21090
Burlington Industries - Asheboro Plant	
Milliken Addition/Subtraction	Milliken Publishing 1100 Research Blvd. P.O. Box 21579 St. Louis, MO 63132
GOAL Reading Comprehension & Vocabulary	Davidson & Associates P.O. Box 2961 Torrance, CA 90509

Software	Publisher
New Reader Bookstore The Ready Reading Course	Interactive Knowledge P.O. Box 560865 Charlotte, NC 28256
DayBreak	Institute for the Study of Adult Literacy Penn State University University Park, PA
Project Star Critical Reading/GED Reading for Adults GED Math	Hartley P.O. Box 419 Dimondale, MI 48821
Collins & Aikman - Roxboro Plants	
BASE (Basic Academic Skills for Employment)	Smyle Educational P.O. Box 37333 Charlotte, NC 28237
EDL Reading Power Modules (A-I) EDL Quantum Reading Series (J-M)	Educational Development P.O. Box 210706 Columbia, SC
Reading & Critical Thinking Practical Composition	Queue 338 Commerce Drive Fairfield, CT 06430
Word Attack Plus Math Blaster Plus Algeblaster Spell It Plus!	Davidson & Associates P.O. Box 2961 Torrance, CA 90509
Problem Solving (Math) VersaText Autoskills Building Memory Skills	Entry Publishing 27 West 96th Street New York, NY 10025
Typing Tutor	Prentice Hall 200 Old Tappan Road Old Tappan, NJ 07675

Software	Publisher
Ready Reading Course	Interactive Knowledge P.O. Box 560865 Charlotte, NC 28256
The Factory	Sunburst P.O. Box 660002 Scotts Valley, CA 95067-0002
Laubach Way to Reading	New Readers Press P.O. Box 131 Syracuse, NY 13210

Collins & Aikman - Siler City Plant

Skills Bank II	Softwriters Development 825-D Hammonds Ferry Linthicum, MD 21090
Word Attack Word Attack Plus	Davidson & Associates P.O. Box 2961 Torrance, CA 90509
VersaText	Entry Publishing 27 West 96th Street New York, NY 10025
Microsoft Learning DOS	Microsoft Corp. One Microsoft Way Redmond, WA 98052

B. Customized Materials -- Alamance Community College

One major curriculum was developed for the project, consisting of material from various jobs and departments in the plant. Some lessons focus on skills and job materials used in all departments, and are thus called job-related lessons, while other lessons focus on specific skills applied differently in each department, and are thus called job-specific. This major curriculum is called the PACE curriculum and is organized into 6 major units, as follows:

Unit 1:	Introduction to PACE and the Company
Unit 2:	Forms, Tables, and Signs
Unit 3:	Work Terms and Descriptions
Unit 4:	Charts and Graphs
Unit 5:	Measurements
Unit 6:	Processes and Procedures

Several customized files were added to the GOAL Reading and Vocabulary computer software programs. These files contain readings and work-related terms and are used in conjunction with customized lessons in the PACE Curriculum book.

GOAL Reading Lessons
BI Today
Yarn Preparation
Safety Programs
Chemical Safety
Job Safety Analysis
Accidents
Work Teams
Basic Principles of Teamwork
Communication at Work

GOAL Vocabulary Lessons
BI Today
Yarn Preparation
Yarn Terms
Chemical Safety
Slashing Terms
Twisting Terms

CUSTOMIZED MATERIALS
Central Carolina Community College
and
Collins & Aikman

Job-Related Curricula

Elapsed Time (Time Cards, Check Stubs)
C&A Computer Basics
Graphs, Charts, and Tables (includes histograms & pareto)
Flow Charts
Metrics
Measurement
Finding Information & Forms (includes new C&A insurance book)
Listening, Following & Giving Directions (including Weaver's knot)
History of Weaving
Your Company - Collins & Aikman (history of C&A)
Collins & Aikman, Quality and Quantity
Collins & Aikman Analogies

Customized Word Attack Software

Metrics
Measurement: Time, Weight, Length
Graph Terms
Quality Terms
World Class Manufacturing Terms
Preparation Terms
Defects
Weaving Terms
Computer Terms
DOS Terms
Parts of Speech
Geometry Terms
Days, Months, Numbers & Contractions
MSDS Terms

Health & Safety

C&A Safety Policy, Rules & Reporting
Accident and Injury Charts and Graphs
Cotton Dust
Hearing

Housekeeping (CAT Team Quality Success Report)
Fire Maps
Fire Safety
Lockout/Tagout
Breathing and Bleeding
Shock, Choking & Fainting
Heart Attacks, Breaks, and Eye Injuries
Electricity, Burns, Chemicals & Heat Stroke
Associate Safety Writings Booklets
Working Safely with Chemicals and Using the MSDS

Departmental Specific Curricula

Knowledge and skills from the various departments overlap; therefore, departmental specific units are combined with core curiculum units to create the Departmental Curricula. Instructors provide students with a requirement list and pre and post tests.

Curriculum has been completed for every Depatment in the Siler City Plant except the Warehouse which employs a small number of associates. Departmental curricula is correlated to CASAS Competencies.

Weaving Specific Units (Pignone and Dornier Departments)

Abbreviations
Weaver's Hand Tools
Dobby & Jacquard Looms; Shuttleless Weaving Machines
Jacquard Loom Pattern Cards and Disks
Productivity Math
Common Weaving Terms
Common Defect Terms

Preparation Specific Units (Preparation Department)

Common Preparation Terms
Yarn and Fiber
The 3 F's (Fabrication, Fiber, Finish)
Warping and Creeling
Slashing and Dyeing
Service Areas (Spooling, lease Picking, Beams, Draw-In)
Yarn Yield
Preparation Math and Metrics

Clothroom Specific Units (Clothroom Department)

Introduction to the Cloth Room
Cloth Quality and Quantity
Common Clothroom Terms
Common Defect Terms
Filling Haulers
Filling Fun
Inspection and Mending

CUSTOMIZED MATERIALS
Piedmont Community College
and
Burlington Industries

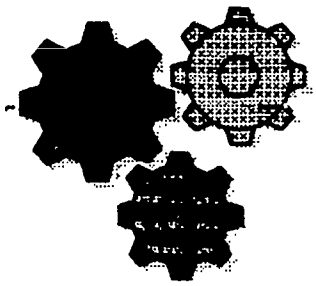
The following material was developed to customize the basic skills curriculum at BI. There are two categories of customized curriculum: job related and job specific. The contents for each follow.

Job-Related Curriculum

Unit 1: Workplace Vocabulary Builders
Unit 2: Workplace Vocabulary
Unit 3: Teamwork
Unit 4: Safety on the Job
Unit 5: Math in the Workplace
Unit 6: Movers and Shakers
Unit 7: Bright Lights
Unit 8: Tools in the Workplace
Unit 9: TextPert - Troubleshooting
Unit 10: Reading on the Job

Job-Specific Curriculum

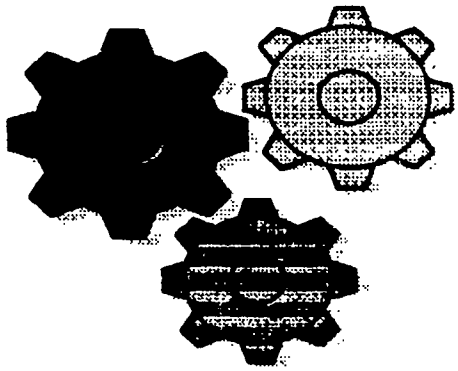
Operator Curriculum
Technician Curriculum
Service Curriculum



Piedmont Community College and Collins and Aikman Roxboro, NC

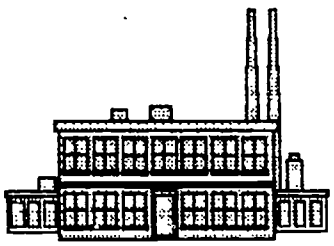
Customized Departmental Curriculum

Inspection Department	Linda Caywood-Farrell Piedmont Community College Box 1197 Roxboro, North Coarolina 27573
Inspection Department Opps and Goofs	Linda Caywood-Farrell
Greige Stores Department	Linda Caywood-Farrell
Exhaust Dye Department Hisaka Jetts Department Spray Redye Department Dye Weigher Department Kettles Department	Linda Caywood-Farrell
Sample Cutting Department	Linda Caywood-Farrell
Slitting & Salvage Department	Linda Caywood-Farrell
Kusters Department	Linda Caywood-Farrell
Wet Finishing Department	Linda Caywood-Farrell
Dry Finishing Department	Linda Caywood-Farrell
Receiving Department	Linda Caywood-Farrell
Shipping Department	Linda Caywood-Farrell



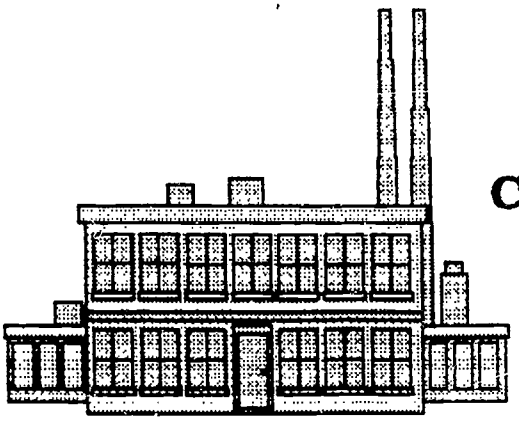
Customized Departmental Curriculum

Weaving Department	Linda Caywood- Farrell
Weave Beaming Department	Linda Caywood-Farrell
Tie-In Department	Linda Caywood-Farrell
Knit Beaming Department	Linda Caywood-Farrell



Customized Job-Related Curriculum

C&A Textile Terms	Brenda Clayton Piedmont Community College Collins & Aikman Roxboro, NC
Computers Unit	Brenda Clayton
C&A Insurance Unit	Mary Sullivan Piedmont Community College Collins and Aikman Roxboro, NC



Customized Job-Related Curriculum

Linear Measurement Unit	Brenda Clayton
Graph Unit	Brenda Clayton
C&A Time Cards & Wage Statement	Brenda Clayton
SPC Unit	Brenda Clayton
C&A Handbook/Contents & Indexes	Brenda Clayton
C&A Rules &Regulations - Written Directions Unit	Brenda Clayton
Scales & Gauges Unit	Brenda Clayton

Customized Curriculum Software

C&A Health And Safety	Piedmont Community College & Interactive Knowledge
C&A Coating Department	Linda Caywood-Farrell (Versa Text Authoring System)
SPC Terms DOS Commands Metrics, Graphs, Measurement, Insurance, Computer, C&A Textile	Brenda Clayton - Word Attack

CUSTOMIZED SOFTWARE LIST
PARTNERS FOR EMPLOYEES' PROGRESS
RANDOLPH COMMUNITY COLLEGE
&
BURLINGTON INDUSTRIES
ASHEBORO, NC

Software	File Name	Corresponding Curriculum
GOAL	VOCAB.1	Curriculum 1 Lesson 5 (Basic Textile Vocabulary)
GOAL	HAZCOM.9	Curriculum 3 Lesson 9 (Hazcom Vocabulary)
GOAL	HAZCOM.10	Curriculum 3 Lesson 10 (Signs at Work)
TYPING TUTOR	BIOR	
TYPING TUTOR	GEIN	
Safety & Health at the Workplace	same	Curriculum 3

JOB SPECIFIC CURRICULUM

NUMBER	NAME
CURRICULUM ONE	THE COMPANY AND THE PRODUCT
CURRICULUM TWO	WORK WISE
CURRICULUM THREE	HEALTH AND SAFETY
CURRICULUM FOUR	THE WEAVE DEPARTMENT
CURRICULUM FOUR	THE PREPARATION DEPARTMENT
CURRICULUM FIVE	YOUR WORK AS A CLERK

C. Anecdotal -- Alamance Community College

INVOLVEMENT of the ADVISORY COUNCIL

The Advisory Council met 5 times over the course of the project. Primary decisions made by the Advisory Council resulted in a) two major recognition ceremonies on each shift (July 1993 for students and supervisors; and December 1993 for plant-wide ceremony), b) an Open House on each shift attended by all interested employees in the plant, and c) additional off-shift classes offered to employees not enrolled in the PACE program.

EXAMPLES of IMPACT on PARTICIPANTS' LIVES

Of the 9 participants who completed the GED requirem[illegible]nd earned a GED Certificate, 5 of them subsequently enrolled in college curriculum c[illegible] participant who possessed a high school diploma and who completed the CASAS re[illegible]nd the job-related curriculum, subsequently took and passed an insurance licensing e[illegible]ributing her success to the program.

RESULTS of EMPLOYEE EVALUATIONS

Each participant completed a survey to describe their reasons for participation and the impact they felt the project had on their lives. Questions and responses are summarized here:

1) Why did you enroll in the program?

a) To work on reading/writing/spelling skills = 36
b) To work on the GED = 24
c) To learn computer skills = 4
d) To improve math skills = 3
e) Other = 3

2) What things did you like about the program?

a) Gaining computer skills = 23
b) Help from teachers, group work & computers = 21
c) Everything = 16
d) Improving in reading & math = 6

3) What things would you like to change about the program?

a) Nothing = 39
b) Longer class sessions = 16
c) No response to question = 4
d) More classroom space = 2
e) Other responses to questions #3:

*Hurry up and get my GED * Study for one GED test at a time * Allow employees without a high school diploma to enter first (GED). * Increase the number of employees enrolled. * Be able to attend consistently (job conflicts). * Offer other computer classes beyond basic computer skills. * A program to help people to learn more about computers used on the job. * Allow people to spend more or all of the class period on computer. * Spend less (or no) time doing group work / Less talking during class. * When someone starts class, they should have to stay for at least three months, instead of two or three days.*

4) What things did the program help you to do in your personal life?

a) Increased self-e steem, confidence in myself, ability to communicate with others = 26
b) Improved reading skills for self or to work with children at home = 23
c) Improved general math skills and/or application of math in life = 19
reading a ruler; difference between a sale and a bargain; balancing checkbook; keeping better bank records; aware of financial resources and how to deal with them
d) Learning computers = 5
e) Nothing or uncertain = 3

5) What things did the program help you to do on your job?

a) Better understanding of my job, reading on my job, using computer on the job, to make it run smoother, to better plan my job (write up charts, line up work orders), to help other employees on the job, to do a better job = 37

b) Being able to communicate with co-workers, teamwork = 17

c) Math functions, measuring, etc. = 13

d) Self-confidence, self-esteem, pride in my job, pride in the company = 8

e) Uncertain, don't know, no affect on the job = 3

6) Would you recommend the program to other employees? Why or why not?

All employees said they'd recommend the program to others. Most explained why:

*It can teach people how to communicate with each other in life, also better your work skills. * Because a job might come up and you might need this schooling... if this should happen then the employee has a better chance. * To understand things more clearly. * Because this program has helped me learn things that I didn't learn in school. * Self esteem, enjoy learning, everyone can learn. * Because there are some people that can't read or write.*

7) Do you plan to continue your education? If so, what would you like to study?

a) Not sure what to study, or no plans to continue yet = 40

b) Computers = 9

c) Medical professions: (nurse assistant, med. office tech, etc.) = 7

d) Other: auto mechanics, cosmetology, Bible studies = 3

8) What was the major benefit you received from this program?

a) Basic skills and better understanding = 25

b) Improved my self-esteem, confidence, sense of achievement = 20

Feeling better about myself, accomplished something no one in my family has done.

c) Being able to work on / complete the GED = 11

d) Learning computer skills = 3

e) Being able to help my children more = 3

9) What was difficult about the program for you?

a) Math = 25

b) Other responses:

*The writing skills, so I quit for a while. * Getting the nerve to sign up. * Not knowing what to expect the first day. * Concentrating in noisy conditions. * Not enough space and it was a noisy environment. * Getting used to one teacher* (3rd shift had 5 different teachers over the project period).

10) Has the program changed any of your relationships at work, or with your family and friends? If so, please explain.

33 employees indicated no change in their relationships. 37 employees responded as follows:

FAMILY:

*I can read with my family. * I want to participate more with other employees and my family. I listen more to my children. * It makes me feel like I fit in better when they are talking. * When they leave notes, I know what they're talking about. * Gave me a change to take different subjects home and it have my family a chance to help me and show me how to go about solving the problem * At first I was ashamed when my son come to me and ask me about certain math problems. I couldn't answer. Because I wasn't sure how to do them, or I had forgotten. * My family has encouraged me to keep on going.*

WORK and LIFE:

*Encouragement from people I work with, also from my family. * I learned to talk problems out with friends, family, and coworkers. * Program has helped me to communicate better with my family members, customers and coworkers. * I can now read by myself and do not have to depend on others for help as much. * I now have confidence in myself. * Helped my self esteem and communication skills. * Because I had a bad attitude. * Personality and attitude are getting better. * More comfortable talking to people, some people. * At work I had small problems getting along with some of my co-workers. Now we are pretty good friends. * At work, I'm now able to communicate more with my co-workers concerning the computer. * I can relate to people better now because I have more self esteem now. * My supervisor seems to have more confidence in me since I went through the program. * Supervisor feels that I work well with computer due to knowledge learned. * Better working relationship with other employees. * Helped things to go easy in some ways, to work better with people. * I have learned to be patient and give other people a chance to talk or explain their differences. * It has helped me deal with teamwork better. * One of my best friends is in class with me so on our break time we discuss some math problems and reading skills. * It made me want to do more in life, don't set back and take second. Keep your head up and do your part, your reward will come.*

SUPERVISOR EVALUATIONS

In addition to quarterly surveys completed by each supervisor on each of their employees, the supervisors were asked to complete a survey at the end of the project to describe how they felt the program helped their employees AND helped make their job as supervisors easier.

All supervisors felt the program had a positive affect on both the employees and themselves as supervisors. The most common expressions of this affect included:

- increased confidence and ability to work in teams, more focused on team goals
- employees "speaking up" more and taking a more active role in team projects
- employees more willing to make constructive decisions

Some supervisors were very interested in becoming more familiar with the instructional materials used in the classroom, while others felt they were familiar enough by talking with their employees, and still others expressed no desire or need to know more.

Supervisor suggestions for program improvement included:

- offer an "off-shift" class for the 3rd shift people who are waiting to get into the class
- allow supervisors to be more involved in scheduling who goes into classes
- offer more classes/ classes beyond high school skills level/ separate classes for each level
- have instructors meet with supervisors each quarter to work together to help employees
- send employee progress reports to supervisors
- rotate people every 6 - 12 months to allow more people to be served
- update the curriculum with company and department changes as they take place
- work on skills that will better prepare employee

ANECDOTAL

Siler City LLL

WHAT ARE PEOPLE SAYING ABOUT LIFELONG LEARNING?

The following comments were made by students in LLL classes.

"People now come to me for help with the computer out on the job - instead of the other way around."

"I can now use the measuring tape and feel like I'm not quessing anymore."

"The Lifelong Learning Program has made me realize that I can still learn - that I'm not as stupid as I thought I was."

"The Weaving Terms have really helped me to understand my job better."

"It's helped me be more patient with myself and keep trying to find the correct answer."

"I like to learn about the company, it helps to feel a part of something."

"I can use the calculator to figure my productivity now."

"The Health and Safety Curriculum has helped me at home as well as being more aware at work."

"It helped motivate me to want to move up within the company - maybe to get into electronics to work as an electronics techinician on the computerized looms."

"The metrics unit has really helped me with my job. I now understand what I should be doing."

"I'm a fixer and I have to figure out what's wrong with looms. The Math Blaster Mystery Computer Program helps me to get better at picking out what information I need to solve problems."

"It is great to work for a company that cares about it's people to give us a chance to improve our selves. It pays off for the company in lots of ways too."

"Thanks to LLL, I'm gonna get my GED - never before thought I could..."

"It's helped me being around other people who are learning. I like working with my teacher. She is patient with me and never gets mad when I make a mistake. After 40 years, I finally understand how to cancel fractions."

"Because of LLL, I can read to my grand-daughter. I was never able to read to my own kids..."

CENTRAL CAROLINA COMMUNITY COLLEGE/COLLINS & AIKMAN

ANECDOTAL

Siler City LLL

The following comments were made by Supervisors of students.

"_____ is a very valuable Associate. Continuing her education through LLL in an asset for our company."

"She is now using a calculator. Before she never did any figuring like she was suppossed to."

"_____'s attitude and self esteem have improved since LLL classes."

"_____ is really excited about LLL."

"Since being in LLL, I've seen some positive changes - I've assigned him to the company newsletter."

"His behavior toward others has improved."

"I've notice with _____ an increase in quality and her caring about it since she began LLL."

"Much better behavior and attitude!"

"_____ encourages everyone to get involved in LLL."

"She feels good about what she is doing"

"He's more eager to find ways to improve the job."

"He was doing a good job before but I would have to say he is doing even a better job now."

" _____ is more confident in her self and more fully appreciative of C&A and why education is important."

"There's been a real increase in attendance and productivity since beginning classes."

" _____'s self esteem and communication skills have really improved since LLL classes."

Burlington Industries Learning Center

Testimonials

Shirley: BI Employee - Cloth Room Clerk

She expressed how much she enjoyed the Job Specific Curriculum. It really helped her with different aspects of her job, especially computers. There was a lot she didn't know about using a computer. The curriculum was helpful and enjoyable.

Christine: BI Employee - Production Machine Operator

Christine's goal when joining the Learning Center was to focus on basic math skills and get over her fear of math. After one quarter she tested 16 points higher in math. She realized that her hard work had paid off. Christine has moved on to Phase II and is pursuing her GED. Even the smallest increase is very motivational for students. Christine thought of some catch phrases that were motivational for her and hoped they would be for other students.

- Don't let it pass you by...Work and learn at BI
- Education is a must...Working at BI is a plus

Patricia and Carl: BI Employees - GED recipients

Both students commented on how the class had helped them improve their skills toward earning a GED.

Robert: BI Employee - Production Machine Technician

Robert expressed how much the Learning Center has helped him. He was a non-reader when he entered the program some years ago. Since he has learned to read, there have been many satisfying moments such as; being able to read road signs as he drives and being able to read a menu and know what he ordered. Robert never honestly thought that he would get to this point and now that he has he is really seeing the effects of the class on his life. Robert attributes most of his success to the Learning Center and its' teachers.

Robert Sills: BI Plant Manager

Robert Sills, the Williamsburg Plant Manager, has said on several occasions to visiting groups of customers and junior executives that, "We need to better educate our employees. This will be critical to BI becoming a 'World Class'

manufacturer." He has stated that, "The BI Learning Center is an integral part of an overall plan to be such a factory within five years."

Larry: BI Employee - Cloth Room

Larry changed shifts and still wanted to continue in the program. He had not had time to talk to his new supervisor about it and because he didn't want to miss class, he came in an hour early before work to attend. This shows the student's dedication to our program.

Lee: BI Employee - Warp Hauler

Lee joined the Learning Center because he thought it was the perfect opportunity to go back to school and work at the same time. He received his GED and is planning to continue his education. Lee is aware of the rare opportunity that he has had and is grateful to BI and PCC for providing it.

Dan: BI Employee - Warp Hauler

Dan is a 47 yr. old non-reader who recently joined the program. Since his enrollment, Dan has noticed that he feels relaxed among others in the class and also feels good about what the class has done for him already. He has raved about working on the computer with New Reader Bookstore and has made tremendous progress with the alphabet and sight words. Dan has lost weight and his new appearance reflects an increase in self-esteem and self-confidence. He attributes this new outlook to the learning enrichment program at BI.

Tosha: Former BI Employee

Tosha is a former student that had to leave her job due to a problem pregnancy. She was eligible for her Phase I certificate but didn't receive it before she left the company. She called recently and wanted to make sure she could get her certificate. She had worked hard and was very proud of being in the class. She planned to start her studies again and she wanted her certificate to show that she had participated.

Robert: BI Section Supervisor

Robert is a weave room supervisor. He made the comment that the Learning Center has done more to boost employee morale than anything he has seen in 27 years of working for BI.

Burlington Industries Learning Center
Questionnaire Responses

"I really love this class. I'm going to enroll in my local community college for the spring quarter. My husband tells me I must really like homework since I do it all the time. I've even got him reading. Can you believe that? I got up at church and told everybody about this program and how it not only helped me, but I'm helping my husband."

"I know that all the sweepstakes mail I get is junk mail. But it sure makes me feel good to be able to fill them out."

"When my daughter was small she would ask me over and over to read to her. I would always put her off by saying I was too busy. Do you know that I read a story to my granddaughter? It gave me the greatest feeling. I can't tell you how it made me feel. She even comes to me now and asks me words and I can tell her what they are."

"I've gone to church for years and always took the service program and did everything with it but read it. Now I can follow along by reading the program."

"I think it's great how the Learning Center can teach you new things to keep up with the world today. People can tell you something but it's good to read about it yourself."

"The Learning helped me read better and feel good inside."

"My kids ask me questions about their homework and I can't help them. I want to better my education so I can help them."

"When I was young I was a slow learner. I heard my mother say a lot that I just couldn't learn. Because of the Learning Center at BI, I learned to read even though it was time for me to retire. I am very grateful to the industry for allowing me to come back and study even though I'm retired."

"You cannot image the feeling of driving down the road and being able to recognize words that you learned in class. After so many years of not being able to read it is like living in a different world."

ANECDOTAL COMMENTS FROM MAMAGEMENT AND PARTICIPANTS LIFELONG LEARNING C&A ROXBORO

Frances Lunsford, D&F Plant Human Resources Manager - " LLL offers an opportunity to acquire needed skills for job promotions and an opportunity for all associates to sharpen their limited educational skills without feeling singled out or embarrassed."

William Weaver, Coating Department Manager - " The LLL program has helped in the Coating Department. People that could not read or write have made steady progress. They make fewer mistakes now. We have had some to get their GED's that would not have had it without LLL. The other class they offer has really helped others on the floor creating better skills and improving the way the department runs."

Jerry Lee, Division Human Resource Director - " LLL has: improved associates use of S.P.C, Problem solving skills,and decision making skills; increased self- esteem; improved morale; kindled motivation; and provided our associates with an opportunity to upgrade their basic skills."

Larry Shoe, Plant Manager D&F Plant - "The instruction provided by Piedmont Community College exceeded my expectations. The training material for LLL is so complete concerning job duties that we use them for new hire training. Getting all written material into a computer program is our next big goal. Overall, the Lifelong Learning Program is one of the best benefits offered to associates that I've seen in years, and C&A is the main winner."

Ronald Mooney, Kuster Department Manager - " I would like to see LLL continue not only for associates benefit but also for improvement in quality ,production and improvements in company morale. I have seen many positives come from the LLL program. I have seen improvements in self-esteem, attitude, and basic skills."

James Edmonds, LLL participant - " I learned to listen and give direct attention. I also improved my math and reading skills."

Bonnie Hubbard, Lab Technician and LLL participant - " LLL improved my writing skills and helped me to improve my SPC charts.

LLL Participant - " At my age I thought that I had no chance of learning some of the things I have learned. I still have problems with algebra and geometry, but I realize that if I had time, I could learn almost any thing."