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ABSTRACT

A joint enterprise by Sanford Public Schools of Sanford, Maine, and five partners established and operated a program of literacy, math, and reasoning/problem-solving skills instruction and support services at five work sites. The business partners were Sprague Electric Company; The Baker Company; Jagger Brothers, Inc.; Greenwood Center; and Millrock, Inc. Program external evaluators attended partner council meetings, read performance reports, conducted personnel discussions, examined the record keeping system, and interviewed representatives of each business partner and all instructors. Evaluation results showed that the five partners were very involved in the Partnership Council and were pleased with the results. The program enrolled 171 employees for reading and writing, 263 for math, and 35 for English as a second language. The program developed evaluation plans to be used by all business partners and individual students. Over 70 percent of employees enrolled in math and reading and writing instruction raised their instructional levels one level. (A separate performance report compares actual accomplishments with stated goals and objectives. Charts illustrate the following: enrollments by grant requirements and actual enrolled; breakdown of students according to male/female by age, ethnic origin, marital status, and school credentials; and pretest/posttest results.) (YLB)

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PERFORMANCE REPORT  
 P/R AWARD #V198A20140

JULY 1, 1992 TO DECEMBER 30, 1993

The following contains a comparison and statement of actual accomplishments of objectives contained in the application and grant listed above. There are thirteen stated goals and objectives.

#1. The first objective was successfully achieved. As agreed, we enlisted and developed a partnership cooperation with five (5) local employers. The Baker Company, Greenwood Center, Jagger Brothers, Millrock Corporation, and Vishay-Sprague actively participated within their respective workforces to arrange and hold workplace class instruction during the stated grant period. The classes were so effective and popular in the community that we added several helping corporations and conducted classes there as well. These companies are Renaissance Greeting Cards, Manpower Temporary Services and Province Automation.

#2, #3 and #4. These objectives were successfully achieved. The goal of these objectives had to do with identifying participants in math, reading comprehension, oral/written communication and English-as-a-Second Language. The original grant calls for specific numbers at each level. We found the levels of competency in the above areas to be lower than we had estimated. It varies among companies as well.

The chart below will specify the breakdown of numbers by grant requirement and actual enrollment.

	Grant Requirements	Actual Enrolled	Over/Under
Reading/ Writing			
Level 0-4 LU* (AA-C)	28	127	+99
Level 5-12 LU* (D-G)	87	44	-43
Total	115	171	+56

	Grant Requirements	Actual Enrolled	Over/Under
<b>Math</b>			
Level 0-4 LU* (A-B)	53	253	+200
Level 5-12 LU* (C-G)	137	10	-127
Total	190	263	+ 73
<b>English-as a-Second- Language</b>			
	80	35	- 45
Grand Total	385	469	+ 84

\* Adult Basic Skills Program levels from the Learning Unlimited Corporation.

In the previous grant, we tested 859 student employees. We were able to serve 340 during the third wave. This present grant served an additional 434. There were 35 participants that were carried over from the previous grant. The testing results for math identified 323 participants that needed instruction in level A and 681 participants needing instruction in level B which does not include the participants that finished level A and went on to level B. In language, testing results showed 100 needing instruction at the pre-literacy level, 205 at level A, 254 at level B, 313 at level C, and 310 at level D. For this reason, we did not provide instruction at higher levels in math and language during this grant period. It took this entire grant period, the fourth wave, to serve most of the remaining student employees who were in level A-D in language and level A-B in math.

Before commenting on the remaining objectives, the following charts will explain the breakdown of students according to male and female by age, ethnic origin, marital status, and school credentials.

AGE	MALE	FEMALE	TOTAL
<b>MATH SESSIONS</b>			
16-24	11	21	32
25-44	51	104	155
45-59	9	57	66
60+	2	8	10
NO INFO GIVEN	0	0	0
SUB TOTAL	73	190	263

AGE	MALE	FEMALE	TOTAL
<b>LANGUAGE SESSIONS</b>			
16-24	8	7	15
25-44	41	63	104
45-59	10	31	41
60+	2	4	6
NO INFO GIVEN	4	1	5
SUB TOTAL	65	106	171
<b>ESL SESSIONS</b>			
16-24	0	2	2
25-44	7	15	22
45-59	4	3	7
60+	0	2	2
NO INFO GIVEN	0	2	2
SUB TOTAL	11	24	35
<b>LISTENING/SPEAKING REASONING/PROBLEM SOLVING (LSRPS)</b>			
16-24	2	0	2
25-44	9	5	14
45-59	4	7	11
60+	0	0	0
NO INFO GIVEN	0	0	0
SUB TOTAL	15	12	27
MATH	73	190	263
LANGUAGE	65	106	171
ESL	11	24	35
LSRPS	15	12	27
TOTAL	164	332	496

ETHNIC	MALE	FEMALE	TOTAL
<b>MATH SESSIONS</b>			
AMERICAN INDIAN	2	1	3
ASIAN	12	6	18
BLACK	0	0	0
HISPANIC	0	4	4
WHITE	51	183	234
NO INFO GIVEN	3	1	4
SUB TOTAL	68	195	263
<b>LANGUAGE SESSIONS</b>			
AMERICAN INDIAN	0	1	1
ASIAN	26	16	42
BLACK	0	0	0
HISPANIC	0	2	2
WHITE	36	84	120
NO INFO GIVEN	3	3	6
SUB TOTAL	65	106	171

	MALE	FEMALE	TOTAL
<b>ESL SESSIONS</b>			
ASIAN	11	24	35
SUB TOTAL	11	24	35
<b>ETHNIC</b>			
	MALE	FEMALE	TOTAL
<b>LSRPS</b>			
AMERICAN INDIAN	0	0	0
ASIAN	0	0	0
BLACK	0	0	0
HISPANIC	0	0	0
WHITE	15	12	27
NO INFO GIVEN	0	0	0
SUB TOTAL	15	12	27
MATH	63	195	258
LANGUAGE	65	106	171
ESL	11	24	35
LSRPS	15	12	27
TOTAL	159	337	496

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	MALE	FEMALE	TOTAL
<b>MARITAL</b>			
<b>MATH</b>			
SINGLE	19	39	58
MARRIED	40	12	152
WIDOWED	2	1	11
DIVORCED	3	1	20
SEPARATED	-	2	2
NO INFO GIVEN	5	4	9
SUB TOTAL	71	132	253
<b>LANGUAGE</b>			
SINGLE	16	10	26
MARRIED	43	72	115
WIDOWED	0	9	9
DIVORCED	2	7	9
SEPARATED	0	3	3
NO INFO GIVEN	4	5	9
SUB TOTAL	65	106	171
<b>ESL</b>			
SINGLE	1	2	3
MARRIED	8	19	27
WIDOWED	1	2	3
DIVORCED	1	0	1
SEPARATED	0	0	0
NO INFO GIVEN	0	1	1
SUB TOTAL	11	24	35

MARITAL	MALE	FEMALE	TOTAL
<b>LSRPS</b>			
SINGLE	3	3	6
MARRIED	12	6	18
WIDOWED	0	0	0
DIVORCED	0	3	3
SEPARATED	0	0	0
NO INFO GIVEN	0	0	0
SUB TOTAL	15	12	27
MATH	71	192	263
LANG	65	106	171
ESL	11	24	35
LSRPS	15	12	27
TOTAL	162	334	496

EDUCATION	MALE	FEMALE	TOTAL
<b>MATH</b>			
GED-YES	7	10	16
HS DIPLOMA	40	145	185
DIPLOMA/GED-NO	13	28	41
NO INFO GIVEN	10	10	20
SUB TOTAL	70	193	263
<b>LANGUAGE</b>			
GED-YES	3	5	8
HS DIPLOMA	27	54	81
DIPLOMA/GED-NO	19	31	50
NO INFO GIVEN	16	16	32
SUB TOTAL	65	106	171
<b>ESL</b>			
NO INFO GIVEN	11	24	35
SUB TOTAL	11	24	35
<b>LSRPS</b>			
GED-YES	1	2	3
HS DIPLOMA	12	10	22
DIPLOMA/GED-NO	2	0	2
NO INFO GIVEN	0	0	0
SUB TOTAL	15	12	27

	MALE	FEMALE	TOTAL
MATH	70	193	263
LANGUAGE	65	106	171
ESL	11	24	35
LSRPS	15	12	27
TOTAL	161	335	496

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#5. This objective states the identification of 335 student employees needing reasoning and problem solving skills. We did not successfully reach those numbers. However, we created several courses that taught reasoning and problem solving skills to employees. We are happy to say that these courses were partner developed with guidance and direction from the instructors. After several meetings, we centered on the skills required. We then created a course and format that was appropriate to production demands. The length of the course was determined by the amount of material to be covered. As coordinator, I tried to tie in to each listening, speaking, reasoning and problem solving course some reference to math or language. Below is a list of these courses and the company that hosted the course. In all we served 78 student employees. 27 were from the partner companies and 51 from othe companies outside the partnership.

EFFECTIVE VERBAL COMMUNICATION/FRENCH	Greenwood Center
PERSONAL EMPOWERMENT	Greenwood Center
SUPERVISORY SKILLS TRAINING	Mallico Corp
COMPUTER APPLICATIONS	Greenwood Center
PRE-CNA STUDY SKILLS COURSE	Greenwood Center
BLUEPRINT READING COURSE FOR MASTER WELDERS DESIGNED TO TRAIN THE TRAINER FOR ADDITIONAL COURSES AT A LOWER LEVEL.	The Baker Company
BLUEPRINT READING MATH SKILLS FOR SHEET METAL WORKERS	The Baker Company
ALGEBRA/TRIGONOMETRY FOR MACHINISTS IN PRODUCTION	Province Automation
BUILDING CONFIDENCE AND BEING ASSERTIVE	Renaissance Greeting Cards

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COMMUNICATION SKILLS

Renaissance Greeting  
Cards

TIME MANAGEMENT

Renaissance Greeting  
Cards

#6. This objective was achieved. Four hundred eighty-nine (489) student employees were tested, evaluated, counseled and placed at appropriate levels of instruction. The grant called for at least 385 student employees. This number represents an overage of 104. Out of the total, 5 were placed with a volunteer tutor and the Wilson Reading System was purchased and used for the participants that we tested for possible dyslexia. The Wilson Reading System was recommended to us by the Learning Disabilities Association of Maine. It was very effective. Unfortunately, by the time we trained in the system and identified students, the grant period had ended. Three students did raise their levels of reading as a result of the program. Two out of the three were non-readers. Studies show that about 3% of the population cannot learn to read because of dyslexia. Our totals should have been about twelve people. I believe we could have had an additional nine participants based upon the numbers we were able to identify during the short span of time we used this method in the grant.

#7. This objective was achieved. This goal of this objective refers to developing and following IEP's for at least 385 targeted workers. This number was exceeded. The grant developed and followed IEP's for 489 student employees.

#8. This objective calls for 90% of the enrollment to raise one level of learning from the original placement level. The objective also calls for an additional 50% of the enrollment to raise 1.5 levels from the placement level as well. The results are listed below.

MATH            194 OUT OF 263    RAISED ONE LEVEL (74%)  
                  45 OUT OF 263    RAISED 1.5 LEVELS (17%)

LANGUAGE 131 OUT OF 171    RAISED ONE LEVEL (77%)  
                  83 OUT OF 171    RAISED 1.5 LEVELS (49%)

ESL\*            OUT OF 35 PARTICIPANTS:  
                  5 LOWERED SCORES (-1 TO -6)  
                  2 RAISED SCORES (+2 TO +4)  
                  11 RAISED SCORES (+5 TO +8)  
                  6 RAISED SCORES (+10 TO +13)  
                  1 RAISED SCORES (+14)  
                  4 RAISED SCORES (+16)  
                  1 RAISED SCORES (+17)  
                  1 RAISED SCORES (+21)  
                  1 RAISED SCORES (+26)  
                  1 STAYED SAME  
                  2 DROPPED OUT

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\* The points above represent the results of the pre-test as compared to the post-test using the B.E.S.T Test scores. The



same B.E.S.T. test was administered to student employees in July, 1992 and again in November, 1993. The numbers represent an increase (+) in the score or a decrease (-) in the score of the original pre-test.

The goal of 90% was not reached as stated. The goal of 50% was nearly reached. I believe it would have been reached in the area of math had the student employees been allowed to continue instruction after level B in math. The company chose not to proceed until everyone identified as needing instruction in level A and B be served. We had to respect their decision and we tried to serve those who wished to continue on their own as room in the classes permitted.

#9. This objective was successfully achieved. Of the 469 enrolled in the project, not including the 27 in LSRPS, 128 participants lacked a high school diploma or GED. This represents 27% of the enrollment. After 45 class hours of instruction in a given subject area, a credit was awarded to the participant. Since Vishay-Sprague chose to limit time of attendance, many of the participants failed to clock 45 hours of instruction. However, these hours were dutifully recorded and each student is aware of this credit. This is on record at the Sanford Community Adult Education office. These hours will be applied to future classes these students may wish to attend. In essence, 100% of the non-credentialed students received credit toward high school diploma.

#10. This objective stated that 95% of the student employees with increased skills would continue their present employment during the project period. Out of the 390 responses to our supervisor rating sheets, 342 of the employees were still presently employed, or 88%. Fourteen (14) were marked as not employed and 34 were left with no information given. The goal of this objective was not met.

#11. This objective states a goal of 75% of the student employees would qualify for advanced training after completing the IEP. Of the 68 responses, 64 qualified for advanced training with the company. It is difficult to determine if we met our goal as it was difficult to determine if the IEP was completed or expanded and several students were not permitted to complete the IEP because of production demands and the need to serve those tested and needing instruction at levels A-D in math, language and ESL.

#12. This objective states a goal of 50% that qualify for and 5% attain career advancement during the grant period. This goal was not met. Of the 57 responses, 48 did qualify for career advancement and 0 attained career advancement. 9 were identified as not eligible for career advancement.

#13. This objective states a goal of 50% of student employees demonstrate increased productivity and job performance. Of the 314 responses, 75 student employees did demonstrate improved job performance and presumed productivity. 230 were documented as not

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showing improved job performance and productivity. This goal was not met. It must be noted that in the area of ESL, the ratio goal was met. The percentage was 66% or 2 to 1.

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**Clayton M. Blood, Sr. Associates**

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Searsport, Maine 04974

**EXTERNAL EVALUATOR REPORT  
OF  
NATIONAL WORKPLACE LITERACY PROGRAM**

**SANFORD PUBLIC SCHOOLS**

**263 Main Street  
Sanford, Maine 04073**

**P/R Award : #V198A20140  
Award Period: 7/1/92 - 12/30/93**

**Submitted by:**

*Clayton M. Blood, Sr. Associates  
Old Route 1, Box 96  
Searsport, Maine 04974*

*Clayton M. Blood Sr.*

Clayton M. Blood, Sr.  
External Evaluator

## INTRODUCTION

This External Evaluation Report has been completed by Clayton M. Blood, Sr. Associates. Clayton M. Blood, Sr. has spent over twenty years in the adult education arena, and for the last ten years as a consultant in the Department of Education in Augusta, Maine, where he led Maine's effort in the arena with business and industry. Clayton M. Blood, Sr. Associates have worked closely with over 75 businesses in Maine, helping to combine education and the workplace over the past five years.

This Evaluation Report will help to determine whether this program has provided useful educational experiences that meet the intent of the Congress, as representatives of the public at large. This External Evaluation is not something that is accomplished at the end of the program. Rather, evaluation is an integral part of the original design of the program and an ongoing process that can permit decisions about how well the program is achieving the purposes and goals of the project, and to improve the program and its value to adult learners, other partners in the project, and the society at large.

## AREA OF THE PROJECT

THE TOWN OF SANFORD. Sanford, Maine is a traditional New England industrial community that serves as a business, cultural, and health services center for smaller surrounding towns. In 1990, Sanford was the seventh largest municipality in Maine with a population of 20,463. The population has increased by 12% since 1980. Sanford is projected to become Maine's fifth largest municipality by 1994.

This project was a joint enterprise by Sanford Public Schools of Sanford, Maine and five partners to establish and operate a program of literacy, math and reasoning/problem solving skills instruction and support services at five work sites to address serious problems

of adult illiteracy for an estimated 385 targeted workers.

There are 238,000 adults (18 years and older) in Maine who do not have a high school diploma (29.8%). A larger percentage of Sanford adults (43.4%) have not completed high school. Some 1,700 adults in Sanford have less than eight years of formal schooling. In addition, nearly 500 immigrants with limited English abilities have come to live and work in Sanford during the past ten years. Most of these new residents have come from Southeast Asia.

The low educational level in this community is directly related to its history as a textile and shoe manufacturing center. These industries contained many semi-skilled and unskilled jobs where formal education was not needed. These job requirements have attracted non-English speaking populations and have encouraged a substantial proportion of young people to leave school at an early age.

Most of the textile and shoe companies are gone now, and the unskilled job opportunities disappeared with them. Sanford's economy is now quite diversified, including the manufacture of aircraft, electronics, skylights, portable air control towers, and plastics. These industries and the growing service economy require employees of higher literacy levels who can comprehend, communicate, adapt, and perform functions of increased complexity, such as reasoning/problem solving. Too many Sanford adults are ill-prepared to participate effectively in this new economy.

SANFORD COMMUNITY ADULT EDUCATION. This division of the Sanford Public Schools is the applicant and grantee of this National Workplace Literacy Program proposal. A comprehensive educational institution that was instituted in 1916, Sanford Community Adult Education served 3,288 adults during the 1990-91 school year. Of these, 712 adults were enrolled in basic education programs (literacy and English-as-a-Second Language), and there were 726 registrations in high school completion classes. One hundred thirty-three (133) adults earned a high school credential at this school.

Since 1986, this school has been a leader in the local Project Literacy U.S. (PLUS) effort. A representative, extremely active local task force has created a widespread awareness of the illiteracy problems in this area and has mobilized the community to identify, attract, and teach functionally illiterate adults. In less than five years, 180 volunteer tutors have been recruited, trained, and paired with 189 targeted adult students with significant impact on individuals' competencies, self-esteem, and aspirations.

As a result of two small grants, Sanford Community Adult Education and PLUS administered a modest pilot workplace literacy program in five local industries in 1988 to 1990. Thirty-nine (39) employees were taught basic skills on site by volunteer tutors. Documentation indicated considerable success, and both participants and employers were enthusiastic about the achievements and supported the program's continuation. Evaluation revealed, however, that a more sophisticated program and the allocation of considerably more funds were needed to serve the hundreds of undereducated workers and to respond in a meaningful manner to employers' personnel and production needs for the 1990's.

## BUSINESS PARTNERS

Sprague Electric Company is one of the world's largest manufacturers of solid tantalum capacitors used by such major industrialists as IBM, General Motors, Ford, Chrysler, AT&T, and NASA. Sprague is Sanford's largest employer with over 1,100 workers on a three-shift schedule. The majority of workers are involved in assembly, inspection, and testing of the company's product. An increasing number are employed in electronics technology, electricity, mechanics, machine tool, and engineering technology operations. It has demonstrated its commitment to the project by conducting a job literacy audit and by requesting that all 835 production employees be assessed in basic literacy skills.

The Baker Company is a national pioneer in the design and manufacture of

biological safety cabinets to provide contamination control for medical researchers, universities, pharmacologists, NASA, and others in the life science field. With a market on four continents, Baker Company employs 170 people in Sanford, 57% of whom are involved in production. Jobs include sheet metal fabrication, welding, painting, and assembly. Baker Company adheres to a policy of promotion from within and is seeking qualified employees for quality control, engineering, product design, and management/supervisory occupations.

Jagger Brothers, Inc. is Sanford's oldest commercial employer, manufacturing worsted yarns since 1898. A survivor of the near-demise of the textile industry in New England, Jagger Brothers supplies 15% of the worsted yarns produced in the U.S. for the making of draperies, clothing, and office furniture. Some 125 employees work as machine operators, mechanics and supervisors. To remain productive and competitive, the company is gradually replacing older equipment with more complex, computerized machinery.

Greenwood Center is the area's largest provider of nursing home services. In addition to its main facility, the company operates two other local residential care centers: Varney Crossing and River Ridge, the first facility in Maine to specialize in the care of head-injured patients. The three sites employ 409 workers to minister to 224 residents. Non-professional/managerial employees include nursing assistants, dietary aides, recreational therapy aides, housekeeping and laundry workers, and maintenance workers. The company is especially interested in preparing undereducated employees to achieve upward mobility, to profit from additional job training, and to qualify for transfers and promotions within the three locations. Because of the increasing sophistication of care plans and therapies, the expanding field of Alzheimer care, and the tremendous changes that are taking place in traditional geriatric care, Greenwood Center is interested in participating in this project. This company will be a particularly valuable partner because it has excellent facilities, which it has offered for project use for administrative, storage, and special event use.

**MILLROCK, INC.** is a young company that manufactures an assortment of units to display greeting cards, gift wrappings, and video tapes in retail stores, as well as counter and shelving systems. The company employs sixty-five (65) workers in a variety of woodworking, finishing, and assembly operations. Increasingly, automated technology and foreign competition are changing the company's operation and demanding a higher level of employee literacy. The company needs workers who can read instructions and specifications, who can communicate clearly, who can work with metrics and measure precisely, and who can participate in group efforts to solve workplace problems.

## **EDUCATION PARTNERS**

Below we've listed the key people involved in this project and comments that the External Evaluator concludes:

**A. Project Director:** Leonard D. McGinnis, B.S., M. Ed., Director of Sanford Community Adult Education Program.

Mr. McGinnis is one of the most outstanding leaders in the Adult Education field in Maine, New England and the Nation. His reputation has been a powerful force in the direction of this project. His leadership style allows everyone to exhibit their own strengths and still contribute as a team player.

**B. Project Supervisor:** Janet E. Kalman, B.S., Coordinator of Adult Basic Education for Sanford Community Adult Education Program.

Ms. Kalman is an outstanding Adult Basic Education professional. She has been very active in staff development training for other supervisors and teachers in Maine. She did an outstanding job of sharing her skills in curriculum-building and teacher-training with the staff of this project.

**C. Project Coordinator:** John Manzo

Mr. Manzo has been a most important factor in the success of this project. He has

exhibited outstanding leadership ability and has been able to coordinate the total group into a very positive and energetic team. John is a very experienced adult educator dealing with workplace issues.

**D. Partners Council:**

This Council met several times during the year. They were involved in the planning and direction-setting of the project. This Council was most effective in developing ideas, discussing area of concerns and as a continuing evaluation group. The External Evaluators were present at these sessions and observed first-hand the progress of the project.

## **GENERAL STATEMENT**

In compliance with the National Workplace Literacy Program Guidelines, Clayton M. Blood, Sr. Associates have evaluated the project's effectiveness in achieving its objectives.

This final report (The External Evaluator's Report) will look at how well the program operators implemented the design and operational plans that they submitted for funding; what outcomes are being achieved; and how the program could be modified to make it more effective.

Clayton M. Blood, Sr. Associates arrived at their conclusions for this project by:

1. Attending three Partner Council Meetings. At each of these sessions, we had a chance to talk with all participants regarding progress, including the Business Partners.
2. John Marzo's (Project Coordinator) excellent Performance Report - both mid-year and final. We also met with John on three occasions and had many telephone calls in which we discussed the project.

3. Personnel discussions with the Project Director, Project Supervisor and teachers. These were on-going, which led to continuous evaluation.
4. We examined the record keeping system.
5. The External Evaluator requested and received a written statement of the program's strengths and weaknesses from the Project Director, Supervisor and each of the teachers.
6. We reviewed a summary of the Project Partner's evaluations.
7. We had an opportunity to dialog with the Project Coordinator, teachers, and business partners. The External Evaluator interviewed representatives of each business partner and all the instructors involved.

## EVALUATION OF OBJECTIVES

Care was taken in writing the project objectives so that they could be measurable as possible. All personnel involved in the project have been involved in this continuous evaluation. As the External Evaluator, we will summarize our findings with those of employers, Project Director, Project Coordinator, teachers and students. In the External Evaluation Summary, we will comment on the overall success or failure in meeting these objectives.

**Objective #1:** To enlist and develop the partnership cooperation of five (5) local employers to actively participate in the literacy upgrading effort for their workers to foster continued employment, career advancement, and increased productivity

*Response #1: This objective was most successfully achieved. The five (5) local employees, Sprague Electric Company, Baker Company, Jagger Brothers, Greenwood Center and Millrock, Inc. all were positive and contributing partners.*

**Objective #2:** To recruit from the five (5) partner's places of employment a minimum of twenty-eight (28) non and low-level readers functioning at 0-4 reading level and a minimum of eighty-seven (87) intermediate level readers functioning at 5-12 reading level and to provide at least two hours of individualized reading instruction per week for native English speaking student employees and two hours of group reading instruction per week for English-as-a-Second Language student-employees.

*Response #2: This was successfully accomplished (see Note 1 in External Evaluation Summary).*

**Objective #3:** To recruit from the five (5) partner's places of employment a minimum of twenty-eight (28) employees functioning at the 0-4 writing level and a minimum of eighty-seven (87) employees functioning at the 0-4 writing level and a minimum of eighty-seven (87) employees functioning at the 5-12 writing level and to provide at least two hours of individualized oral/written communication instruction per week for native English speaking student employees and two hours of group oral/written communication instruction per week for English-as-a-Second-Language student-employees.

*Response #3: This was accomplished (see Note 1 in External Evaluation Summary).*

**Objective #4:** To recruit from the five (5) partner's places of employment a minimum of fifty-three (53) employees functioning at the 0-4 math level and a minimum of one hundred thirty-seven (137) employees functioning at the 5-12 math level and to provide at least two hours of individualized basic mathematics and calculator skills instruction per week for native English speaking student-employees and two hours of group mathematics and calculator instruction per week for English-as-a-Second-Language student-employees.

*Response #4: This was completed (see Note 1 in External Evaluation Summary).*

**Objective #5:** To identify from the five (5) partner's places of employment 385 of employees identified as needing reasoning and problem solving skills and instruct these targeted student-employees with such skills in partner developed periodic workshops.

*Response #5: They were notable to identify the full 385 employees as planned. The partners council did however alter their plans and developed special courses that tied together listening skills, speaking and reasoning that affected over 300 students.*

**Objective #6:** To test, evaluate, counsel, and determine appropriate placement levels and instructional delivery format for at least 385 targeted student-employees and further update such throughout project period.

*Response #6: This objective was achieved. Four hundred eighty nine (489) student-employees were tested, evaluated, counseled and placed at appropriate levels of instruction.*

**Objective #7:** To develop and follow Individual Educational Plans (IEPs) for at least 385 targeted student-employees.

*Response #7: The project developed and followed IEPs for 489 student-employees. The project was achieved.*

**Objective #8:** To raise at least one level above that determined upon intake the instructional level of 90% of those student-employees who complete their IEPs and to raise the instructional level of 50% to a level of 1.5 over that determined upon intake.

**Response #8:** *This objective was not reached to the stated amount. The following chart will show the actual numbers.*

The same B.E.S.T. Test was administered to student-employees in July, 1992 and again in November, 1993. The numbers represent an increase (+) in the score or a decrease (-) in the score of the original pre-test.

<b>MATH</b>	194 Out of 263	Raised One Level (74%)
	45 Out of 263	Raised 1.5 Levels (17%)

<b>LANGUAGE</b>	131 Out of 171	Raised One Level (77%)
	83 Out of 171	Raised 1.5 Levels (49%)

**ESL\***                      Out of 35 Participants:

- 5 Lowered Scores (-1 to -6)
- 2 Raised Scores (+2 to +4)
- 11 Raised Scores (+5 to +8)
- 6 Raised Scores (+10 to +13)
- 1 Raised Scores (+14)
- 4 Raised Scores (+16)
- 1 Raised Scores (+17)
- 1 Raised Scores (+21)
- 1 Raised Scores (+26)
- 1 Stayed Same
- 2 Dropped Out

\* The points above represent the results of the pre-test as compared to the post-test

using the B.E.S.T. Test scores.

**Objective #9:** To increase the reading comprehension, oral and written communication, basic mathematics, and reasoning and problem solving skills of the non high school credentialed student-employees who complete their IEPs to the extent that 95% earn adult high school diploma credit or a G.E.D. equivalency certificate through project workforce instruction during the project period.

*Response #9: This was met. One hundred percent of the non-credentialed students received credit towards a high school diploma.*

**Objective #10:** To increase the reading comprehension, oral and written communication, basic mathematics, and reasoning and problem solving skills of the student-employees who complete their IEPs to the extent that 95% continue their present employment during the project period.

*Response #10: Out of 390 responses, 342 of the employees were still presently employed or 88%. This is very close (see the External Evaluation Summary for an explanation).*

**Objective #11:** To increase the reading comprehension, oral and written communication, basic mathematics, and reasoning and problem solving skills of student-employees who complete their IEPs to the extent that 75% exit project workforce instruction and qualify for their company's advanced training.

*Response #11: Because of many changes, it was impossible to determine if this was achieved or not (see the External Evaluation Summary for an explanation).*

**Objective #12:** To increase the reading comprehension, oral and written communication, basic mathematics, and reasoning and problem solving skills of the student-employees who complete their IEPs to the extent that 50% qualify for and 5% attain career advancement during the project period.

*Response #12: This objective was not met (see the External Evaluation Summary for an explanation).*

**Objective #13:** To improve by the end of the project period the job performance - and presumed increased productivity - of at least 50% of the student employees who complete their IEPs as documented by their immediate supervisors.

*Response #13: This objective was not achieved (see the External Evaluation Summary for an explanation).*

## EXTERNAL EVALUATION SUMMARY

Without question, the National Workplace Literacy Program with the Sanford Public schools for 1992 and 1993 was extremely successful.

We will highlight a few of the most successful accomplishments and also list some of the areas that could have been improved.

### HIGHLIGHTS

1. The five (5) local employers that were recruited were very involved in the Partnership Council and were solidly behind this program.

2. The recruitment of employees at the five (5) businesses in the categories of learning levels was a tremendous success. The actual enrollments in objectives #2, #3 and #4 were way over what the grant called for. See Note 1 chart below:

**NOTE 1**

	<u>Grant Requirements</u>	<u>Actual Enrolled</u>
<b>READING &amp; WRITING</b>	115	171
<b>MATH</b>	190	263
<b>ESL</b>	80	35

3. The business partners were all very pleased with the project. See Appendix A for their comments.

4. The number of employees tested, evaluated and counseled was way above projections. The grant called for 385 and 489 were tested. This provides a grant base for further programs.

5. The program developed evaluation plans to be used by all business partners and individual students. These have played a big part in the total evaluation process.

6. The success of this project has led to the interest of another 12-14 companies who are interested in this type of program for their company.

7. The overall goal of the project numbers was very impressive. The following data explains this:

<b>Company</b>	<b>Total Projected to be Served</b>	<b>Total Served</b>
Sprague Electric Co.	300	438
Baker Company	25	20
Jagger Brothers	25	6
Greenwood Center	20	19
Millrock, Inc.	15	15
<b>TOTALS</b>	<b>385</b>	<b>498</b>

8. The success of this project, however, rests entirely with the tremendous leadership and enthusiasm of the paid educational personnel. The three administrators, Len McGinnis, Janet Kalman and John Manzo were the real leaders that made this project go. I would be difficult to find a more dedicated and capable group.

As an explanation of some of the difficulties that the project faced trying to achieve all of their objectives, we found that:

The area was involved in recession, a number of layoffs, weak production demands, and among some of the partners were internal management changes. This helped contribute to making it very difficult to achieve completing Objectives #8, #10, #11, #12 and #13.

## IMPROVEMENT NEEDS

1. In future grants, consideration should be given to be cautious of objectives that depend upon the business to provide employees at certain levels. Perhaps Objectives #10 through #13 were too ambitious.
2. The desired results of showing evidence of job advancement and qualifying for a better job are probably not realistic in today's economy. Shouldn't an employee who does a better job in the work he does and who feels better about himself be a great objective?
3. Continuous efforts must be made by Washington and project people to realize that the business community see this as a small part of their whole operation and our expectations for evaluation are too high.
4. We need to develop new ideas to have better communication between educators and business leaders in all stages of the grant process. This is especially true in developing the grant; it becomes difficult to change later.
5. All objectives in the grant were met or very closely met. As an evaluator, we feel that they were too ambitious.

## CONCLUSION

In reviewing all the documents and listening to all of the people involved, it is our candid opinion that this Workplace Literary Program P/R award #V198A20140 was an outstanding success.

Clayton M. Blood Sr

Clayton M. Blood, Sr.

Clayton M. Blood, Sr. Associates

Date: May 10, 1994

## APPENDIX A

Comments made to External Evaluator by business partners:

"A quick story -- told to me by one of the supervisors at Sprague. One of the ESL students came to her and said, there's a jim. There's a jim Supervisor thought, "we don't have any Jims in this department but went over to look. The employee pointed to the machine and said, see, a jim. Oh, you mean a jam. The employee then repeated the word, You say jam? This may not sound like a great improvement, but this was a person who, 18 months ago, was too shy and unsure of her English to even speak, let alone ask a supervisor to correct her English."

"There have been instances where supervisors have noted improvement in the reading and writing abilities of their employees who have attended these classes. Most importantly, the students themselves have shared positive attitudes about learning and about the National Workplace Education Classes."

"We believe that the process we followed contributed to these positive outcomes. The Baker Company chose to make these classes optional for our employees; this non-aggressive recruitment made the program less intimidating for employees and also drew only those employees who had a sincere desire for self-improvement. The classes were offered on-site at the Baker Company during work hours to enable any who desired to attend. We felt that this and the chosen Learning Unlimited Curriculum contributed to the success of this project on our site."

"Overall, The Baker Company has been very pleased with the process as well as the outcome of this grant. We have received positive feedback from the students involved with the classes, and, although we cannot point to any great leaps and bounds in productivity or employee involvement, we are certain that this project has contributed to the overall

improvement of our company."

"Through this cooperative effort, Sylvia far exceeded all expectations. She received a grade of 79 on her state competency exam, where a 70 is passing. I sincerely thank you for your caring program."

"By the end of the eight week course, the students, who previously had had little to no formal training in reading blueprints, were able to demonstrate their ability of the basic knowledge of interpreting the symbols used on their shop blueprints."

"An assessment test covering many of the skills needed to interpret blueprints was given at the beginning and at the end of the course. The initial scores averaged 40% correct. The final scores averaged 86.5%. This represents an average increase of 46.5%. The greatest improvement was 79%."

"During the class sessions the students discussed examples of blueprints they work with. During the discussions, the instructor emphasized the use of proper blueprint terminology. The homework assignments included exercises for drawing blueprint sections. There was additional drawing practice in class."

"Students learned how to use calculators and charts for adding and subtracting mixed numbers. The method of using the decimal/fraction conversion charts was practiced until each student was able to use it properly."

"The Learning Unlimited Language/Reading Program would be a good resource for students to use to master specific language skills as related problems or questions arise in their writing and reading. Student-generated, self-expressive writing and engrossing or work-related reading should be the main focus of the curriculum."

"It definitely has been interesting and educational being involved with The National Workplace Literacy Project. I must commend all the Partners and Teachers in the program. Every aspect of the grant was explained thoroughly and with great enthusiasm. There is a great need for this Project in our community."

"Industry is changing quite rapidly, and the skills that are needed are far beyond

what any school might have taught. Some employees have actually been left behind, due to technology change, and they do not have access to keep up with the technology in their daily work routine. And when we do have a change in our machinery, or how their work routine will be changed, due to the technology, they are frightened and apprehensive, because they are left in the dark."