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ABSTRACT

The SCORE project developed and delivered workplace literacy training to employees and/or job candidates in the customer service and telephone sales industry at the AT&T Corporation. The work was done in partnership with the Florida Community College (FCC) at Jacksonville. Of 259 adults served, 39 percent became employed as a result of the program and 29 percent were eligible for career advancement. Candidates had access to funds for child care and were given transportation reimbursement; classes were held at the business site to accommodate employees; and schedules were adjusted to meet students' needs. To ensure curriculum materials met the needs of adult and were reflective of the workplace, the project conducted focus groups. The training consisted of developing reading, writing, occupation-specific math, learning skills, communication, problem-solving and critical thinking skills, self-esteem, and vocational vocabulary. The curriculum was a combination of computer-based and instructor-led activities delivered in the context of customer service and telephone sales tasks. The evaluation was a pretest/posttest design. Analyses indicated the program had a strong positive effect on participants' achievement. (Attachments to the performance report include instruments, program results, and student and teacher program evaluation results. The evaluation is accompanied by nine data tables, glossary of evaluation terms, and data dictionary.) (YLB)

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S.C.○.R.E.

Sales and Customer Service Occupational Readiness Education

National Workplace Literacy Partnership:
AT&T and The Florida Community College at Jacksonville

Award # V198A20062

Final Report

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CE 066 423

S.C.©.R.E.

Sales and Customer Service Occupational Readiness Education

The AT&T Corporation, in partnership with the Florida Community College at Jacksonville (FCCJ) and the Institute for the Study of Adult Literacy (ISAL) at Penn State, have developed a functional context literacy training program for customer service jobs, funded by the National Workplace Literacy Grants program of the U.S. Department of Education. The training entitled S.C.©.R.E., consists of developing reading, writing, occupational-specific math, learning skills, communication, problem-solving and critical thinking skills, self-esteem, and vocational vocabulary. The curriculum is a combination of computer-based and instructor-led activities delivered in the context of customer service and telephone sales tasks.

PROJECT TEAM

- Project Director: Cathleen Bimmerle, AT&T, Morristown, NJ (201) 898-8557
- FCCJ Contact: Edythe Abdullah, Jacksonville, FL (904) 766-6726
- ISAL Contact: E. Nickie Askov, University Park, PA (814) 863-3777

SUBCONTRACTORS

- Instructor-led Curriculum Development: - Dr. Linda Baker, University of Maryland, Baltimore County, MD (410) 455-2567
- Dr. Paul Squires, AT&T, Morristown, NJ (201) 898-8072
- Program Evaluation: Dr. Richard Reilly, AAI, Florham Park, NJ (201) 593-0072
- Program Support: Joseph Furando, Waldwick, NJ (201) 898-8072

**NATIONAL WORKPLACE LITERACY PROGRAM
INFORMATION FORM
S.C.O.R.E.**

AWARD 198A20062-92 (AT&T/FCCJ)

Part 1: Program Parameters

1. Target No. to be Served: 250
2. No. Served at Each Site to Date:
- | | |
|--------------------|----------------|
| Site 1. <u>4</u> | Site 6. _____ |
| Site 2. <u>43</u> | Site 7. _____ |
| Site 3. <u>208</u> | Site 8. _____ |
| Site 4. _____ | Site 9. _____ |
| Site 5. _____ | Site 10. _____ |
3. Total No. Served: 255
4. Fed. Funds Obligated: \$332,083
5. Matching Funds/ In-Kind: \$465,803
6. Value Release Time: \$53,838
7. No. Participating in Programs Offered:
- | | |
|--------------|-----------|
| Basic Skills | <u>2</u> |
| GED | <u>12</u> |
| ESL | <u>1</u> |
8. Contact Hours Provided: 15,300
- (Contact Hours are the number of teaching hours that workers receive)

Part 2: Participation Data

1. Mean Age Participants: 33
2. Sex: No. Males 59 No. Females 196
3. Race/ Ethnicity: No. who are:
- | | |
|-------------------------|------------------------------|
| White <u>76 (30%)</u> | Am. Indian/ |
| Black <u>126 (49%)</u> | Alaska Native <u>1 (.4%)</u> |
| Hispanic <u>10 (4%)</u> | Asian/Pacific |
| | Islander <u>12 (5%)</u> |
4. No. Single Head of Household: 127
5. No. Limited English Proficient: 19
6. Outcomes
- | | No. Participants |
|----------------------------------|------------------|
| a. Tested higher on basic skills | <u>203 (80%)</u> |
| b. Improved communication skills | _____ |
| c. Increased productivity | _____ |
| d. Improved attendance at work | _____ |
| e. Increased self-esteem | <u>195 (76%)</u> |
7. Years with the company
- | | No. Participants |
|------------|------------------|
| Unemployed | <u>69</u> |
| 0-5 | <u>114</u> |
| 6-10 | <u>19</u> |
| 11-15 | <u>5</u> |
| 16-over | <u>10</u> |
| Not Listed | <u>38</u> |

Award #V198A20062 - National Workplace Literacy Grant

Sales and Customer Service Occupational Readiness Education (S.C.O.R.E.)

FINAL PERFORMANCE REPORT

The scope of the grant project has been to develop and deliver workplace literacy training to employees and/or job candidates in the customer service and telephone sales industry. This work was done in partnership with The Florida Community College at Jacksonville and supported by The Pennsylvania State University's Institute for the Study of Adult Literacy.

The S.C.O.R.E. project has been extremely successful. We are pleased to report that 355 people enrolled in training, and 255 students received certificates of completion. Our quality and satisfaction measures are very positive, and five copies of the materials are already on request for dissemination. Below is a comparison of actual accomplishments relative to our application's stated objectives.

I. Program Factors

The relationship between skills taught and the literacy requirements of the job have been effectively presented in the application and supported the development of this curriculum. Of the 259 adults served under the program, 39% became employed as a result of our program and 29% are eligible for career advancement. While 32% are reported as unemployed, this may be overstated as we have been unable to track some students beyond training.

As an illustration of the relatedness of skills taught and literacy requirements of the job, AT&T American Transtech has put in place an incentive program for associates to upgrade their literacy skills which, in effect, provides a corridor for career advancement. Certification of basic skills through S.C.O.R.E. enables them to raise their classification level and earn more money. This decision was made, in part, as a result of the work we have done in Jacksonville.

In terms of reducing barriers to participation, candidates had access to funds for child care (one person used the services). Seventeen people were given transportation reimbursements. Classes were held at the business site to accommodate employees, and schedules were adjusted to meet students' needs. While we did not track students who used career counseling services available through FCCJ, each candidate received individual feedback from a vocational counselor as to the results of their TABE (Test of Adult Basic Education).

The partners' level of participation was extraordinary. AT&T met its commitment by contributing telephone sales and customer service training materials, job aids and job analysis data; referred several hundred applicants and employees to the workplace literacy training program; developed diagnostic and training assessments; and provided program director support. As a dissemination activity (not supported by grant funding), AT&T is implementing the training program at one production facility in Denver, Colorado, and plans to add four more customer service locations within the two months (Dallas, TX; Mesa, AZ; Kansas City, MO; and Pittsburgh, PA).

The Florida Community College's support in providing facilities has been invaluable. The staff's flexibility and creativity in providing instructors, classrooms and equipment -- often on very short notice -- was beyond our expectations. The college was extremely responsive in providing vocational counseling support; often succeeding in being in two places at once. The quality of instruction was exceptional, and, additionally, their role in providing feedback and resources to support improving the course content and design was commendable. The instructional staff had the difficult task of delivering training while it was under development. This required a great deal of patience and creativity for which the staff deserves a lot of credit. As mentioned, coordination of transportation and child care services was successful as the project coordinator was persistent in making direct contact with students so they would be aware of all available support services.

Important to note is the contribution of the staff from Penn State University's Institute for the Study of Adult Literacy (ISAL), and Dr. Linda Baker from The University of Maryland (Baltimore County), our subcontractors under this grant. The design of the computer based training and the level and depth of the instructional materials is excellent. The flow is logical and progressively challenging for students, and feedback received from employees and business managers is that the training closely simulates customer service and telephone sales work. Software releases were delivered on schedule, and the Institute was successful in meeting the difficult challenge of providing technical and training support to a remote facility in a cost-effective, expedient way.

The development of the instructor-led portion of our curriculum is a testimony to the effective partnering that took place during this grant cycle. Dr. Linda Baker (UMD) was our lead developer for the metacognitive strategies and Dr. Paul Squires (AT&T) for the personal side of learning. When field-trialing this portion of the curriculum, we recognized the need to expand its functional context, adjust the readability level for our adult basic education population, and improve the linkage between the instructor-led curriculum and the computer-based instruction. The support given by The Florida Community College and Penn State's ISAL throughout this development effort was immeasurable. Through this partnership, we brought together the best of all available resources: cognitive psychology, social learning theory, adult basic education, training and technology, workplace education, and research and knowledge about customer service and telephone sales. This partnering effort provided an improved and highly effective instructor-led and computer-based curriculum product.

II. Extent of Need

As stated in the application, this literacy program would focus on the borderline literacy group. This was supported because an analysis of work documents and jobs aids showed that the typical customer service job requires an 11th grade reading level and arithmetic competency at the 8th grade level. With this information, we targeted employees, job applicants, and Adult Basic Education students between the grade levels 6.9 and 10.9 (as measured by the TABE).

We also recognized the need for qualified customer service workers at AT&T and other businesses in Jacksonville. This was further confirmed after submitting the grant application by a survey conducted of local businesses who reported the need for basic literacy skills training. Additionally, surveys showed businesses having an increased demand for qualified customer service workers over the next 2-4 years. Our effort supported by this grant responded to this community need.

To further define students' need for training, a "work sample test" was developed and used (in addition to the TABE) prior to training to provide students a diagnostic view of their basic skills level in the context of a customer service environment. As seen in the external evaluation report, the training effectively impacted students' ability to improve their job-related reading, arithmetic, business problem solving, and communication skills as measured by an end-of-course assessment. Students competency achieved by this grant program effectively led to employment for many of the people served under this grant (39%). As this program becomes institutionalized throughout Jacksonville and in other cities, we will be able to track employers' experience with increased productivity, lower turnover, reduced employment and training cost savings.

III. Quality of Training

To insure the curriculum materials met the needs of adults and were reflective of the workplace, we conducted focus groups with four companies (Prudential Insurance, American Express, AT&T American Transtech, and Methodist Medical) to assist with gathering job analysis data. Participants included customer service employees, supervisors, and trainers/curriculum developers from these four corporations. Using job analyses materials from customer service and telephone sales jobs at AT&T, assistance was given to Penn State's ISAL for their analysis of job and training design requirements. Job aids and training materials, as well, were provided.

To further insure we were meeting the needs of local businesses, two meetings were held during the grant period where attendees were given product presentations and demonstrations. We received strong endorsements from local businesses at these meetings; the second of which resulted in two corporations providing customer service employees for training and a third provided a proposal for training 150 customer contact employees.

In support of providing Individualized Education Plans, profiles of student's abilities in the area of reading, arithmetic, and language were provided by vocational counselors (TABE results). Another assessment was provided which surveyed students' working and learning styles. This instrument was intended for individuals to look at their goal setting, attributional style, persistence and self efficacy (see attachment 1 for sample questions). The computer based training element of our curriculum effectively customized the training experience for individuals because the training was designed to branch into additional lessons and be automatically accessed for individuals who required more remediation. Students responding correctly to higher level problems would not require the same degree of instruction and, therefore, progressed more quickly through the computer-based training.

The training was conducted at two sites: The Florida Community College's Urban Resource Center and AT&T American Transtech. The environment at both locations was conducive to adult learning as the training facilities were designed for use by corporations for customized training of their employees. The rooms were fully equipped with high technology computer equipment and instructional aids.

IV. Plan of Operation

The design of project met the objectives outlined in the application. Job analysis materials were provided to our curriculum developers, as well as existing customer service training materials and job aids. In addition to these work-related materials, we collected from four businesses over one hundred critical incidents where employees, supervisors, and customer service training managers described (in writing) examples of good (and bad) customer service/telephone sales performance. These scenarios were very helpful to our developers as lessons were planned utilizing the real-life incidents employees and managers described as occurring in the workplace. These focus groups and other meetings held during the grant period contributed greatly to the acceptance of the curriculum; businesses felt ownership having had a role in its development and they clearly understood the program content.

The project team also satisfied the test development objectives. Our accomplishments include the diagnostic test which determined students' need and level of remediation; mastery tests built into the computer-based training in the form of lessons enabling students to progress at different levels depending on their individual needs; and an end-of-course assesment which determines a student's readiness to progress to entry-level customer service and telephone sales and/or advanced training in the field. Sample test questions are included in attachment 2.

The end-of-course assessment is a paper-and-pencil test and not a telephone role-play as outlined in the application. This decision was made because we wanted to reflect the performance gains students made from beginning to end of training for evaluation purposes. The effort that went into test development was monumental. The instruments

were validated against the training content, as well as customer service and telephone sales work. We also dedicated time and resources to equate the pre and post tests to accurately measure gains in students' performance from beginning to the end of training.

The curriculum materials were developed as planned. Our instructor-led component contains an instructor guide, student guide, overheads and activities supporting lessons in metacognition and the personal side of learning (goal setting, attribution, persistence and self-efficacy). The computer-aided instructional component includes diskettes containing essential files and an introduction to the courseware as well as modules two through five which instruct basic skills (reading, math, problem solving, etc.) utilizing the context of customer service/telephone sales medium (forms, charts, manuals, and computers). An additional computer-aided module was developed to help students learn the vocabulary relevant to customer service and telephone sales job families.

The course length is approximately 60 hours with approximately four hours allocated for diagnostic and end-of-training tests. By utilizing job analysis materials from other sources besides AT&T and conducting periodic review sessions with other corporations, we exceeded our level of commitment with this grant by developing a curriculum that is generic enough to be effective for other industries such as financial, insurance, health, etc., yet specific enough to produce significant training performance gains. This is very important for product dissemination which will be covered in a later section.

Instructor materials and instructor training were completed as planned. Instructors were given diagnostic and end-of-training test materials and the project coordinator and FCCJ staff facilitated this instructional support effort.

Through the program evaluation, data collection, and analysis effort, the following objectives were accomplished as stated in the application. Criterion data was developed and collected (see external evaluation). In order to get the level of detail needed for an effective evaluation, a great deal of effort was applied to preparing forms, questionnaires, and rating guides used for gathering this data. Some examples of these materials include consent forms, registration forms containing several key demographic data, student/teacher evaluation forms, and student expectation and self-evaluation forms. A checklist of data elements collected is included as attachment 3.

We reported the pre-post comparison of participants' basic skills; the percent of participants hired and those who successfully completed the workplace literacy training. Students' satisfaction with the training and changes in their self-concept before and after training is provided. We report on demographic data collected as well as standardized, diagnostic and end-of-training test results. These findings are summarized in attachment 4 and reported in the external evaluation.

At this time, we are unable to provide information on participants' job satisfaction, pre-post job performance levels, percent of people promoted and control group data. Our

program implementation was affected by the business conditions changing at AT&T and another corporation that intended to participate in the training. The affect this had on our data collection effort was that a large percentage of our trainees were treated in the last four months of the grant period. This made it impossible to track students' (employees) post-training job performance and promotional capability as the grant extension period ended. While we had identified a population of employees eligible for training earlier in the grant period, several attempts made to schedule training classes failed because business demands increased to the point where managers were unable to release associates for training. During this implementation period, AT&T was experiencing a difficult time sourcing enough candidates from the local labor pool to satisfy the increased volume of work. An additional constraint involved budgetary constraints at AT&T and one other firm. Reorganizations and these financial cutbacks affected line managers' ability to release candidates for training and testing/treatment of a control group, as outlined in the application.

V. Schedule of Accomplishments

Our performance against our timeline is as follows:

The June 1 - August 31, 1992 tasks outlined involved job analysis and curriculum design elements, and this work was accomplished on schedule. September 1 - November 30 activities involved beginning a pilot training class and supporting activities such as training instructors and data collection. This was completed and a pilot class began at FCCJ's North Campus on September 28, 1992. Our data collection effort was limited for this pilot class due to the fact that curriculum and test development was at the beginning tages. Curriculum and software development began on schedule and cotinued between December 1, 1992 and November 30, 1993. We met our objectives during this period to promote the program in the Jacksonville community: companies participated in two large meetings and demonstrations (12/92 and 6/93) in addition to several meetings held with individual businesses by representatives of Florida Community Coliege (adult education and vocational assessment staff).

As mentioned, delays experienced in serving people were a function of business conditions and not curriculum availability. These program constraints were cited as increased work volumes, reorganizations, and budgetary constraints temporarily impacting businesses and prohibiting our meeting the schedule outlined in the grant application. However, we were able to overcome these obstacles and the project team was successful in fulfilling our obligation during the extension period, and have included data on the total population served under the grant.

VI. Project Participants Served

The number of participants completing planned project activities is 255. Those who enrolled but did not complete the program total 355. Characteristics of those who finished include associates on assignment at AT&T American Transtech performing

customer service and telephone sales work. These workers were identified (through TABE and diagnostic assessment) as needing basic skills intervention. Also served are applicants for these associate positions who failed to qualify for jobs based on the diagnostic assessment put in place at the temporary agency's employment office. Several students from FCCJ's Adult Basic Education program participated. We served employees from the Jacksonville Transit Authority and Prudential Insurance; those being people who worked in customer service positions and needed their basic skills upgraded.

Outcomes achieved by participants are significantly higher than expected. Over seventy percent of the students achieved passing scores, while approximately 26% did not. (see the enclosed evaluation report). Student satisfaction showed that 69% of students felt the overall program was excellent, with 26% rating the training good (see attachments 4 and 5). They enjoyed working with the computer, appreciated learning about metacognition, and liked the vocabulary portion of the training, as well. Many were interested in expanding their training an advanced class in customer service skills.

VII. Dissemination

Our relationship with union/management supported organizations Alliance and ETOP were outlined in the grant application. When this was first submitted, we expected to include Salt Lake City, UT, St. Louis, MO, and Duval, CO in our program. This was revised upon negotiation for the grant award (letter from P. Squires to J. Bowe dated May 8, 1992). This revision occurred because those locations are union-represented customer service and telephone sales sites, and Jacksonville, Florida is not. The Alliance and ETOP organizations support represented employees of AT&T only. Also, it would have been difficult and costly for The Florida Community College, our partner in this grant, to support training efforts outside of their community. We have, therefore, concentrated the application of this work with these two organizations (Alliance and ETOP) to occur during the dissemination process. In fact, ETOP has ordered materials from our source at Penn State's ISAL and begun two classes at their site in Denver, CO. Because production/factory work is on the downturn, ETOP is aggressively supporting plant employees so that they may expand their skills and be more marketable within AT&T and gain employment stability in the Denver area. Plans are to expand this at other ETOP sites nationally once the Denver application is evaluated.

We are expanding the program in four cities over the next two months: Dallas, Mesa (AZ), Kansas City, and Pittsburgh. We are working with Community Colleges in those areas to develop a community-based environment where this curriculum can be offered by the local college to AT&T employees as well as other businesses and local government offices. Representatives including Mayors, city government officials, community college presidents, etc. have visited the Jacksonville facility, seen demonstrations of this grant product, and made plans to train their instructors over the next month. The Florida Community College is providing training to support those instructors.

The Alliance organization is very well positioned in these local communities, as well. They typically contract with local colleges to provide training for our union-represented employee body and have been reviewing our program throughout the grant period. Alliance representatives have visited the Jacksonville facility and are very much in support of customer service standards and the curriculum we have developed. We are in the process of defining their role in implementation of this basic skills offering as a further dissemination activity.

VIII. Evaluation Activities

Our external evaluator was involved as surveys, questionnaires and data collection instruments were developed. Copies of the curriculum were provided as developed, and test development feedback was given throughout the program. Since training continued up through the grant extension period, there was no time to conduct post-training focus groups with trainees or their line managers as we had planned. The evaluation report enclosed is thorough and should greatly assist any dissemination effort as a solid and reliable resource for reporting progress on this grant award.

IX. Changes in Key Personnel

The key personnel change that took place during the grant period involved our project coordinator. Due to the fact that our extension was not granted until the last week of the award period, our project coordinator, Doris Manukian, selected another assignment. This was unfortunate as Doris had done an excellent job and desired to continue the program through to completion. When the ninety-day extension was approved, we were unable to secure a full-time coordinator on such short notice for just three months. We staffed the position with two part-time workers: Barbara Bazinsky and Diane Routhier. Both remained in position until the project completed February 28, 1994.

The change in our external evaluator was made prior to the final approval of our grant contract and all supporting documentation was submitted. Dr. R. Reilly of AAI, Inc. conducted the evaluation for this grant award.

X. Summary

Despite the adverse business conditions which we faced this past eighteen months, the partners involved in this grant are proud of the outstanding effort and work we have produced. We met our commitments for test and curriculum development, effectively and responsibly marketed this program to businesses, and successfully served the numbers of people we had targeted for training. Confident as we were that this program would be a success, we concurrently supported dissemination activities throughout the grant period to insure the program would not only survive, but flourish, when government funds were withdrawn. To date, this effort is supported as curriculum materials have already been ordered prior to the release of the final report.

This partnership effort is viewed extremely favorably by AT&T, businesses in Jacksonville, by other cities where the program has been promoted, and among community leaders and community colleges to whom FCCJ has so graciously hosted. The enthusiasm and support we have received has been based on the design and content of our curriculum, coupled with the fact that colleges and businesses have identified with the need for skill development of customer service and telephone sales workers. Today, we are able to further promote this program by including the extraordinary results shown in the evaluation report. With this information, businesses can examine cost savings and revenue projections, and advance the data collection and evaluation efforts to include job performance characteristics enabling our partners to successfully market and disseminate this outstanding product.

PERSONAL SIDE OF LEARNING SURVEY

Sample Questions

Your personal approach to learning can effect your success. Each person has a unique approach, but some are more helpful to working and learning than others. Think about how you do your work or learn new tasks. Read each statement and rate yourself according to how true the statement is of you.

RATING SCALE

1 ----- 2 ----- 3 ----- 4 ----- 5

| Hardly Ever True of Me | Sometimes True of Me | Occasionally True of Me | Usually True of Me | Nearly Always True of Me |
|---------------------------|-------------------------|----------------------------|-----------------------|-----------------------------|
|---------------------------|-------------------------|----------------------------|-----------------------|-----------------------------|

Rating of Self Esteem

- ___ I can do arithmetic better than most people.
- ___ I can read better than most people.
- ___ At school or work I think about outdoing the performance of others.
- ___ I have a better memory than most people.
- ___ I compare my work to my own personal standards.
- ___ I can solve problems better than most people.

AT&T- PROPRIETARY (RESTRICTED)
Solely for authorized persons having a need to know
pursuant to Company Instructions

SAMPLE S.C. R.E. ACHIEVEMENT TEST QUESTIONS

The following are words and phrases that are important for Customer Service and Telemarketing jobs. Choose the answer that best describes the meaning of each word or phrase.

Computer File

- (A) Information used by the computer to send messages to the display screen.
- (B) A set of code words used by the computer to interpret a person's keystrokes.
- (C) Information used by the computer to send signals among the internal parts of the computer.
- (D) Information stored on a computer disk under a specific name.
- (E) None of the above.

Close-ended questions

- (A) Questions that sales people use to get specific, one word answers.
- (B) Questions that prevent simple yes and no answers.
- (C) Questions used to find out what the customer is willing to pay.
- (D) Questions that customers ask about product features.
- (E) None of the above.

Monitor

- (A) An electronic device (like a television) used to display words and images.
- (B) A computer program that tracks the amount of memory that has been used.
- (C) Computer messages which report continually on the operation of the computer.
- (D) A computerized method to schedule future customer contacts.
- (E) None of the above.

Consumer

- (A) A person who buys something for resale.
- (B) Another name for a sales person.
- (C) A person who buys things for his or her own use.
- (D) To use something till there is no more.
- (E) None of the above.

Read the memo below and then answer the following questions

To: All store employees
From: Fred Caron, Director of Sales
Date: 11/21/91

There will be a store wide sale on Saturday, November 29. All prices will be marked down 25 percent. The store will be closed on Friday to prepare for the sale. All workers scheduled to work on Friday, November 28, should report to work at the usual time.

We will need extra help on Saturday. If you are not scheduled to work on Saturday, please contact Ruth Smith, the store manager, if you want to work. All workers will receive time and a half for working on Saturday.

If you make \$4.00 per hour, how much will you get paid an hour if you work on Saturday?

- (A) \$4.50
- (B) \$5.00
- (C) \$6.00
- (D) \$6.25
- (E) \$8.00

What should workers scheduled to work on Friday do?

- (A) Decide if they want to work on Saturday.
- (B) Report to work at the usual time in Saturday.
- (C) Report to work at the usual time on Friday.
- (D) Decide if they want to work on Friday.
- (E) See Fred Caron if they want to work on Saturday.

The following is a Table of Contents from a telephone equipment manual. Look at the Table of Contents and use it to answer the following questions.

| | |
|---------------------------------------|----|
| Parts of the Telephone. | 1 |
| Placing Calls. | 2 |
| Answering Calls. | 4 |
| Call Hold. | 5 |
| Call Transfer. | 6 |
| Three-Way Conference Calling. | 7 |
| Call Forwarding. | 10 |
| Last Number Redial | 11 |
| Intercom | 13 |

You made a telephone call. The line was busy. You want to call the same number again. What page would you go to for information on this feature?

- (A) 2
- (B) 5
- (C) 6
- (D) 11
- (E) Cannot be answered from information given

You want your party to wait on the line while you talk to someone else. What page would you go to for information on this feature?

- (A) 4
- (B) 5
- (C) 6
- (D) 13
- (E) Cannot be answered from information given

Part of a tax table used in Smith's Department Store is listed below. Use the tax table below to complete the following questions.

Tax Table

| Amount of Sale | Tax |
|-----------------------|-----|
| \$7.11 through \$7.17 | .43 |
| \$7.18 through \$7.34 | .44 |
| \$7.35 through \$7.50 | .45 |
| \$7.51 through \$7.67 | .46 |
| \$7.68 through \$7.84 | .47 |

| SALES SLIP | |
|------------|---|
| Sub Total | \$7.41 |
| Tax | (A) .43 (B) .44 (C) .45 (D) .46 (E) .47 |
| Total | |

| SALES SLIP | |
|------------|--|
| Sub Total | \$7.38 |
| Tax | .45 |
| Total | (A) 6.86 (B) 7.50 (C) 7.83 (D) 7.99 (E) 8.47 |

Examine this medical claim form and answer the following questions on the next page.

| PHYSICIAN OR SUPPLIER STATEMENT | | | | | |
|--|------------------------|---|---|---|---------------|
| 1. Patient's Name Damon Avery | | | 2. Patient's Address 405 Canterfield Drive, Allentown, PA 19232 | | |
| 3. Date illness or injury first occurred 4/11/92 | | 4. Date first consulted you for this condition 4/12/92 | | 5. Has patient ever had same or similar symptoms? | |
| 6. Date Patient Able to Return to Work | | 7. Dates of Total Disability From Through | | 8. Dates of Partial Disability From Through | |
| 9. Name of Referring Physician P.W. Sabol, MD | | | 10. For services requiring hospitalization, give hospitalization dates. Admitted: 4/11/92 Discharged: 4/21/92 | | |
| 11. Name & address of facility where services were rendered General Hospital 532 Market Street Allentown, PA 19232 | | | 12. Was laboratory work performed outside your office? No | | |
| 13. Diagnosis or nature of illness or injury 1. 852.43 Epidermal hematoma with moderate loss of consciousness 2. 803.23 Skull fracture with epidermal hemorrhage with moderate loss of consciousness | | | | | |
| 14.A Date of Service | B. Place of Service | C. Procedure Code | D. Fully describe medical services or supplies furnished for each date given . | E. Diagnosis Code | F. Charges |
| 10/29/92 | 1 | 61312 | Surgery for hip replacement and nerve repair. | 1/2 | 13,000.00 |
| 10/30/92 | 1 | 11923 | Surgery for evacuation of epidermal hematoma | 7/9 | 6,000.00 |

Refer to the previous medical claim form to answer the following questions.

For how many days was the patient hospitalized (not counting the day he was discharged)?

- (A) 7
- (B) 9
- (C) 10
- (D) 11
- (E) 12

This claim form is for what service?

- (A) Surgery
- (B) Lab tests
- (C) X-rays
- (D) Office visit
- (E) Vitamin injection

How soon after the injury occurred did Damon receive this service?

- (A) One hour
- (B) The same day
- (C) The next day
- (D) Three days later
- (E) A week later

Data Elements Summary Sheet

The following is a list of data elements that are to be collected per each class in training. Use this form as a checklist when collecting source data. All appropriate hard copy information should accompany this form.

Date: _____

Location & Number of Participants in Program:

_____ / _____

Data Elements:

Check box when data element is completed being enclosed.

1. Consent Form .
2. Data Map .
3. FCCJ Registration form.
4. Demographic Data (see Adult Education Student Information Form).
5. TABE (Math & Verbal). [NOT INCLUDED - CONFIDENTIAL]
6. SSR-TAB. [NOT INCLUDED - CONFIDENTIAL]
7. Computer Based Training Pre-Test (Criterion Referenced Test).
8. Computer Based Training Post-Test (Criterion Referenced Test).
9. Metacognition Pre-Test.
10. Metacognition Post-Test.
11. Performance Measures (pre/post Supervisor Rating Form , \$ volumes etc.). [TBD]
12. Student Evaluation of Program Forms.
13. Teacher Evaluation of Program Forms.
14. Supervisor Evaluation of Program Forms.
15. Questionnaire for Focus Group Feedback . [TBD]
16. Student Self - Evaluation Form.
17. Student Expectations Form.

S.C.○.R.E.

Sales and Customer Service Occupational Readiness Education

JACKSONVILLE PROGRAM RESULTS:

Overall Student Program Evaluation

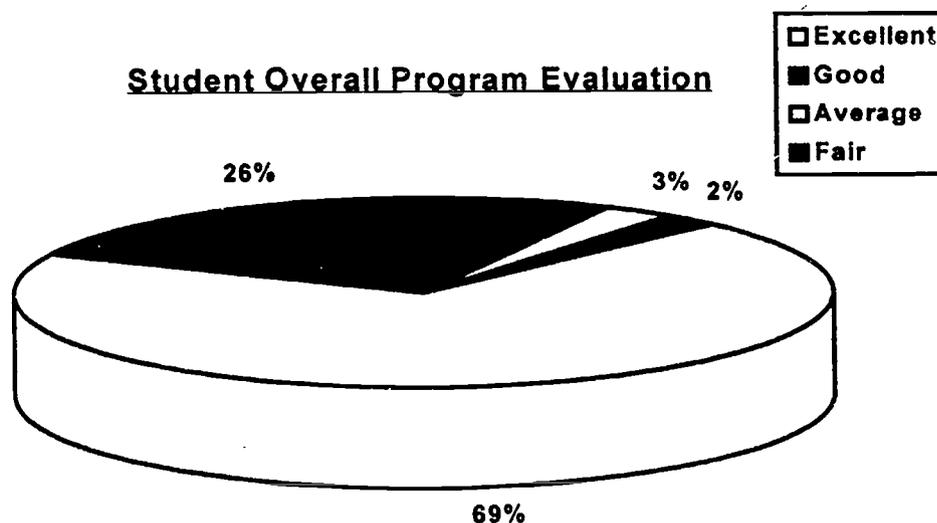
Overall program evaluation was established on a scale ranging from the lowest "Fair" to the highest being "Excellent."

- Over 2/3 of students rated this program as "Excellent."
- Fewer than 5% of students felt that this program was deficient in any way.

Comments:

What were the strengths of this course? What did you like most?

- "It let you know what dealing with a customer is really about. Also finding the solution to the customers problems."
- "Using the computer and the vocabulary words and the fact that I actually completed the course!!!"
- "The course was an excellent learning opportunity for me....it was represented to me in an organized and timely manner. I enjoyed it very much....I learned a lot!"
- "Really, I enjoyed all of it. I thought covering metacognition was very interesting. I feel it has enhanced my learning and memory skills."
- "Learning the correct way to respond to the customer..."



S.C.◉.R.E.

Sales and Customer Service Occupational Readiness Education

JACKSONVILLE PROGRAM RESULTS:

Instructor Program Evaluation

Instructors were asked whether or not they would teach this program again, and to respond to a scale ranging from "Definitely Not" to "Definitely Would".

- All instructors indicated that they "**Definitely Would**" teach this program again.

Overall Instructor Program Evaluation

Overall program evaluation was established on a scale ranging from the lowest "Fair" to the highest being Excellent."

- All instructors rated this program as "**Good**" to "**Excellent**."

Comments:

What were the strengths of this course? What did you like most ?

- "The combination of instructor interaction (traditional lecturing) and CBT (Computer Based Training)."
- "Computer teaching"
- "Very well planned.."
- "...the work-place scenario discussions...the examples were very good and helped illustrate the instruction effectively."
- " ...the role-playing scenarios."
- " The metacognition curriculum is easy to follow...I also like the Vocabulary Master (software)—it is a fun and easy way to learn the (sales, customer service, and computer) vocabulary."
- "I look forward to teaching this course in the future."

Student Program Attendance Rates

Typically class attendance rates were 93% for the total number of students enrolled.

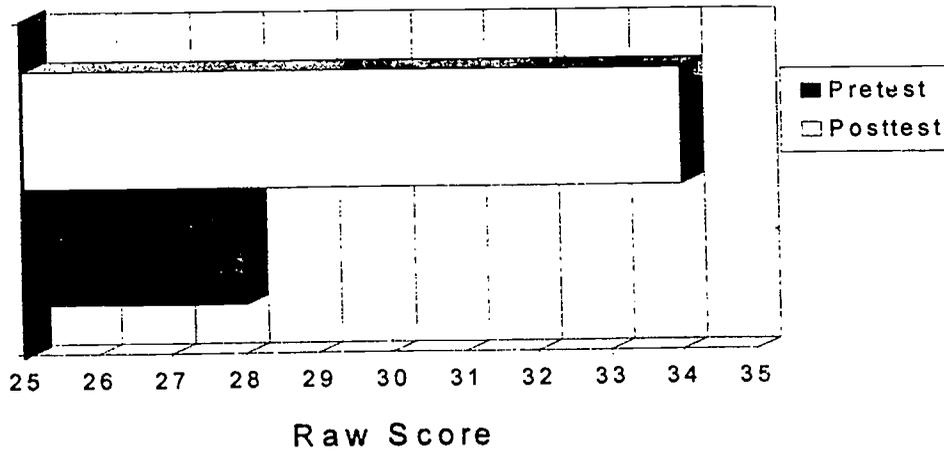
S.C.O.R.E.

Sales and Customer Service Occupational Readiness Education

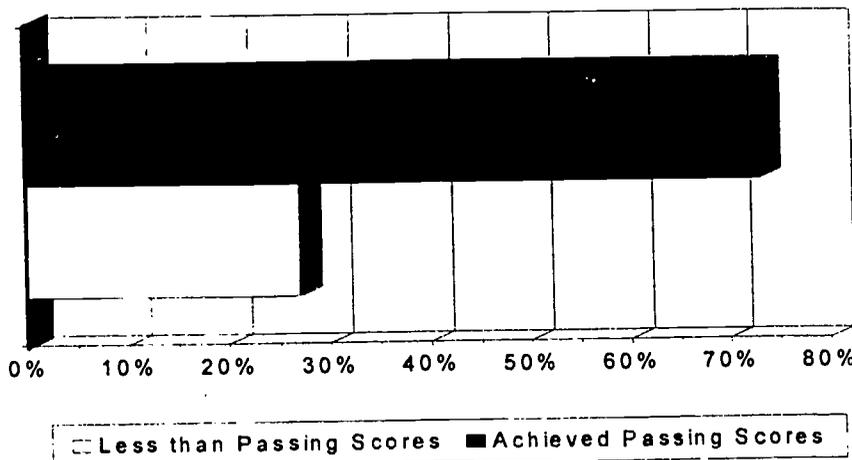
JACKSONVILLE PROGRAM RESULTS:

Preliminary Test Results

- Test results indicate an average 18% increase in skill based test scores following training.



- Test pass rates dramatically improved after training.



- For students not able to achieve a passing score on the pretest, nearly 3/4 were able to pass the posttest following training.

STUDENT PROGRAM EVALUATIONS

1. What did you like most in this course?

Total Comments: 197

| # of Comments | Percent | |
|---------------|---------|---------------------------------------|
| 78 | 40% | Computer Usage |
| 55 | 28% | Instructors |
| 20 | 10% | Relationships with other Students |
| 10 | 5% | Course Content |
| 7 | 4% | Individualized Attention |
| 6 | 3% | Preparation for Customer Service jobs |
| 6 | 3% | Role Playing |
| 5 | 3% | Group Effort/Teamwork |
| 5 | 3% | Class Discussions/Participation |
| 4 | 2% | Vocabulary |
| 3 | 2% | Boost in Confidence/Self- Esteem |
| 3 | 2% | Problem Solving |
| 3 | 2% | Learning Environment |
| 2 | 1% | Metacognition |
| 1 | 1% | Grammar |
| 1 | 1% | Getting Paid For Training |

2. What did you like least in this course?

Total Comments: 126

| # of Comments | Percent | |
|---------------|---------|-----------------------------------|
| 65 | 52% | Nothing |
| 30 | 24% | Computer Functioning/Bug Problems |
| 12 | 10% | Length of Training (Too Long) |
| 8 | 6% | Length of Training (Too Short) |
| 6 | 5% | Lecture |
| 4 | 3% | Time of Class (Inconvenient) |
| 2 | 2% | Length of Time on Computer |
| 1 | 1% | No Promise of Employment |

STUDENT PROGRAM EVALUATIONS

3. What were the strengths on this course?

Total Comments: 100

| # of Comments | Percent | |
|---------------|---------|---------------------------------|
| 35 | 35% | Computer Knowledge/Training |
| 25 | 25% | Instruction |
| 13 | 13% | Interaction with other Students |
| 12 | 12% | Functional Context Learning |
| 12 | 12% | Customer Service Training |
| 6 | 6% | Vocabulary |
| 5 | 5% | Metacognition |
| 5 | 5% | Enhanced Thinking Skills |
| 4 | 4% | Course Materials |
| 4 | 4% | Class Size |
| 3 | 3% | Enhanced Self-Esteem |

4. What topics should have been covered but were not?

Total Comments: 152

| # of Comments | Percent | |
|---------------|---------|-----------------------------------|
| 132 | 87% | None |
| 9 | 6% | More Customer Service Focused |
| 8 | 5% | More Computer use Training |
| 3 | 2% | Typing Skills |
| 2 | 1% | Career Counseling/Resume' Writing |

5. What could have been done to improve the course?

Total Comments: 114

| # of Comments | Percent | |
|---------------|---------|---------------------------|
| 81 | 71% | Nothing |
| 16 | 14% | Fix Computer Problems |
| 12 | 11% | Increase Length of Class |
| 5 | 4% | Include Live Role Playing |

TEACHER PROGRAM EVALUATIONS

1. What did you like most in this course?

Total Comments: 9

| # of Comments | Percent | |
|---------------|---------|-------------------------------|
| 2 | 22% | Combination of CBT an Lecture |
| 2 | 22% | Metacognition |
| 2 | 22% | Small Class Size |
| 2 | 22% | Vocabulary |
| 1 | 11% | Students |

2. What did you like least in this course?

Total Comments: 8

| # of Comments | Percent | |
|---------------|---------|-----------------------------------|
| 8 | 100% | Computer Functioning/Bug Problems |

3. What were the strengths on this course?

Total Comments: 7

| # of Comments | Percent | |
|---------------|---------|--------------------------|
| 2 | 29% | Review of Math |
| 2 | 29% | Metacognition |
| 1 | 14% | Vocabulary |
| 1 | 14% | Team Effort |
| 1 | 14% | Review of Writing Skills |
| 1 | 14% | Problem Solving |

4. What topics should have been covered but were not?

Total Comments: 6

| # of Comments | Percent | |
|---------------|---------|------------------------------|
| 2 | 33% | More Customer Service Skills |
| 2 | 33% | Role Play |
| 1 | 17% | Oral Communication |
| 1 | 17% | Skimming Techniques |
| 1 | 17% | Grammar and Punctuation |

5. What could have been done to improve the course?

Total Comments: 5

| # of Comments | Percent | |
|---------------|---------|----------------------|
| 2 | 40% | More Math |
| 2 | 40% | Fix CBT |
| 1 | 20% | Realistic Role Plays |

Evaluation

Method

Design

The study design was a pre, post-test design with version A of the Criterion Test serving as a pre-test and version B of the Criterion Test serving as the post-test and dependent variable.

Although the two tests were designed to be equivalent, an equipercentile equating, conducted on a separate sample adjusted for any potential differences in test difficulties (see table 1).

Sample

The study sample consisted of 244 participants who had both pre-test and post-test scores. All study participants were selected based on their reading test performance. Scores on the TABE test were typically between 6th and 11th grade and scores on the pre-Criterion Test were less than 32 (out of a possible 41 correct). There were also an additional 11 individuals who went through the class in its early stages before pre and post-tests were available, so that a total of 255 participants were actually served by the program. The sample consisted of 76 Whites (29.8%), 126 Blacks (49.4%), 12 Asians (4.7%), 10 Hispanics (3.9%) and one American Indian (0.4%). The remaining 11.8% of the sample were either not identified as to racial group or indicated membership as "other". There were 56 males (23.0%) and 188 females (77.0%) identified in the sample. Most of the sample (87.7%) indicated English as their native language. Spanish was reported as the native language by 3.3% of the sample and 3.7% indicated that another language was native to them. An additional 5.3% did not report native language. Most of the sample (70.9%) had either graduated high school or had a Graduate Equivalency Diploma. Of the remainder, 23% had some high school, 2% had no high school and 4.1% did not report education level. Most of the sample (64.3%) was paid while participating in the program.

Study Variables

In addition to the demographic variables described above and the pre (CRTA_TOT) and post-test (CRTB_TOT) additional data were collected from sample participants on TABE Math (TABE_M), Reading (TABE_R), and Language (TABE_L) tests. A total TABE score (TABE_T) was also included for study participants. Students were also asked to complete an evaluation questionnaire that asked for indications of agreement or disagreement with 37 specific questions about the program on a 5-point scale, and asked for an overall rating on a 4-point scale.

Analyses

Descriptive statistics for all test score and rating variables were computed as were correlations between all test scores. An overall program effect was tested for with a paired t-test and a series of subsequent analyses examined whether there were interactions between the effect of the program and the following variables: (1) Race, (2) Gender, (3) Level of Education, (4) Language, (5) Payment, (6) Class sequence.

The latter variable was important because the program was undergoing continual revision and improvement during the course of the study so that early results may not be reflective of the effectiveness of the final, revised program. Based on the starting dates of each class the total program was divided into 17 sequential classes (some classes started at the same time but were grouped into the same sequential category if starting date was the same).

Results

Table 1 shows the means and standard deviations for the program evaluation ratings. It can be seen that with few exceptions the ratings are quite high. The average item-level rating was 4.44, indicating a generally high level of participant agreement that the program was effective. The overall rating of the program was 3.64 on a 4-point scale supporting the conclusion that participants judged the program to be highly effective.

Table 3 shows the means and standard deviations for the test scores included in the study. The mean for the pre-test (CRT_ATOT) was 28.01 with a standard deviation of 5.23. The mean for

the post-test (CRT_BTOT) was 32.91, indicating a fairly large effect size of 0.94 standard deviation units (SDUs)¹. A paired t-test indicated that the difference between the pre and post tests was statistically significant. ($t = 16.81$; $df=243$; $p < .001$).

Table 4 shows the intercorrelations between the test score variables. It can be seen that all of the test scores are fairly highly intercorrelated with the TABE_R and TABE_L scores having higher correlations with the pre and post tests than TABE_M. TABE_T had the highest correlation with the pre and post tests.

Residual Analysis

The TABE and the pre-test scores were useful indicators of the pre-program level of competency in the target skills. Because there was interest in assessing the program effectiveness for different subgroups it was decided to use this information to partial out pre-program differences through a regression analysis. The regression analysis began with a stepwise regression in which the dependent variable was CRT_BTOT the post-test. The independent variables included the pre-test and the TABE scores. Table 5 shows the results of the stepwise regression analysis. Three predictors added significantly to the prediction of CRT_BTOT. These were TABE_TOT, TABE_R and CRT_ATOT, the pre-test. The multiple correlation between these three predictors and the post-test was .71. The regression analysis was used to create a residual gain score for each sample participant. That is, a score reflecting the difference between the predicted and actual score on the post-test was computed by using the regression equation to predict a score for each participant and subtracting the predicted from the actual score. These residuals were first examined to determine whether they appeared to meet the assumptions of linearity and homoscedasticity. Plots of the residual distributions were examined and appeared to be normal without any evidence of non-linearity.

As noted above there was some interest in assessing the effects of the program for different subgroups. Using the residual gain score as a dependent variable a series of one-way analyses of

¹. As noted, the two versions of the test were equated allowing an estimate of the effects to be obtained by dividing the difference between post minus pretest divided by the pretest standard deviation.

variance (ANOVAs) was carried out to examine whether the program had differential effects for different subgroups. Table 6 shows the F-tests for each of these ANOVAs. It can be seen that there were no significant differences for race, gender, level of education, or language. Significant differences were obtained for two variables, payment and class sequence. These latter two variables were confounded, however. A higher proportion of participants were paid in the later stages of the program, making it difficult to separate the two variables. In order to control for the confounding effect of course sequence a regression analysis was conducted entering the ordinal number of the course sequence category first and then testing for the effects of payment on the residual gain score. The results, shown in Table 7, indicate that once course sequence is controlled there is no effect of payment on the gains made by participants ($F = .38$; $df 1, 235$; ns).

A further analysis was performed on the residual gain score by comparing the mean gain for the early classes (first nine starting dates) with the gain for the later classes (last 8). The difference was significant ($F = 22.08$; $df 1, 236$; $p < .001$). Table 8 summarizes the residual gain scores for each demographic category.

Table 9 shows that the mean for the pre-test measure of affect (self-esteem, motivation, etc.) (PRE_PSL) was 3.38. The mean for the post-test measure of affect (POST_PSL) was 3.67, indicating a fairly large effect size of 0.63 standard deviation units (SDUs)². A paired t-test indicated that the difference between the pre and post tests was statistically significant. ($t = 9.42$; $df=223$; $p < .001$).

Conclusions

The results of the analyses indicate that the program had a strong positive effect on the participants achievement as measured by the criterion referenced post-test. The study design is a variation of the one-group pre-post design from which it is usually difficult to draw causal conclusions. Several factors argue that the results can be interpreted as supporting the conclusion that the program had a positive impact, however. First, the program was conducted with a number of different samples

². Obtained by dividing the difference between post minus pretest divided by the pretest standard deviation.

over a fairly long period of time and the typical threats to validity, such as maturation effects are unlikely to explain the results. Secondly, instrumentation effects were minimized by using an equated, equivalent form of the test as the post measure. The time in between test administrations should have been long enough to minimize practice effects, but even allowing for practice effects the effect size obtained was impressive. Regression effects, a common concern in studies of this type, were also minimized by the use of an upper and lower limit on the reading test scores. Finally, the results showing the improvement in program effects over time offer strong support that the program strengthened its impact as continual improvements were made. The actual effect size for the early classes was .46 SDUs as contrasted with 1.3 SDUs for the later classes. The impact of these differences can be seen in the "passing rates" on the criterion tests. Passing rates (a score of 32 or higher) for participants in the early classes was 57.5% as contrasted with 79.9% for participants in the later classes.

One final and interesting note was that there were no significant differences for the various race, gender and language subgroups included in the sample. It should be noted, however, that the residual gain was higher for minorities (see Table 7).

Table 1

| CRT_A ADJUSTED RAW SCORE K=41 | PERCENTILE | CRT_B ADJUSTED RAW SCORE K=45 |
|----------------------------------|------------|----------------------------------|
| 20 | 1. | 18 |
| 21 | 2. | 19 |
| 21 | 3. | 21 |
| 22 | 4. | 21 |
| 24 | 5. | 22 |
| 25 | 6. | 23 |
| 25 | 7. | 23 |
| 26 | 8. | 24 |
| 27 | 9. | 25 |
| 27 | 10. | 26 |
| 27 | 11. | 26 |
| 28 | 12. | 26 |
| 28 | 13. | 27 |
| 28 | 14. | 27 |
| 28 | 15. | 27 |
| 29 | 16. | 28 |
| 29 | 17. | 28 |
| 29 | 18. | 29 |
| 30 | 19. | 30 |
| 30 | 20. | 31 |
| 30 | 21. | 31 |
| 30 | 22. | 31 |
| 30 | 23. | 32 |
| 31 | 24. | 32 |
| 31 | 25. | 32 |
| 31 | 26. | 32 |
| 31 | 27. | 33 |
| 32 | 28. | 33 |
| 32 | 29. | 33 |
| 32 | 30. | 34 |
| 32 | 31. | 34 |
| 32 | 32. | 34 |
| 32 | 33. | 34 |
| 32 | 34. | 34 |
| 32 | 35. | 34 |
| 33 | 36. | 35 |
| 33 | 37. | 35 |
| 33 | 38. | 35 |
| 33 | 39. | 35 |
| 33 | 40. | 35 |
| 33 | 41. | 35 |

Table 1

| CRT_A ADJUSTED RAW SCORE K=41 | PERCENTILE | CRT_B ADJUSTED RAW SCORE K=45 |
|----------------------------------|------------|----------------------------------|
| 34 | 42. | 36 |
| 34 | 43. | 36 |
| 34 | 44. | 36 |
| 34 | 45. | 36 |
| 34 | 46. | 36 |
| 34 | 47. | 36 |
| 34 | 48. | 36 |
| 34 | 49. | 36 |
| 34 | 50. | 36 |
| 34 | 51. | 36 |
| 34 | 52. | 37 |
| 34 | 53. | 37 |
| 35 | 54. | 37 |
| 35 | 55. | 37 |
| 35 | 56. | 37 |
| 35 | 57. | 37 |
| 35 | 58. | 37 |
| 35 | 59. | 37 |
| 35 | 60. | 37 |
| 35 | 61. | 37 |
| 35 | 62. | 38 |
| 35 | 63. | 38 |
| 35 | 64. | 38 |
| 35 | 65. | 38 |
| 36 | 66. | 38 |
| 36 | 67. | 38 |
| 36 | 68. | 38 |
| 36 | 69. | 38 |
| 36 | 70. | 38 |
| 36 | 71. | 38 |
| 36 | 72. | 38 |
| 36 | 73. | 38 |
| 36 | 74. | 38 |
| 36 | 75. | 38 |
| 36 | 76. | 38 |
| 36 | 77. | 38 |
| 36 | 78. | 39 |
| 36 | 79. | 39 |
| 37 | 80. | 39 |
| 37 | 81. | 39 |
| 37 | 82. | 39 |

Table 1

| CRT_A ADJUSTED RAW SCORE K=41 | PERCENTILE | CRT_B ADJUSTED RAW SCORE K=45 |
|----------------------------------|------------|----------------------------------|
| 37 | 83. | 39 |
| 37 | 84. | 39 |
| 37 | 85. | 40 |
| 37 | 86. | 40 |
| 37 | 87. | 40 |
| 37 | 88. | 40 |
| 37 | 89. | 40 |
| 37 | 90. | 40 |
| 38 | 91. | 40 |
| 38 | 92. | 40 |
| 38 | 93. | 40 |
| 38 | 94. | 41 |
| 38 | 95. | 41 |
| 38 | 96. | 41 |
| 38 | 97. | 41 |
| 39 | 98. | 42 |
| 39 | 99. | 42 |

Table 2**Program Evaluation Questionnaire Results**

| Item | Mean | SD |
|-------------------|------|------|
| 1. | 4.36 | .92 |
| 2. | 4.38 | .86 |
| 3 (reverse coded) | 3.86 | 1.37 |
| 4 (reverse coded) | 3.45 | 1.34 |
| 5. | 4.13 | 1.05 |
| 6. | 4.39 | .96 |
| 7. | 3.79 | 1.24 |
| 8. | 4.55 | .67 |
| 9. | 4.29 | .92 |
| 10. | 4.44 | .77 |
| 11. | 4.53 | .66 |
| 12. | 4.44 | .87 |
| 13. | 4.29 | .95 |
| 14. | 3.90 | 1.12 |
| 15. | 4.13 | 1.03 |
| 16. | 4.52 | .78 |
| 17. | 4.54 | .70 |
| 18. | 4.44 | .70 |
| 19. | 4.65 | .71 |
| 20. | 4.51 | .82 |
| 21. | 4.48 | .99 |
| 22. | 4.35 | 1.11 |
| 23. | 4.77 | .50 |
| 24. | 4.76 | .55 |
| 25. | 4.71 | .66 |
| 26. | 4.76 | .59 |
| 27. | 4.76 | .55 |
| 28. | 4.72 | .64 |
| 29. | 4.74 | .65 |
| 30. | 4.75 | .59 |
| 31. | 4.73 | .65 |
| 32. | 4.75 | .60 |
| 33. | 4.78 | .52 |
| 34. | 4.76 | .65 |
| 35. | 4.34 | .88 |
| 36. | 4.21 | 1.08 |
| 37. | 4.50 | .81 |
| OVERALL | 3.64 | .64 |

Note: N = 192.

Table 3

Descriptive statistics for test scores

| Variable | Mean | Std Dev |
|----------|-------|---------|
| CRT_ATOT | 28.01 | 5.23 |
| CRT_BTOT | 32.91 | 5.34 |
| TABE_M | 8.56 | 2.84 |
| TABE_R | 10.20 | 2.60 |
| TABE_L | 8.34 | 3.32 |
| TABE_T | 9.06 | 2.79 |

Note: N = 244

Table 4

| Correlations: | CRT_BTOT | TABE_M | TABE_R | TABE_L | TABE_T |
|---------------|----------|--------|--------|--------|--------|
| CRT_ATOT | .6293 | .4780 | .6116 | .5614 | .6183 |
| CRT_BTOT | | .4977 | .5978 | .5852 | .6299 |
| TABE_M | | | .4600 | .6560 | .8269 |
| TABE_R | | | | .6559 | .7641 |
| TABE_L | | | | | .8848 |

Note: All correlations significant with $p < .001$.

Table 5

Results of Stepwise Regression

| Predictor | Beta | B-Weight | t-value | Mult R |
|-----------|------|----------|---------|--------|
| TABE_T | .29 | .55 | 3.89** | |
| CRT_ATOT | .35 | .36 | 5.82** | |
| TABE_R | .16 | .33 | 2.19* | |
| | | | | .71** |

Note: * p<.05
** p <.01

Table 6

Summary of Analysis of Variance Results

| Variable | F-Test | df |
|----------------|---------|--------|
| Gender | 0.41 | 1,236 |
| Race | 0.57 | 2,230 |
| Education | 2.21 | 2,208 |
| Language | 0.79 | 2,228 |
| Payment | 12.02** | 1,236 |
| Class Sequence | 3.76** | 16,221 |

** p < .001

Table 7

Regression analysis of payment, controlling for class sequence

| Variable | F-test ^a | df | Mult. R |
|-----------|---------------------|-------|---------|
| Class seq | 39.31** | 1,236 | .38 |
| Payment | 0.34 | 1,235 | .38 |

Notes: ** $p < .001$.

a. F-test of increment in squared multiple R.

Table 8

Residual gain scores for each demographic category

| Category | Residual Gain |
|-----------------------|---------------|
| Male | .29 |
| Female | -.08 |
| White | -.43 |
| Black | .13 |
| Other Minority | .13 |
| No high school | -2.01 |
| Some high School | -.74 |
| High School Grad | .24 |
| Native English | -.19 |
| Native Spanish | 1.31 |
| Other native language | .58 |
| No payment | -1.34 |
| Payment | .50 |

Table 9

T-tests for paired samples measures of affect

| Variable | Number of pairs | 2-tail | | Mean | SD | SE of Mean |
|----------|--------------------|--------|------|--------|------|------------|
| | | Corr | Sig | | | |
| POST_PSL | | | | 3.6669 | .410 | .027 |
| | 224 | .292 | .000 | | | |
| PRE_PSL | | | | 3.3790 | .355 | .024 |

| Paired Differences | | | | | | |
|---------------------|------|------------|---------|-----|--------|-----|
| Mean | SD | SE of Mean | t-value | df | 2-tail | Sig |
| .2879 | .457 | .031 | 9.42 | 223 | .000 | |
| 95% CI (.228, .348) | | | | | | |

Glossary of Evaluation Terms

| Terms/Abbreviations | Description |
|---------------------|---|
| CRT_ATOT | Pre - Criterion Test score used to measure functional context literacy |
| CRT_BTOT | Post - Criterion Test score used to measure functional context literacy |
| TABE_L | Standardized adult literacy test score for language |
| TABE_M | Standardized adult literacy test score for math |
| TABE_R | Standardized adult literacy test score for reading |
| TABE_T | Standardized adult literacy test score for total ability |
| PRE_PSL | Pre - Personal side of Learning Test score to measure affect (self-esteem, motivation, locus of control, goal setting, attribution, persistence) |
| POST_PSL | Post - Personal side of Learning Test score to measure affect (self-esteem, motivation, locus of control, goal setting, attribution, persistence) |

BEST COPY AVAILABLE

Data Dictionary

Software: Excel 4.0

File: WorklitA.xls

Demographic Information

| Variable Position | Variable Name | Data/Codes | Description |
|-------------------|----------------|--|---|
| A | (#34) Class_Cd | 1 - Class #1 2 - Class #2 3 - Class #3..... | Identifies classes by group codes |
| B | (#35) Date | xx/yy/zz | Month/Day/Year the class began |
| C | (#1) SSN | aaa-bb-cccc | Social security number |
| D | (#2,3,4) Name | Last, First Name | |
| E | (#12) Sex | 0 - Male 1 - Female | |
| F | (#11) DOB | xx/yy/zz | Date of birth |
| G | (#13) Race | 1 - White American 2 - Asian 3 - American Indian 4 - Hispanic 5 - Black American 6 - Other | |
| H | (#18) Lang | 1 - English 2 - Spanish 3 - Other | Native language |
| I | (#19) LEP | 0 - yes 1 - no | Limited english proficiency |
| J | (#20) Employ | 1 - Agriculture 2 - Distributive 3 - Health 4 - Home Economics 5 - Office 6 - Trade/Industrial 7 - Public Service 8 - Sales and Service 9 - Unemployed 10 - Other | Area of Employment |
| K | (#21) S&S_IS | 1 - Most of the time 2 - Part of the time 3 - Little/none of time | Sales and service position Area: Information Sharing |
| L | (#21) S&S_SCC | 1 - Most of the time 2 - Part of the time 3 - Little/none of time | Sales and service position Area: Simple customer service |

| Variable Position | Variable Name | Data/Codes | Description |
|-------------------|------------------|---|--|
| M | (#21) S&S_CCS | 1 - Most of the time 2 - Part of the time 3 - Little/none of time | Sales and service position Area: Complex customer service |
| N | (#21) S&S_S | 1 - Most of the time 2 - Part of the time 3 - Little/none of time | Sales and service position Area: Sales |
| O | (#22) Yrs_Empl | 1 - [0 - 5] 2 - [6 - 10] 3 - [11 - 15] 4 - [16 - over] | Years currently employed |
| P | (#25) Educ | 1 - 8th grade or below 2 - 9th grade or above 3 - High school graduate or GED | Education: completed |
| Q | (#27) Ed_Trng | 0 - no 1 - yes (with no specific training mentioned) 2 - yes (basic skills) 3 - yes (GED) 4 - yes (ESL) 5 - yes (other) | Enrolled in other training/education while participating in workplace literacy program. If yes is selected select the correct number that reflects the type of additional training the student is attending. |
| R | (#28) Handi | 0 - yes 1 - no | Handicapped |
| S | (#32) Leave | 1 - Completed objectives 2 - Health problems 3 - Child care issues 4 - Transportation 5 - Family 6 - Location of class 7 - Lack of interest 8 - Class time 9 - Moved 10 - Obtained job 11 - Other | Reason for leaving training |
| T | (#36) Payment | 1 - Student was paid 0 - Student was not paid | Identify students paid for attending training. |
| U | (#37) Inst_Nm | Instructor name | |
| V | (#38) Inst_SS | Instructor Social security number | |
| W - AP | Atten1 - Atten32 | 1 - Attended class 0 - Not attended | Class Attendance |
| AQ | Att_tot | Total attendance # | Number of classes attended |
| AR | Att_per | Percent attendance # | Percent of attendance |

Data Dictionary

Software: Excel 4.0

File: Worklitb.xls

Pretest data

| Variable Position | Variable Name | Data/Codes | Description |
|-------------------|--------------------|--|--|
| A | (#34) Class_Cd | 1 - Class #1 2 - Class #2 3 - Class #3..... | Identifies classes by group codes |
| B | Name | Last, First Name | |
| C | SSN | aaa-bb-cccc | Social security number |
| D - BU | Crt_A1 - Crt_A70 | 1 - A 2 - B 3 - C 4 - D 5 - E | CRT Pre-test Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| BV | Crt_ATot | Total Score | Total correct CRT answers |
| BW | Crt_AVer | CRT Version # | Identify SC@RE TEST version # |
| BX | Tab_M | TABE Math score | |
| BY | Tab_R | TABE Reading score | |
| BZ | Tab_L | TABE Language score | |
| CA | Tab_T | TABE Total score | |
| CB - CF | SSRTAB1 - SSRTAB5 | 5 individual section scores | Individual scores for each of the 5 SSRTAB sections |
| CG | SSRTAB_R | Raw score | Raw SSRTAB score |
| CH | SSRTAB_C | Converted score | Converted (qualifying) SSRTAB score |
| CI - ES | Meta_A1 - Meta_A63 | 1 - 10% of time 2 - 25% of time 3 - 50% of time 4 - 75% of time 5 - 100% of time | Metacognition test A Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| ET | Meta_Atot | Total score | Metacognition total raw score |
| EU | Meta_Aver | Metacognition Version # | METACOGNITION TEST # |
| EV - GP | Meta_C1 - Meta_C47 | 1 - 10% of time 2 - 25% of time 3 - 50% of time 4 - 75% of time 5 - 100% of time | Metacognition test C Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| GQ | Meta_Ctot | Total score | Metacognition total raw score |
| GR | Meta_Cver | Metacognition Version # | METACOGNITION TEST # |

Data Dictionary

Software: Excel 4.0

File: Worklitc.xls

Posttest data

| Variable Position | Variable Name | Data/Codes | Description |
|-------------------|----------------------|---|---|
| A | (#34) Class_Cd | 1 - Class #1 2 - Class #2 3 - Class #3..... | Identifies classes by group codes |
| B | Name | Last, First Name | |
| C | SSN | aaa-bb-cccc | Social security number |
| D - BU | Crt_B1 - Crt_B70 | 1 - A 2 - B 3 - C 4 - D 5 - E | CRT Post-test Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| BV | Crt_BTot | Total Score | Total correct CRT answers |
| BW | Crt_BVer | CRT Version # | Identify SCORE TEST version # |
| BX - EJ | Meta_B1 - Meta_B65 | 1 - 10% of time 2 - 25% of time 3 - 50% of time 4 - 75% of time 5 - 100% of time | Metacognition test B Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| EK | Meta_Btot | Total score | Metacognition total raw score |
| EL | Meta_Bver | Metacognition Version # | METACOGNITION TEST # |
| EM - GH | Meta_D1 - Meta_D48 | 1 - 10% of time 2 - 25% of time 3 - 50% of time 4 - 75% of time 5 - 100% of time | Metacognition test D Individual test items for item analysis "NO/BLANK ANSWERS" MUST BE LEFT BLANK |
| GI | Meta_Dtot | Total score | Metacognition total raw score |
| GJ | Meta_Dver | Metacognition Version # | METACOGNITION TEST # |
| GK - HU | Student1 - Student37 | 1 - Completely Disagree 2 - Mostly Disagree 3 - Partially Agree 4 - Mostly Agree 5 - Completely Agree | Student program evaluation |
| HV | Overall38 | 1 - Fair 2 - Average 3 - Good 4 - Excellent | Student program evaluation - overall rating |