The Continuing Education Institute (CEI) established a seven-member training collaborative to upgrade the literacy and English language skills of nursing assistants, dietary aides, and housekeeping workers employed in a chronic and acute care hospital and in five Massachusetts nursing homes. Three adult basic education (ABE) classes, five English-as-a-Second-Language (ESL) classes, and one adult degree class met at the Shattuck Hospital during a 15-month period, while other classes were held at other sites. CEI worksite training programs were characterized by a strong link between course content and the trainee's job functions. Counseling and child care arrangements also were made for the employees. Employee participants benefited by becoming more skilled in their jobs, preparing for training for advancement, and becoming more comfortable socially. Employers benefited by using the training as a recruitment tool and by increasing attendance and productivity of class participants. The program was regarded as a success by participants and employers.

(This report includes course descriptions and descriptions of the programs as implemented at each site. An external program evaluation is appended.) (KC)
Workplace Literacy Partnership for Nursing Home Employees

Grant No. V198A80-180

Final Report

1990
Table of Contents

Overview 3
Objectives 4
Population 6
Services 7
Program Descriptions 8
Objectives 15
Dissemination 18
Changes in Personnel 18
Program Summary Results 18
Appendices 24
  Example ABE Detailed Report 25
  External Evaluation Report 32
WORKPLACE LITERACY PARTNERSHIP FOR NURSING EMPLOYEES

OVERVIEW OF THE PROGRAM

The Continuing Education Institute (CEI) established a seven member training collaborative to upgrade the literacy and English language skills of nursing assistants, dietary, and housekeeping workers employed in a chronic and acute care hospital and in 5 Massachusetts nursing homes. The partners were Lemuel Shattuck Hospital, Armenian Nursing Home (Jamaica Plain), The Greenery Rehabilitation and Skilled Nursing Center (Brighton), Massachusetts Long Term Care Foundation (Dedham), Vernon Hall Nursing Home (Cambridge), and the Westridge Healthcare Center (Marlborough).

CEI established and operated 3 educational programs: Adult Basic Education (ABE), English as a Second Language (ESL), and the High School Diploma (ADP) creating 100 training positions for employees of the 6 health care organizations. There were 3 ABE classes, 5 ESL classes, and 1 ADP class which met at the Shattuck Hospital.

The three educational programs were funded through the U.S. Department of Education and were implemented during a 15 month period in addition to a two month planning, or start-up period.

LITERACY REQUIREMENTS IN A HEALTH CARE SETTING

CEI worksite training programs were characterized by a strong link between course content and the trainee's job functions. Ongoing, regular contacts between CEI staff and employer supervisors were scheduled to ensure that the literacy skills taught related to those required of the trainees on the job. In addition to ABE and ESL textbooks which have a strong emphasis on the world of work, CEI staff have available a wealth of teacher-produced readings and practice materials based on nursing home and hospital content.

Each trainee benefited from the program in several ways. For ABE and ESL students, the workplace-specific curriculum had a direct impact on performance and productivity because of their improved oral and written communication abilities. Many trainees in ADP secured the skills needed to be accepted for more specialized training, an absolute prerequisite to advancement in a health care career.
Sponsoring employers also benefited. The possibility of paid training was used successfully by some nursing homes as a recruitment tool. Nursing home staff who have participated have improved their attendance and increased productivity. Employers who subsidized and supported training engendered feelings of loyalty on the part of employees. Overall retention rates increased, as did options for promotions from within. Finally, careful scheduling of courses at the worksite resulted in a virtually uninterrupted work flow.

One of the most important issues regarding the relevance of the Workplace Literacy Program to the needs of the health care industry relates to the implementation of certification requirements for nursing assistants, the result of federal and state legislation enacted to improve the quality of care for Medicare and Medicaid certified nursing homes. The national Nursing Home Reform Act of 1987 required that as of October 1989, all newly hired nursing assistants must successfully complete within 120 days a minimum of 75 hours of training in a program approved by the state, as well as pass a state-approved competency evaluation. Nursing assistants employed by a facility before July 1989 are required to take the competency evaluation within 180 days. Adequate literacy skills are a necessary condition for these direct-care personnel to participate in training and to pass the certification evaluation which are both based on standards established by the U.S. Department of Health and Human Services.

In order to conduct the 75 hour training program, a RN staff member must complete an approved course with a length of 24 hours. The Train the Trainer Course conducted by Workplace Literacy Partnership staff was designed to fulfill this requirement. There were 95 participants who attended the course.

OBJECTIVES OF THE WORKPLACE LITERACY PARTNERSHIP

The Workplace Literacy Partnership for Nursing Home Employees was designed to achieve a number of objectives in the sponsoring health care facilities. They ranged from the social, which included intangible, but important benefits for residents and employees, to the three separate educational programs that were created. In addition, the economic impact of the Partnership on the nursing homes and on their employees was reflected in the set of economic goals.
Those objectives included:

SOCIAL

1. enhanced the quality of care and well-being of the residents and patients of the health care facilities
2. fostered inter-generational communication
3. raised the level of basic education and English language skills of women, minorities, and immigrants -- major segments of the workplace of the future

ECONOMIC

1. improved the job performance and productivity of employees
2. facilitated the recruitment of direct-care workers and other staff
3. increased the retention of employees who had demonstrated a commitment to geriatric and long-term care nursing
4. helped nursing homes implement training requirements mandated by state and federal government
5. provided the skills for employees to undertake advanced training programs
6. enhanced the earning potential and broadened the career options of participating employees

PROGRAM

1. provided adult basic education -- reading, writing, and math -- to 20 employees of 3 nursing homes
2. established an English as a Second Language Program for 60 limited English speakers of 5 nursing homes
3. offered a high school diploma program at Lemuel Shattuck Hospital to 10 of its employees and to 10 employees of 3 nursing homes
4. helped nursing assistants acquire the literacy skills needed to pass state-mandated training and competency evaluation requirements
5. made available a range of support services (counseling, tutoring, transportation, and child care) to facilitate employee participation in these classes

As a whole, the Workplace Literacy Partnership for Nursing Home Employees enabled the primary learning provider, CEI, to make a comprehensive assessment of employee literacy and language needs in 5 health care organizations and to service them appropriately.
COMMITMENT OF PARTNERSHIP MEMBERS

As primary learning provider, CEI was the lead member and representative of the partnership. CEI assumed fiscal and operational responsibility, as well as provided all education, counseling, and related services.

The health care organizations provided paid release time to employees enrolled in the classes. Each facility contributed classroom space, and the administrators authorized senior staff and department heads to work with their CEI counterparts in program scheduling. One member of each facility was designated to serve as the liaison for the respective facility with CEI managers and instructional personnel.

Each of the partners had a representative serve on the Advisory Board which met a total of six times.

TRAINEE POPULATION

The most typical trainees were female nursing assistants in the 25-34 year age range. Prior to their current positions, many were out of the workforce or out of school for many years. Many more foreign born than native born were represented. Among the non-native speakers, the overwhelming majority were Haitians, followed by Hispanics, Portuguese speaking, and Asians. Over half of the employee group indicated that they had completed high school. That number includes immigrants who reported having earned high school diplomas in their countries of origin. However, the educational equivalent of these foreign diplomas is difficult to ascertain.

Despite different ethnic backgrounds, command of English, and basic skill level, participants in the Workplace Literacy Partnership share several characteristics. They were nominated by their employers on the basis of their commitment to a career in nursing--especially in a long term care environment--and for their excellent attitudes and attendance on the job. Further, almost all of the native born trainees lacked the reading and math skills that are needed for post-secondary technical coursework (high school diplomas notwithstanding). Lastly, all lacked the economic independence to support themselves (and family members, in some cases) for 12 months and to pay for education-related expenses such as tuition, books, and fees.
SUPPORT SERVICES

A. Counseling and Advisement

In the course of a year of study, many challenges arose which are unique to the adult student. Balancing work, family and school responsibilities can be very difficult. For some students, the need to hold a second job inhibited their ability to function effectively in class. Moreover, many adults who undertook this training program did so with a history of negative experiences in school. For others recording homework assignments, preparing for tests, communicating concerns with instructors, and managing their time were challenging habits that had to be acquired.

For these reasons, counseling was essential for the students’ successful participation in the Workplace Literacy Partnership. The Coordinators of the three programs, who have experience in educational counseling as well as in teaching and administering adult education programs, had the overall responsibility for ensuring that students made progress and for addressing obstacles that might have impeded progress. In the ABE and ESL programs, the instructors provided formal counseling for 1-2 hours each week. In the Adult Diploma Program, the Diploma Consultant had a counseling role.

Counselors also supervised the assessment process and provided academic advisement which began with a conference prior to the start of classes. All students met individually with their counselor (Instructor, Consultant, or Course Coordinator, depending on the program) to discuss academic history, test results, and educational and career goals. In this manner, employees began their training with an accurate understanding of the program’s requirements and of their strengths and weaknesses in reading, writing, mathematics, or English. During the initial conference, counselors offered needed reassurance to prospective students about their decision to enroll in the program by describing, for example, the range of support services that were available.

B. Transportation and Child Care

ABE and ESL classes were held at participating nursing homes. ADP trainees from the sponsoring nursing homes needed to travel to Lemuel Shattuck Hospital, readily accessible by public transportation. Travel expenses of employees were reimbursed. The ABE and ESL classes took place during the first or last work hour of a shift and for one hour before or after. Additional child-care costs were reimbursed. Trainees in the ADP, which were held twice weekly in the late afternoon, were also reimbursed for their increased child care costs.


C. Tutoring

When recruitment and assessment are correctly conducted and when instruction and materials are geared to the appropriate level, the majority of learners are likely to meet the course objectives. Some students—especially those who had been out of school for many years or who had learning disabilities—required assistance beyond what the teacher was able to provide. Moreover, even when students were progressing normally, tutoring provided reinforcement for optimum learning and, with limited English speakers, extra practice time.

Volunteer tutors were recruited from several sources: the Commonwealth Literacy Campaign (CLC) and volunteers from the nursing home supervisory staff. In other CEI literacy programs held at long-term care worksites, supervisory staff, co-workers, and residents have sometimes served as tutors, or language coaches. Such support of the trainees is a natural outgrowth of the quasi-familial atmosphere that characterizes many long-term care facilities. If available, this assistance is a welcome addition, and when appropriate, instructors consult with them to identify skill areas needing extra practice in the tutorial setting.

DESCRIPTION OF PROGRAMS

A. Adult Basic Education

A competency-based curriculum was designed for nursing home employees with relatively low literacy skills (below 4th grade). The ABE course consisted of three 13-week modules, with reading, writing, and mathematics integrated. Students spent 52 hours in each module (4 hours a week for 13 weeks) for a total of 156 hours of instruction. Counseling and tutoring, which were described above took place beyond the scheduled class hours.
The ABE program was offered at 3 sites with the following numbers of students:

<table>
<thead>
<tr>
<th>SITE</th>
<th>Registered</th>
<th>Withdrew</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Greenery</td>
<td>13</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Armenian</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Westridge</td>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>5 (22%)</strong></td>
<td><strong>18 (78%)</strong></td>
</tr>
</tbody>
</table>

Students attended class on the average of 76% of the time with a range of 51% to 100%.

B. English as a Second Language

The ESL course sequence consisted of three 13-week modules, providing a total of 156 hours of class. The structure of the ESL course is similar to that of the ABE modules. Classes met twice weekly for two hour periods, with each module offering 52 hours of instruction. Counseling and tutoring --integral parts of the program-- were offered in addition to these class hours.

CEI's philosophy of ESL instruction is aimed at enabling the employees (1) to communicate accurately and confidently in English on the job and (2) to acquire the lifeskills needed to adapt successfully to living in the United States. A CEI language class is lively and interactive; student practice is maximized.

In CEI's nursing home ESL program course content is adapted after an analysis of the actual communication needed for effective job performance. Instructors concentrate on workplace ESL, as opposed to teaching general or academic English. The learning provider is experienced in meeting the learners' basic educational needs --especially ESL--in nursing home settings. CEI staff have developed curricula covering the beginning to low intermediate level and the intermediate to high intermediate level. These curricula were the product of on-site analyses of the communication needs of direct-care workers. A rich collection of handouts and exercises based on this content was made available for classroom use.
Each course focused on helping students develop the English skills necessary to perform their jobs efficiently and with respect for the well-being of the residents in their care. Emphasis, too, was placed on transferring the skills developed in the workplace to everyday life.

Most of the classes within the ESL program reflected varying language competencies and work duties. Therefore, in addition to published texts, instructors developed supplementary materials to meet the language and work needs of each participant. Instructors and site coordinators also counseled participants. CEI conducted 5-ESL programs at 4 sites.

<table>
<thead>
<tr>
<th>SITE</th>
<th>Registered</th>
<th>Withdrew</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Greenery</td>
<td>13</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Armenian</td>
<td>7</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Westridge</td>
<td>11</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Vernon Hall</td>
<td>14</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>11</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>

24% withdrew, 20% completed other classes.

C. Adult Diploma Program

CEI established the Adult Diploma Program in 1977 in cooperation with Christopher Columbus High School, a private high school in Boston. This highly successful program reflects a progressive approach to adult education by combining academic coursework with a careful evaluation of the individual's previous learning achievements. Employees completed 5 competency-based courses of the standard secondary school curriculum:

* Mathematics 2 credits
* Reading 2 credits
* Writing 2 credits
* Science 2 credits
* U.S. history 2 credits
Students fulfilled the remaining requirements for the diploma—about a third of the credits needed—in the following manner:

* Informal Life Experience Workshop..... credits
* Life Experience Employment Workshop..4 credits

Total.....16 credits

Upon successful completion of the coursework and Life Experience Workshops, employees earn a high school diploma from Christopher Columbus High School, a private accredited institution in Boston.

The ADP sequence involved 170 to 190 hours of class time. The course descriptions follow:

Reading

This course focuses on the critical thinking and reading skills prerequisite for completing the other courses in the Adult Diploma Program. Topics range from reading skills (pre-reading, locating main ideas, supporting details, finding the author’s purpose, scope and sequence, etc.) to reading for meaning (inference, discerning fact from opinion, implied main ideas, etc.). Emphasis is placed on class participation and using texts appropriately.

Writing

The CEI writing course emphasizes building a personal narrative based on the adult’s experience in life. Essays are individually created under the careful supervision of the course instructors. Skills developed in class are centered on the fundamentals of composition: developing good paragraphs, using topic sentences and conclusions, using transitional devices and using appropriate punctuation and grammar. A writing process approach is used to develop the voice of each class member.

Mathematics

The CEI mathematics course presents the basic computational skills necessary to perform the operations needed in everyday living. The focus of the course is to obtain competency in the
areas of basic computations (addition, subtraction, multiplication, and division), map-reading, basic geometry, measurement and metrics, and pre-algebra. All program participants pass competency-based tests prior to completing the course.

Science

The CEI Science course emphasizes the fundamentals of earth, life and physical science. A strong focus of the course is the hands-on experience of working on science laboratory experiments. At the conclusion of the course, each individual obtains a better working understanding of the science components contained in their world.

U.S. History

The CEI U.S. History course emphasized the critical thinking, reading and writing skills necessary to integrate the concepts for an overview of U.S. History from the colonial period to the 1990s. Particular emphasis was placed on classroom participation through a dialectical inquiry method of instruction.

Life Experience Employment Workshop

The CEI Life Experience Workshop is designed to have students reflect on their current jobs and write a 4-6 page paper describing and analyzing at least eight skills used in their jobs. A particularly powerful process in this course is the transformation students go through when they recognize all the many skills they have and how valuable these skills are in their first work. Elements of composition introduced in the first writing course are re-emphasized in this one.

Life Experience Workshop

In this workshop students demonstrate expertise in applied skills acquired during their lives. Examples include a second language in which they are evaluated, a high school transcript indicating that two major subjects have been successfully completed, demonstrating skills in home management, sports, recreation, travel, fine arts, practical arts, family health, community service. Students compose a short paper on the learning involved in the skill and present their findings in class.
Description of Students

Eighty percent of the class were nursing assistants. Students ranged from 28 to 61 years of age, with an average age of 32. Seventy-five percent of the class were women. Ninety percent were immigrants from Haiti, Jamaica, and Barbados.

<table>
<thead>
<tr>
<th>Registered</th>
<th>Withdraw</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>7 (35%)</td>
<td>13 (65%)</td>
</tr>
</tbody>
</table>

Of the 20 trainees who undertook the ADP, 13 completed the graduation requirements established by Christopher Columbus High School. In general, the trainees who undertook the ADP read on the 7th-9th grade level. By graduation, their average reading levels increased by 3 levels.

Individualized Educational Plans

In the CEI approach to adult education, individualized educational plans are established for each trainee. Broad educational/career goals and discrete objectives in the various skill areas are identified as a result of the assessment process.

On-site orientation and screening was conducted by the Course Coordinators and/or the instructors under the direction of the Program Manager. Assessment and placement required 3-5 days at each worksite over a period of 2-3 weeks. The process differed for English dominant and limited English speakers.

All employees nominated by their employers for the ESL program were evaluated individually with an oral interview, which consisted of a needs profile, and tests for auditory discrimination, sight word recognition, and aural vocabulary. Following the oral interview, the CEI Reading and Writing Assessment Instruments were administered. This exam consists of reading passages and performing grammar exercises of increasing difficulty ranging from low - beginning through advanced ESL levels. Candidates were also given the opportunity to express themselves in a writing exercise.
Individuals who were not able to take this exam because their literacy levels were too low were given the CEI Literacy Assessment, which consists of letter, number and sentence recognition and comprehension which places candidates in either ESL Literacy Level 1 or 2.

The trainees also took pre- and post-tests for each module of instruction so as to provide quantitative, as well as qualitative, monitoring of progress.

In individual interviews, the ABE, and ADP candidates had the opportunity to discuss their school history and academic/employment goals. Depending upon their educational background, applicants took several of the following measures: the Wide Range Achievement Test, the Slosson Oral Reading Test, California Adult Student Assessment Systems, CEI Informal Reading Inventory, CEI Math Assessment instrument, and CEI Writing Assessment Instrument. The tests were administered in small groups of 3-4 candidates to minimize interference with the employees' work schedules. In addition to interviewing each interested employee, CEI staff met with supervisory personnel to identify the kind and level of basic skills that were needed on the job.

Information derived from these activities served as the basis of the individualized educational plans. ESL and ABE students met with their instructors and with their coordinators on a regular basis to review their progress and/or raise concerns. The individualized plan was frequently amended as a result of these meetings. Depending on specific academic strengths and weaknesses, tutorial assistance was sometimes required. Although instructors offered individualized instruction in class and through homework assignments, tutors -- by definition -- served as the greatest source of individualization.

D. TRAIN-THE-TRAINER SEMINAR

A 24 contact hour training course was developed in accordance with state and federal requirements for instructors of nursing assistants. This course was approved by the Massachusetts Department of Public Health. The 102 member audience was comprised of registered nurses with at least one year's experience working in a nursing home, but with less than one year's teaching experience. Non-nursing home employees planning to teach nursing assistants were allowed to participate if they had two year's experience in the care of the elderly or chronically ill, as well as a year's teaching experience.
The course covered the following topics:

Adult Learning Principles
Options for Teaching Methods
Role of Evaluation in Learning
Developing Effective Lesson Plans
Accommodating Cultural Differences
Barriers to Adult Learning

The course was offered over a three day period to 102 participants. CEI staff provided the bulk of the organizational and instructional staff with assistance from other members of the training collaborative.

PROGRAM OBJECTIVES MET

There are two general descriptions of objectives met in this report, the first is a summary written by each of the program directors and the second is the observations by the supervisors of the students at their workplace. Overall, the CEI workplace literacy and basic skills programs have a 70% completion rate overall, while the national average is about 30% for literacy programs; the close relationship between trainees and their counselors and the specific intervention which counselors often facilitate are one important factor in the number of adults which are retained in a given program.

A. Program Co-ordinators Reports

The general social, economic, and program goals were listed earlier. The specific quantifiable program accomplishments were as follows:

1. Adult Basic Education

Sixty-seven percent of the trainees who began the program in February 1989 completed the 39-week, 156 hour program in reading, writing and math. Of the remaining persons, 71% completed at least one 13 week module. In addition, 3 people joined classes in progress. Of these, 100% remained through the end of the program. On the average, ABE students entered reading below the 4th grade level. In addition to the study, organization, dictionary, and test-taking skills acquired during the program, the trainees demonstrated an increase in comprehension as measured by the CEI Reading Comprehension Assessment Instrument. Trainees increased the volume and quality of writing with more appropriate paragraph structure, as well as better grammar and spelling.
The three AbE modules provided immediate on-the-job benefits to participants who were better able to comprehend and retain written material as well as to measure, compute and perform other mathematical operations. Sponsoring employers observed that individuals who completed the ABE modules developed better work habits, became more motivated for job advancement and planned to continue their education.

2. English as a Second Language

Limited English speaking trainees advanced about 25% after each of the 3 modules, as measured by gain on the CEI Assessment Instrument. In addition, trainees were able to perform a variety of vocationally related tasks: for example, to demonstrate understanding of a sequence of verbal instructions; to describe orally a patient's condition using appropriate English vocabulary; to comprehend a patient's chart and be able to fill in appropriate information; and respond to emergency safety procedures for the well-being of the residents in the nursing home.

3. Adult Diploma Program

ADP students have made steady progress in both academic and job skills performance. To date one student has received a promotion since enrolling in the program. Many students intend to enroll in some form of higher education next fall: five are interested in nursing school (two have already applied), four are interested in community college (one has already been accepted, two are interested in a trade/technical school and two have not yet decided. In general, the trainees who undertook the ADP read at the 7th to 9th grade level upon registration and by graduation, the average reading level increased by three grades.

4. Train the Trainer Seminar

The specific quantitative results from analyzing responses to questionnaires are given in the external evaluator's report since the evaluator was responsible for the data analyses. In summary, at registration, the 95 participants responding indicated areas in which they already understand and use the information, skills and concepts. The greatest area of need was in creating effective lesson plans. When participants were asked to rate the entire three day sessions on a scale from one to five (five being best), all 16
topics were rated with means over four. A single question asking how useful the entire seminar was, resulted in a mean score of 4.19 out of a possible five. Ninety-one percent of the participants wrote that they would recommend the seminar to their colleagues.

B. Overall Impact on Participants As Observed by Supervisors

The supervisors of participants were asked to complete a questionnaire on each participant indicating where they observed improvement as a result of the Workplace Literacy Partnership program. The items on the questionnaire represented a wide range of areas including communication, self confidence, reading and writing skills, comprehension of directions given (and willingness to ask questions if directions are not understood), risk taking, and relations with co-workers.

The Adult Basic Education Program (ABE)

The most often cited area of improvement for these students was greater self-confidence. The next area most noted by supervisors was in communications where they saw both an improvement in willingness to communicate and an increased ability to communicate in stressful situations. A few also observed improved reading and writing skills and greater participation in meetings. One supervisor saw improved risk taking and one saw an increased understanding of directions given.

English as a Second Language (ESL)

There were two areas where supervisors noted improvement for large numbers of participants: communication and self confidence. The next most noted areas of improvement were in reading and writing skills, speaking up when instructions were not understood, improved relations with co-workers and willingness to perform duties. Supervisors also saw improvement in understanding appropriated behavior in the workplace and a willingness to ask questions. One supervisor noted an increased understanding of staff and patient needs.

Adult Diploma Program (ADP)

For the participants in this program there were several areas that supervisors indicated improvement. These included stronger job performance, greater efficiency in the workplace due
to higher level reading and writing skills, improved interactions with patients and patients' families, more productive communication with co-workers and staff, enhanced problem solving abilities when dealing with co-workers, improved attendance at work, greater retention of employees and workers becoming more reliable and independent.

DISSEMINATION ACTIVITIES

Articles
An article on the project appeared in the Business Council for Effective Literacy newsletter (No. 19, April, 1989). Also the project is discussed as an example of an adult literacy program in an article by CEI Director, Dr. Lloyd David, in the Alumni Bulletin of the Harvard Graduate School of Education, Volume XXXIII, Number 3, Summer, 1989.

The Brochure
CEI, together with our partners, developed a brochure for distribution to each nursing home in the state of Massachusetts. The purpose of the brochure was to inform other nursing homes about the project and provide pertinent information with hopes of enabling them to use the information to upgrade the skills of their direct-care staff, and help prepare for the new licensing regulations. This brochure was distributed to the members of the Massachusetts Federation of Nursing Homes with membership over 550.

Changes in Personnel Over the Course of the Grant
Ron Schacter, the original Program Director, was replaced by Maxine Keats, the ABE coordinator. Ms. Keats continued in her role as ABE coordinator.

Final Reports From Each Of The Three Programs
Following are the reports submitted by the directors of each of the programs which summarize, in their words, the program activities and outcomes. In addition, a detailed description of the: assessments, curriculum, class composition and student progress is reported for one of the programs, the Adult Basic Education program in the Appendix.
CEI conducted five ESL programs in four nursing homes. Each course within a program focused on helping students develop the English skills necessary to perform their jobs efficiently and with respect for the well-being of the residents in their care. Emphasis, too, was placed on transferring the skills developed in the workplace to everyday life. For the most part, participants in the program worked in Dietary and Housekeeping departments and as Nurses' Aides.

Most of the classes within the ESL program reflected varying language competencies and work duties. Therefore, in addition to published texts, instructors developed supplementary materials to meet the language and work needs of each participant. Instructors and site coordinators also counseled participants.

The following is a summary of each program by site:

**Vernon Hall Nursing Home**

**ESL 520**

Four employee/participants completed the program. Participants entered the program with a Low Literacy - Beginning level of competencies in English. At the completion of the program, all four participants had progressed to Beginning - Advanced level in all competency areas (auditory discrimination, auditory vocabulary, grammar, sight words, reading and writing). (six participants enrolled in the program: two left the company).

**ESL 590**

Eight employee/participants completed the program. The Intermediate level course added a communication competency to those already described above. Participants progressed from a Beginning level - Intermediate/Advanced in the course of the program.

**Armenian Nursing Home**

**ESL 530**

Five employee/participants completed the program. All participants made noticeable progress from Low Beginning - Low Advanced levels. (seven participants enrolled: two withdrew for personal reasons).
Greenery Rehab Center

ESL 540

Five employee/participants completed the program. An additional five participants were transferred to an ABE program at the same site. Participants in the multi-level program advanced from, in some cases, functionally illiterate to beginning literacy; others from a Literacy - Intermediate level. (13 participants were enrolled: five were transferred to other classes, three withdrew for personal reasons).

Westridge Center

ESL 550

Four employee/participants completed the program. All of the participants progressed from either Beginning - Intermediate or Intermediate - Advanced levels. (11 participants were enrolled: four (of the 11) were transferred to a bilingual class, three withdrew because of work-related conflicts).
The Adult Basic Education Courses were held at 3 sites. There were a total of 23 students in the program. Teachers met on a regular basis and put together syllabi for their classes. Samples of their syllabi are attached to this report. The skills that teachers tried to develop are also attached to this report. Attention to particular skills varied according to site needs and the level of students at each site. The focus was on developing vocabulary, literal and inferential comprehension, as well as on writing, usually at the sentence/paragraph level. Math skills were also incorporated into lessons with particular emphasis on whole numbers, fractions, and metrics. Every weekly meeting had a particular focus, see attached schedule. At each meeting attendance was discussed, as well as site specific problems. For example, several sites had difficulty providing meeting space for classes since the sites were undergoing reconstruction and renovation. To further complicate the picture, several sites had problems with releasing students for classes since these students were also participating in other training programs concurrently. These obstacles created several problems for the instructor which the coordinator had to step in to resolve. Since the ABE coordinator began to function as grant manager as well, a grant project - The Train-the-Trainer Seminar became part of the ABF program. ABE instructors wanted to be involved with the planning and implementation of the seminar. They developed the curriculum, served as a sounding board for ideas, helped develop the format, and prepared presentations and materials which were included in the three-day seminar. In addition, ABE instructors helped develop the evaluation strategies which helped demonstrate the seminar's success. Several instructors commented that while the seminar was exciting and clearly necessary, it was nevertheless, distracting and it did dilute our efforts in creating a strong ARE curriculum. Our focus for curriculum tended to be on the general reading level. We tried to create job specific curriculum using nursing home materials, and these were successful mostly with vocabulary lessons. Instructors noted that students resisted when job specific materials were tried. Their attitude seemed to be, "Don't try to tell me how to do my job." They tended to view most attempts to incorporate job-related material as a threat, and therefore, negatively.
Assessment:

Many problems centered around assessment. Initial assessment was spotty and incomplete at some sites. This was a result of a personnel problem. There were two issues. Since two key people were part-time and had limited time to spend at the sites, several participants missed some of the initial testing. Teachers were unable to do the assessments in class because of the limited time allowed by the sites. In addition to lack of time, there was a problem regarding the testing instruments. This was especially true with the math assessment. Some people took the ABE assessment instrument while others took the ADP assessment instrument.

At the end of the program some of the same issues occurred. All students read the same passages from CEI's Reading Assessment Instrument. However, some students were tested for math skills with the ADP math test while others were retested with the ABE math test. The reason was that we were trying to see how many students we could recommend to go on to the ADP program. For this reason instructors decided to use the ADP exam. However, I was concerned about having a test/retest condition in order to satisfy evaluation requirements for the grant, so since Westridge was not included in the proposal for the following year, and thus would not have an ADP program, it was decided to use the ABE instrument, and supplement it with some additional material which the instructor covered in class.

The problem with this was that we do not have strong test/retest data for the Adult Basic Education program. For future ABE programs I strongly recommend using the ABE math test in the beginning and near the end of the program. The final exam could then be the ADP math assessment, depending on the programs of the students, the material covered in class, and the amount of time devoted to math. It seems foolish to use the ADP math assessment if the material covered does not relate to the material on the assessment instrument.

To assess reading comprehension, I strongly recommend using a standardized reading test such as the Stanford Diagnostic Reading Test (SDRT), brown level. While students on the ABE level will invariably score low, if at the end of the class they are given the same test, some measurable progress can be determined. My research of the SDRT indicates that the reliability of using alternate forms for testing and retesting is not as high as it should be, hence I recommend that the same form be given.

To assess decoding skills, I recommend using the WRAT since it is easy to administer, and gives a good diagnostician a lot of information regarding students' ability to decode. It is easy to score, and it provides another "number" to show quantifiable results. This is a useful test to show qualitative and quantifiable improvement.
Adult Diploma Program
Lemuel Shattuck Hospital
Final Report
December, 1989 to March, 1990
Amy McMahon, Diploma Co-ordinator

Thirteen of twenty-one students (62%) completed their course work, graduated and were awarded diplomas.

The students were a combined class from three sites: Armenian Nursing Home in Jamaica Plain, MA, the Greenery Rehabilitation and Skilled Nursing Center in Brighton, MA and the Lemuel Shattuck Hospital in Jamaica Plain, MA.

Approximately 80% of the class was comprised of nursing assistants. Students ranged in age from 28 to 61 years of age, with an average age of 32 years old. Also, 75% of the class were women. Of those students enrolled under the Workplace Literacy Partnership, 90% were immigrants from Titi, Jamaica and Barbados.

Students in the Adult Diploma Program have made steady progress in both academic and job skills performances. To date, one student received a promotion since enrolling in the program. Many students intend on enrolling in some form of higher education next fall: five are interested in nursing school (two have already applied), three are interested in community college, two are interested in a trade/technical school and two are undecided. One student has already been accepted to a community college for next fall.
Appendices

A. Example of detailed reports filed by program directors

B. External Evaluator Report
Introduction

This final report will outline the Adult Basic Education Course held at the Westridge Healthcare Center. The report will describe testing procedures, curriculum, class composition, and student progress.

Assessment Procedures

Several measures were used to evaluate student progress.

Initial Assessment included:

Reading: Comprehension: Graded Passages - 3rd grade
4th grade

Mathematics: CEI's ABE math instrument
Addition, Subtraction, Multiplication, Division, Fractions, Decimals, and Geometry

Writing: An initial sample was taken to use for comparison at various points in the program.

Final Evaluation included:

Reading: Comprehension: Graded Passages - 3-13 grade level

Math: CEI's ABE math instrument and/or CEI's ADP math instrument

Writing: A final sample was taken to compare with earlier samples

Throughout the modules instructor constructed tests were used to monitor progress and identify potential problems. Since standardized tests are not appropriate at this level we use...
test/retest strategies utilizing our own instruments for quantitative data.

Writing samples done throughout our programs provide qualitative data.

ABE Designated Writing Levels:

**Poor:** writes words and attempts to write at sentence level

**Fair:** writes sentences with some attention to word order, grammar, and punctuation; may attempt to write at paragraph level

**Good:** writes paragraphs showing some command of grammar and word order; attempts to use more sophisticated vocabulary

**Advanced:** writes well-developed paragraphs with strong command of grammar and uses sophisticated vocabulary

**DESIGN OF PROGRAM**
Three modules meeting for 13 weeks for a total of 39 weeks.

**DESCRIPTION OF CLASS**
ABE Monday/Wednesday 2:00-4:00 pm
Instructor: Catherine M. Smith

**Student Texts:**
- **Module I**
  - Reading Power
  - Essential Mathematics for Life
- **Module II**
  - America's Story - Book I
  - Essential Mathematics for Life
  - Great American Stories - Book I
- **Module III**
  - America's Story - Book II
  - Contemporary Mathematics - Book I
  - Great American Stories - Book II

**CLASS COMPOSITION**
Five students were originally enrolled for this module, one joined class in progress but withdrew for reasons explained below.

1. Carolyn
2. Antonio
3. Frances (Sue)
4. Millicent (joined 4/13 withdrew 5/17 - lack of time)
5. Jeanne
6. Deann
This is a multi-level class, which requires additional planning and supplementary materials. The range was from about second grade through high school.

Progress was shown by all students, including the student who withdrew after the first module. This can be observed by examining the attached individual progress reports.

It is important to note that Millie was a supervisor, and working at a very high level. She is clearly able to work at least on a junior college level. The problem was that the rest of the class was functioning well beneath her level.
Deann

Initial Assessment:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Reading:** | 3rd grade passage 60%  
4th grade passage - unable to do |
| **Math:** | ABE Math Assessment: 14/71 - 20% |
| **Writing:** | content: Poor  
form: Poor  
volume: 1 sentence |

Final Evaluation:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
</table>
| **Reading:** | 80% Primer  
50% 1st grade  
25% 3rd grade |
| **Writing:** | Content: Poor/Low Fair  
Form: Poor |
| **Math:** | ABE Math Assessment: 25/71 - 35%  
Improved skills working with whole numbers. |

Attendance: 64 out of 78 sessions  
Continuing Education Units: 12.8

Narrative: Deann had difficulty following class discussions as well as following directions as a result of her severe learning problems. She feared exposing her weaknesses, so the instructor only requested participation when she felt certain that Deann could be successful. Deann has a low conceptual level, and she is very sensitive about her deficiencies. She was thrilled that, following a class discussion about Alaska, she was able to tell her family many facts which were then corroborated by a National Geographic Special. The ABE class clearly had a powerful impact on her self-perception. During the course of the literacy program, Deann was promoted from PCA I to PCA II. While in-house staff training was a factor, according to Bernadette Oinenen, the Staff Development Coordinator, CEI's program made a considerable contribution because it helped develop Deann's confidence. Given her limitations Deann showed slight improvement in math and writing. However, the course clearly improved her self-image and increased her confidence. Deann's reading skills did not improve appreciably; however, her math skills improved 75% according to the CEI ABE math assessment instrument, and her writing volume
Instructor: Deann has made a real effort to improve her skills but continues to need support at the ABE level. Her writing shows improvement in productivity and her willingness to write shows improvement. She has become more responsive and is willing to risk error because she feels comfortable in the group. She is particularly eager to complete the history book on her own. In math she has difficulty following exercises having more than one-step, but she works at rote skills. Deann has problems with memorizing. Deann began to study before exams in subjects she liked and eventually began to volunteer. She became quite motivated. Her self-confidence began to develop, but skills remain at very low level. She is unable to work independently and finds group work difficult, but makes attempts to follow.

Student: Except for the direct quote, the following comments were extrapolated from the checklist Deann completed:
I have improved in history and math. I have more confidence since I've taken this class. My math and writing have improved. Reading is still very hard. "I like my class they are nice to work with and the teacher."

Supervisor: Comments unavailable
Deann was promoted from a PCA to a PCA II
ADULT DIPLOMA PROGRAM

WRITING ASSESSMENT

Name: Dean
Company: Western Electric
Date: 1/27/89

CHOOSE ONE (1) of the following topics and develop your ideas about that topic, using complete sentences and paragraph structure:

1. Tell why you want to continue your education.
2. Identify and describe the country you come from.
3. Identify a movie or TV show you have seen and tell why you did or did not like it.

I want to learn more about plumbing.
Dear Cape,

I am writing to let you know that my husband has been feeling ill lately.

He's been spending a lot of time watching TV, which has been affecting his appetite.

My husband's been spending time on the couch, watching TV all day, and hasn't been eating much. He's been playing games with his sister.

My older daughter is graduating and spending time with her friends. This week, she's been coming home to visit, except on weekends.

He's had his last exam last week and is looking forward to the weekend.

I hope you have a good time this weekend.

Sincerely,
[Your Name]
Workplace Literacy Partnership for Nursing Home Employees

External Evaluation Report

Marcus G. Lieberman, Ph.D.

1990
Overview

This report describes five major areas of evaluation activities during the 1989-1990 academic year of the project. The five areas are the following:

(1) orientation
(2) observations
(3) consultations on measurement and evaluation
(4) quantitative results and
(5) recommendations

The evaluator would like to express great appreciation to the project staff and the director of CEI for their time, patience and cooperation over the course of the past year. He recognizes the concerns the staff have, both for the students and for the need for an effective evaluation and the compromises that are necessary to achieve optimal results in both areas.

1. Orientation

In the fall of 1989, the evaluator interviewed staff from each of the three programs, the Adult Diploma Program (ADP), the Adult Basic Education Program (ABE) and the English as a Second Language Program (ESL). He also interviewed the Project Director and the Director of the Continuing Education Institute (CEI). He reviewed the project proposal for goals and educational methodology. Each of the programs provided curriculum materials and the evaluation measures presently on hand. They also provided schedules for their courses, a description of the student population and copies of their credentials.

CEI has been conducting educational programs in the workplace for a number of years and has continued to revise its materials and tests to meet the needs of the employees it serves. There is a great deal of emphasis on diagnostic measures to inform the instructors of the strengths and weaknesses of participants in reading, writing, grammar and mathematics. The teaching is intended to respond to each student's needs. End of unit tests are criterion-referenced to match the unit's objectives. The instructors have created, with consultation from each program director, worksheets, activities and tests for each course taught. The experienced staff were able to describe the
perspective of potential adult students who are often very self-conscious about their English and described the various ways they have found that provide a minimum-risk situation where the students can converse in English without fear of ridicule. The observations conducted by the evaluator are described in the next section.

2. Observation of ESL and ABE Classes

During November and December, 1989, the evaluator, Dr. Marcus G. Lieberman, visited two ESL and one ABE classes. All three classes were held in the nursing homes where the students worked.

In Vernon Hall, in Cambridge and at the Greenery, in Boston, the classes were held in a room apart from the patient area. In Armenian, the class was held in one of the patient’s rooms while she was at an activity. Each of the classes took two hours.

All three instructors shared their lesson plans for the day with the evaluator and before the class began, described the range of level of the students, both in achievement and in motivation.

During the classes, all three instructors showed a high degree of warmth, enthusiasm, sensitivity and competence. The instruction ranged from concepts in language and mathematics to actual applications of what they were learning to their nursing home duties and responsibilities. In one ESL class, the instructor had brought articles of loose clothing so that the students could describe in English what they were doing as they put on or took off the clothing from themselves or each other. The aides often assist the nursing home patients in dressing or undressing and they were told that if they explained to the patients what they were about to do, anxiety and confusion would be reduced.

The instructors used workbooks, papers prepared to practice the concepts presented, role play and conversation to reinforce knowledge and skills presented.

3. Consultation on Measurement and Evaluation

Achievement Tests

A large proportion of the evaluator’s time was spent discussing the importance of evaluation instruments and data
apart from the diagnostic measures employed by the instructors. Project directors were extremely reluctant to administer a pre-test based on the objectives for a course or unit. While participants were eager to learn English, they were very shy about expressing themselves publicly. The program directors felt that asking the students to take a pre-test would set a tone early in a very sensitive course that would likely result in students dropping out of the course and not returning for a second and subsequent classes.

Some time ago, the Director of CEI supported an effort to review the existing adult basic skills measures for validity to the CEI instructional program and sufficient levels of relevant reliability coefficients. None of the measures reviewed were judged satisfactory in both areas by the CEI staff.

The Director recognizes the need for some standardized yardstick to demonstrate the amount and nature of improvement of CEI's clients. The results could be used for both evaluation and marketing purposes. However, the staff feel that each individual comes with different levels of skills in a variety of areas and the general nature of the existing standardized measures does not permit the investigation of specific strengths and weaknesses addressed by the instruction.

The staff are reluctant to use standardized tests designed for elementary age school children for the adults enrolled in their programs because the examples and applications are often inappropriate. In addition, the norms for these tests, based on children's responses to the items would also be inappropriate.

The ESL and ABE staff have created measures and begun research to determine a correspondence between grade level and test score so they can measure growth due to the program. The ADP staff use midterms and final exams throughout their course to determine whether or not students pass each module, but do not pre-test the students to assess prior knowledge.

Each instructor keeps detailed records on their students and logs each objective met or skill acquired. Therefore, there are specific reports on each student as to growth accomplished, but it is impossible to summarize the results into a simple descriptive statement.

Supervisory Observations

In addition to student-administered achievement tests, supervisors are asked to complete a short survey to document changes or areas of improvement they have noticed in students. The first draft of this measure included several areas that
supervisors were not likely to observe, such as specific English writing or oral skills. A revised version includes many behaviors more likely to be observed by supervisors. The supervisor indicates whether or not he or she has noticed improvement in each of several areas.

4. Quantitative Results

Since many of the instruments were developed while the courses were being taught, quantitative results are sketchy this first year.

In the ESL program, assessments were made in the areas of Grammar and Reading for one of the groups late in the year. There were nine levels in each area: Literacy 1, Literacy 2, Low Beginning, Beginning, High Beginning, Low Intermediate, Intermediate, High Intermediate and Advanced. Four of seventeen students (24%) remained at the same level in Grammar and thirteen of seventeen (76%) increased their level. In Reading, four of twenty-one students tested (19%) remained at their original level, sixteen of twenty-one (76%) increased their level and one (5%) decreased in level.

In addition to these achievement scores, perceptions of supervisors as to improvement by students in various areas were also recorded. The accompanying table shows the numbers of students for whom supervisors completed evaluation sheets describing their perceptions of improvement (or the lack thereof) in several areas.

The number of students evaluated is given at the top of each column and numbers in the columns show the number of students for whom supervisors saw improvement.
### English as a Second Language Workplace Education

#### Summary of Supervisors' Evaluations

**Modules I and II**

**Percentages of Students Where Improvement Was Observed**

#### Module I:

<table>
<thead>
<tr>
<th>Site:</th>
<th>Armenian</th>
<th>Greenery</th>
<th>vernon Hall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mid</td>
<td>Final</td>
<td>Final</td>
</tr>
<tr>
<td>Numbers of Students</td>
<td>(5)</td>
<td>(3)</td>
<td>(7)</td>
</tr>
<tr>
<td>Increased Willingness To Communicate At Work</td>
<td>80</td>
<td>100</td>
<td>28</td>
</tr>
<tr>
<td>Ability To Communicate In Problematic or Stressful Situations</td>
<td>40</td>
<td>67</td>
<td>43</td>
</tr>
<tr>
<td>Improved Reading and Writing Skills</td>
<td>40</td>
<td>33</td>
<td>14</td>
</tr>
<tr>
<td>Level of Self Confidence</td>
<td>40</td>
<td>33</td>
<td>57</td>
</tr>
<tr>
<td>Program Meeting Initial Expectations (yes)</td>
<td>80</td>
<td>67</td>
<td>57</td>
</tr>
</tbody>
</table>

#### Module II:

<table>
<thead>
<tr>
<th>Numbers of Students</th>
<th>(5)</th>
<th>(4)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Willingness To Communicate At Work</td>
<td>100</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Ability To Communicate In Problematic or Stressful Situations</td>
<td>40</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Improved Reading and Writing Skills</td>
<td>60</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>Level of Self Confidence</td>
<td>100</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Program Meeting Initial Expectations (yes)</td>
<td>20</td>
<td>0</td>
<td>86</td>
</tr>
</tbody>
</table>
Summary of Quantitative Results

Tables 1 and 2 present the results of the administration of tests to students in January and May, 1989 in the areas of Mathematics and Reading.

In the area of mathematics, two students took a lower level test in January, so their results cannot be compared with the test they took in May. The other 12 students took the same level test at both times. In all four areas measured by the tests, (1) Number Theory/Graphs and Charts (2) Computation/Fractions/Decimals (3) Percent and Formulae and (4) Metrics/Geometry the increase from January to May was statistically significant (p<.01).

In the area of reading, there were three sets or levels of material for the students to read and answer multiple choice questions which spanned the levels of the Bloom Taxonomy. The three levels correspond to 4th grade, 7th grade, and 9 to 11th grade. At each level students were given two passages, one from a non-fiction piece and the other, a selection from a real work of literature.

In January, students took either the Level I or Level II passages, by May, all students were administered the Level III passages with the results shown in Table 2. Eight of 14 students received a score of 80 or higher on the Facts passage and eight of 14 received a score of 80 or higher on the Literature passage.

In Table 1, the data for two students who took different tests are presented first, though no real comparison is possible. Then the results for the other twelve students are presented. The numbers in parentheses under the test headings are the numbers of items in each section.
Table 1
Mathematics Results for Individual Students
January - May, 1989

<table>
<thead>
<tr>
<th>No. of Items</th>
<th>Add</th>
<th>Sub</th>
<th>Mult</th>
<th>Div</th>
<th>Frac</th>
<th>Dec</th>
<th>Geom</th>
<th>Theory</th>
<th>Grph/Cht</th>
<th>Fractions</th>
<th>Pct</th>
<th>Decimals</th>
<th>Form</th>
<th>Metrics</th>
<th>Geometry</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>10.5</td>
<td>10.5</td>
<td>8.5</td>
<td>9</td>
<td>3.5</td>
<td>5.5</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>5.5</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Num Thry Comp/Frac Percent Metrics</th>
<th>Grph/Cht</th>
<th>Dec</th>
<th>Formulae Geom</th>
<th>(13)</th>
<th>(14)</th>
<th>(8)</th>
<th>(16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.33</td>
<td>9.00</td>
<td>1.91</td>
<td>5.00</td>
<td>10.67</td>
<td>12.00</td>
<td>6.55</td>
</tr>
</tbody>
</table>

* Significant Difference from January score. (p<.01)

Table 2
Reading Results for Adult Diploma Program Students
January - May, 1989

N = 14

(Mean Percent Score)

<table>
<thead>
<tr>
<th>January</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I Facts Lit.</td>
<td>Level III Facts Lit.</td>
</tr>
<tr>
<td>Level II Facts Lit.</td>
<td></td>
</tr>
<tr>
<td>Mean 100 100 77.9 81.4</td>
<td>79.3 76.4</td>
</tr>
</tbody>
</table>

39 40
Summary of Responses to Questionnaires
By Participants at the
Continuing Education Institute
Nursing Assistants Instructor Course
August 22 - 24, 1989

Participants were asked to complete a questionnaire to assist the program staff in placing the most emphasis on the areas most needed. The respondents were to place a check under one of the two categories 'Understand/Use' or 'Need To Learn.' The results of the 95 registrants are summarized in Table 1.

Table 1
Responses to Needs Assessment
(Percent agreeing)

<table>
<thead>
<tr>
<th></th>
<th>Understand/Use</th>
<th>Need To Learn</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adult Learning Principles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building on adult experience</td>
<td>42.9</td>
<td>57.1</td>
</tr>
<tr>
<td>Barriers to adult learning</td>
<td>27.8</td>
<td>72.2</td>
</tr>
<tr>
<td>Special problems in nurses' aides population</td>
<td>38.9</td>
<td>61.1</td>
</tr>
<tr>
<td><strong>Options For Teaching Methods</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participative lecture</td>
<td>41.9</td>
<td>58.1</td>
</tr>
<tr>
<td>Demonstration and practice</td>
<td>58.3</td>
<td>41.7</td>
</tr>
<tr>
<td>Role Play</td>
<td>48.3</td>
<td>51.7</td>
</tr>
<tr>
<td>Discussion</td>
<td>70.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Small groups</td>
<td>68.6</td>
<td>31.4</td>
</tr>
<tr>
<td>Audio-visual aids</td>
<td>51.7</td>
<td>48.3</td>
</tr>
<tr>
<td><strong>Role of Evaluation in Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying training needs</td>
<td>29.3</td>
<td>70.7</td>
</tr>
<tr>
<td>Recognizing accomplishments</td>
<td>55.8</td>
<td>44.2</td>
</tr>
<tr>
<td>Identifying areas for remediation</td>
<td>21.3</td>
<td>78.7</td>
</tr>
<tr>
<td>Use of self-, peer- and instructor-driven evaluation</td>
<td>27.2</td>
<td>72.8</td>
</tr>
<tr>
<td><strong>Effective Lesson Plans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying outcome goals</td>
<td>47.1</td>
<td>52.9</td>
</tr>
<tr>
<td>Breaking down big tasks into small skills</td>
<td>25.6</td>
<td>74.4</td>
</tr>
<tr>
<td>Selecting learning activities to teach skills</td>
<td>17.0</td>
<td>83.0</td>
</tr>
<tr>
<td>Sequencing learning activities</td>
<td>14.4</td>
<td>85.6</td>
</tr>
<tr>
<td>Integrating evaluation into the lesson plan</td>
<td>13.3</td>
<td>86.7</td>
</tr>
</tbody>
</table>
After the first day of the course, 97 participants responded to an evaluation form which allowed them to (1) rate material as to whether or not it was useful to meet the needs of trainees and (2) rate the presentation as to whether or not it was focused and easy to follow. Table 2 shows the percentage agreeing that the material was useful and that the presentation on the material was focused.

Table 2

| Percentage Agreeing That Materials and Presentations Were Useful and Focused |
|---------------------------------------------------------------|------------------|
| Introduction and overview of seminar/Characteristics of adult | Material | Presentation |
| learners                                                      | Useful | Focused |
| How to setup a 75 hour nursing assistant training course     | 93.6   | 87.9    |
| How to identify and select outcome goals                     | 83.1   | 66.7    |
| Assessing needs and evaluating outcomes                      | 93.5   | 92.8    |
| Focus Group                                                  | 83.1   | 77.0    |
Table 3 shows the proportion of those respondents who rated each of the materials areas as USEFUL who also rated the PRESENTATION focused and easy to follow.

Table 3

Percentage of Those Who Rated the Materials as Useful Who Also Rated the Presentation as Focused

<table>
<thead>
<tr>
<th>Topic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and overview of seminar/</td>
<td>83.5</td>
</tr>
<tr>
<td>Characteristics of Adult Learners</td>
<td></td>
</tr>
<tr>
<td>How to set up a 75 hour nursing assistant</td>
<td>90.6</td>
</tr>
<tr>
<td>training course</td>
<td></td>
</tr>
<tr>
<td>How to identify and select outcome goals</td>
<td>75.4</td>
</tr>
<tr>
<td>Assessing needs and evaluating outcomes</td>
<td>95.1</td>
</tr>
<tr>
<td>Focus Group</td>
<td>94.2</td>
</tr>
</tbody>
</table>

After the second day of the course, respondents completed an evaluation form similar to day 1, but on new topics. Tables 4 and 5 show the results of these evaluations.
### Table 4

Percentage Agreeing That Materials and Presentations Were Useful and Focused

<table>
<thead>
<tr>
<th>Material</th>
<th>100.0</th>
<th>96.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodating cultural differences</td>
<td>100.0</td>
<td>96.5</td>
</tr>
<tr>
<td>Building on adult experience</td>
<td>100.0</td>
<td>96.4</td>
</tr>
<tr>
<td>Simplifying materials</td>
<td>96.4</td>
<td>93.9</td>
</tr>
<tr>
<td>Developing effective lessons</td>
<td>69.0</td>
<td>54.3</td>
</tr>
<tr>
<td>Focus group</td>
<td>81.3</td>
<td>79.7</td>
</tr>
</tbody>
</table>

### Table 5

Percentage of Those Who Rated the Materials as Useful Who Also Rated the Presentation as Focused

<table>
<thead>
<tr>
<th>Material</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodating cultural differences</td>
<td>96.5</td>
</tr>
<tr>
<td>Building on adult experience</td>
<td>96.4</td>
</tr>
<tr>
<td>Simplifying materials</td>
<td>96.2</td>
</tr>
<tr>
<td>Developing effective lessons</td>
<td>80.0</td>
</tr>
<tr>
<td>Focus Group</td>
<td>96.6</td>
</tr>
</tbody>
</table>
After the third day of the course, respondents completed an evaluation form similar to days 1 and 2, but on new topics. Tables 6 and 7 show the results of these evaluations.

Table 6

Percentage Agreeing That Materials and Presentations Were Useful and Focused

<table>
<thead>
<tr>
<th>Material</th>
<th>Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful</td>
<td>Focused</td>
</tr>
<tr>
<td>Introduction</td>
<td>84.9</td>
</tr>
<tr>
<td>Barriers to adult learning</td>
<td>97.9</td>
</tr>
<tr>
<td>Accommodating learning differences</td>
<td>99.0</td>
</tr>
</tbody>
</table>

Table 7

Percentage of Those Who Rated the Materials as Useful Who Also Rated the Presentation as Focused

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>97.4</td>
</tr>
<tr>
<td>Barriers to adult learning</td>
<td>100.0</td>
</tr>
<tr>
<td>Accommodating learning differences</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Finally, on the third day, participants were asked to complete an evaluation form for the entire workshop. Ratings ranged from one (not at all comfortable with the material) to five (extremely comfortable with the material). Table 8 gives the mean ratings for each item.
Table 8
Mean Ratings For Items
On the Conference Evaluation Form
(5 Point Scale)

Adult Learning Principles

Building on adult experience 4.65
Barriers to adult learning 4.54
Special problems in the nursing asst. pop. 4.38

Options For Teaching Methods

Participative lecture 4.55
Demonstration and practice 4.53
Role play 4.28
Discussion 4.56
Small groups 4.53
Audio-visual aids 4.55

Role of Evaluation in Learning

Identifying training needs 4.14
Recognizing accomplishments 4.44
Identifying areas for remediation 4.05
Use of self-, peer-, and inst. dir. evaluation 4.24

Effective Lesson Plans

Identifying outcome goals 4.12
Breaking down big tasks into small skills 4.12
Selecting learning activities to teach skills 4.18
Sequencing learning activities 4.17
Integrating evaluation into lesson 4.18

At the end of the conference evaluation form, participants responded to two final questions. On a scale from 1 (not at all useful) to 5 (very useful), how useful was the entire three day seminar? The mean rating for all participants was 4.19.

The second question asked whether or not participants would recommend the seminar to their colleagues. Ninety-one percent of the respondents said they would.
Summary

On the application form, registrants reported their greatest needs in the areas of evaluation and lesson plans. Three areas where over 80% of the respondents indicated a need to learn were selecting and sequencing learning activities, and integrating evaluation into the lesson plan.

During the first day, participants indicated that three of five areas were very useful, characteristics of adult learners, how to set up a training course, and assessing needs and evaluating outcomes. The most focused presentation was that on assessing needs and evaluating outcomes. The least focused presentation was on identifying and selecting outcome goals.

During the second day, every participant rated accommodating cultural differences and building on adult experience as useful. Developing effective lessons was judged the least useful. Only developing effective lessons and the focus group were judged less focused.

All the topics on the third day were judged useful and the presentations focused.

When participants were asked to rate the entire three days on a scale from one to five (five being best), all topics were rated with means over four. A single question asking how useful the entire seminar was, resulted in a mean of 4.19 out of a possible 5.00. Ninety-one percent of the participants said they would recommend the seminar to their colleagues.

46

47
5. Recommendations

One major area lacking in the evaluation of these programs is a control or comparison group. In order to attribute change in reading, writing and mathematics skills to the program, it is necessary to show that there is little or no change in these skills without the program. Recognizing that asking people to complete lengthy tests without providing feedback or intervention borders on unethical practice, some form of control may still be possible to implement. Often, there are several groups which meet during the year. Perhaps one group may be pre and post tested several months later (equal to the length of the program) and then later offered the course.

The second major area requiring attention is instrument development, norming, validation and reliability estimation. Over the course of the year, the evaluator met with personnel from each of the programs to discuss the various possibilities for measurement and evaluation. Program directors were very concerned that if potential students were given pretests, they were likely to find the experience intimidating and not come back for the courses. However, they realized that pretests are necessary to show change. Some suggestions that arose out of the discussions included giving pretests early in the course, but after rapport had been established and the purpose of the test presented, most likely as a place to start and not to highlight embarrassing weaknesses in English or mathematics. By the end of the year, the staff in the ESL and ABE programs were working to create grade level material for students to read and to answer multiple choice comprehension test items on the reading. The ADP staff continues to refine their instruments which reflect the goals of their courses.