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## ABSTRACT

The Massachusetts Career Development Institute (MCDI) refined and expanded the existing program of Workplace Education at the Geriatric Authority of Holyoke (GAH), Massachusetts. The 18-month program provided educational and support services on site to 60 employees at the GAH. Classes were held in English as a second language, adult basic education, and high school equivalency test preparation. MCDI staff also provided ongoing educational and personal counseling, motivational workshops, and pre- and posttesting. The program included the following interrelated components: planning; outreach and recruitment; orientation and pretesting with a program-developed assessment; participant selection; counseling; motivational workshops; individualized upgrading programs; posttesting; independent program evaluation; and the development and field testing of a workplace-specific, competency-based curriculum. Extension of the program for an additional 10 months allowed for more services to the students. An independent evaluation concluded that the program had been successful in the following areas: an average 2.4 grade level increase in participants' skills, a 100 percent success rate for participants who took the General Educational Development test, improved employee performance, improved employee self-esteem, and the elimination of personnel turnover during the project period. (Attached to the final report are the following: curriculum guide on transporting residents, student interview results, news release, and third-party evaluation.) (Author/KC)

**UNITED STATES DEPARTMENT OF EDUCATION  
OFFICE OF VOCATIONAL AND ADULT EDUCATION  
NATIONAL WORKPLACE LITERACY PROGRAM**

**MASSACHUSETTS CAREER DEVELOPMENT INSTITUTE**

**IN PARTNERSHIP WITH**

**THE GERIATRIC AUTHORITY OF HOLYOKE, MASSACHUSETTS**

**1993**

**FINAL REPORT**

**PROJECTS AWARD# V198A20032**

**MASSACHUSETTS CAREER DEVELOPMENT INSTITUTE, INC.  
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NH '93

HISTORY OF THE  
MASSACHUSETTS CAREER DEVELOPMENT INSTITUTE

The Massachusetts Career Development Institute (MCDI) has a history of more than twenty years of providing individual upgrading programs which have been extremely successful for workers throughout Western Massachusetts.

For five years, the MCDI operated a program of Workplace Education for employees at the Danaher Tool Group (formerly EASCO Hand Tools Company) in Springfield, Massachusetts. MCDI staff assessed more than 200 Danaher employees and provided classes in ABE, ESL and GED to more than 125 employees. Eighteen students obtained their GED and 75% of all who participated achieved a minimum of a two grade level increase in reading and mathematics. A similar program was developed and implemented at the Digital Equipment Corporation in Springfield. In addition, the MCDI has provided a series of educational and technical programming systems for the private sector community across greater Springfield.

MCDI staff attended numerous staff development and training seminars held by the State on the issue of Workplace Education. In addition, the State funding agency recognized the quality of MCDI's program by awarding it a contract in 1988 to develop and distribute workplace specific curriculum which has been replicated in similar programs across Massachusetts.

The experiences, lessons, and successes of the Danaher and Digital programs, combined with twenty years of providing ABE, ESL, and GED programs to more than 10,000 residents of Hampden County, MA demonstrate quite clearly that the MCDI possesses the ability, staff, and curriculum to provide a program of Workplace Education at the Geriatric Authority of Holyoke.



## ABSTRACT

The Massachusetts Career Development Institute, Incorporated (MCDI) has refined and expanded the existing program of Workplace Education at the Geriatric Authority of Holyoke (GAH), Massachusetts. This program provided educational and support services to sixty employees at the GAH. The instruction was held in the classroom at the facility provided by the GAH. MCDI educational staff provided English as a Second Language, Adult Basic Education, and High School Equivalency (GED) Preparation instructional programs. MCDI staff also provided ongoing educational and personal counseling, motivational workshops, and pre and post testing to establish initial functional levels to determine gains. The program is a continuation of MCDI's response to the problems of functionally illiterate adult workers and other employees whose upward mobility is inhibited by limited reading comprehension and communication skills (oral and written). The goal is to assist GAH employees in obtaining these transferable basic skills to enable them to maintain their present employment and to enhance their access to career advancement opportunities in the health services industry.

The program consists of the following interrelated components:

- planning
- outreach and recruitment
- orientation and confidential pre-testing, including the development of a workplace specific assessment tool
- participant selection (by all partners)

- counseling
- motivational workshops (ongoing)
- individualized upgrading programs in ABE/ESL/GED
- confidential post-testing and/or GED testing
- independent evaluation (formative and summative)
- development and field testing of workplace specific, competency based curricula

The program served thirty low functioning and thirty intermediate functioning employees of the GAH in an eighteen month program starting March 1, 1992, and concluding September 31, 1993. The continuation of this program for an additional ten months enabled MCDI to provide additional services to GAH employees and to refine and field test further our workplace specific curricula and assessment tools. All students enrolled in the grant were post tested in all appropriate areas. The post test measured students' progress against goals for the current program and provided a pre-test for the FY'92 program.

#### Program factors

It is estimated that 20% of the adult population and 40% of the youth population in Hampden County are functionally illiterate, unable to perform competently in the workplace with little or no chance for career advancement. The cost to local industry brought about by employees who have deficient workplace literacy skills is many millions of dollars a year.

This hidden cost is passed on to the consumer and directly affects our capacity to compete in the marketplace. This hidden cost in goods and services is comprised of low productivity, errors, poor quality, accidents, and wasted supervisory time, in large part arising from the inability of employees to think analytically, to read and comprehend instructions or to communicate effectively with co-workers.

The Geriatric Authority of Holyoke (GAH) is a public, non-profit nursing home facility located in Holyoke, Massachusetts. The majority of GAH employees are residents of Holyoke. Holyoke is a city with a population of 41,000 of which 27% are Hispanic, 3% are African American, and 6% are Asian American. There are approximately 16,000 households of which 20% are receiving public assistance. Of the 3,039 families receiving AFDC 72% are of Hispanic origin.

The Hispanic and South East Asian populations presently comprise 50% of the total enrollment in the Holyoke Public Schools. Of this number more than one third have limited English speaking ability.

The Holyoke Public Secondary School System presently is experiencing a dropout rate that hovers around 50%. The projections are that the GAH will have to draw increasingly from a pool of candidates who are undereducated and present ever increasing language and cultural barriers.

Recognizing this reality GAH wants to develop and institutionalize a Workplace Literacy Program which will empower staff to provide optimal patient care.

The Massachusetts Department of Education defines the term functional literacy as the ability "to read, write, comprehend, compute, problem solve, think critically and communicate in English well enough to execute individual responsibilities as family members, employees and citizens".

This definition, when applied to a health care facility, demands that all employees must be functionally literate. The Geriatric Authority of Holyoke deals with life and death issues on a routine basis. Nursing assistants, who provide first line direct patient care, must with accuracy and consistency be able to think clearly and critically, prioritize tasks, and solve problems relating to the care of individual patients. An improper meal tray assembled by a dietary worker could have serious impact on a patient's health. If an employee can not read or understand instructions, the result could be harmful to that person, fellow employees and/or patients, and costly to the institution.

The GAH employs 310 individuals in a range of service programs for the elderly. The employees are 81% females and 47% are not high school graduates. More than 50% are earning less than \$9.00 per hour. 75% have been employed more than one year and a growing number (32% of those hired in the past year) do not speak English

as their primary language.

Signs of low educational levels are evident in the existing workforce as well as in the applicant pool. The lowest functional reading level acceptable at the GAH is the ability to match words; i.e., a laundry worker who matches name tags on clothing with the same name on a storage rack. This employee will have limited mobility from this position unless he/she develops reading abilities. Similarly, those with limited conversational English skills are restricted to entry-level, routine jobs in which they are not required to understand complex instructions.

There are several problems presented by the employee who possesses inadequate basic skills. This person lacks the ability to communicate effectively with supervisors, other GAH personnel, visitors or patients. This communication problem can be the inability to speak and understand oral English and/or to interpret written instruction, directions, or procedures. Due to labor market conditions, the GAH is forced into considering and hiring more individuals whose primary language is not English. This precipitates the potential for language difficulty and cultural conflicts. These conflicts can cause tension within the Institution and between the Institution and the patient.

Another set of problems is posed by the English speaking worker who has, to date, successfully masked his/her educational deficiencies. This person has been able to cover the inability to read

effectively. The supervisor may not be aware of this deficiency and assumes that the employee is careless or incompetent when errors in completing tasks or following assignments are made. Concurrently, these employees who have limited basic skills may also suffer from a lack of self-confidence and possess low self-esteem. This self-doubt may result in the individual being intimidated and unable to respond when asked to make timely, critical decisions. The outcome could prove consequential to patient care and might result in negative implications for the GAH.

The necessity for upgrading educational levels of GAH staff is clear. A primary goal of the GAH is employee retention to insure continuity of care to the patients. The overwhelming personal responsibilities of staff, especially those single heads of household, dictate the need for upward mobility within the workforce. The opportunities for advancement primarily are in direct patient care areas and supervisory positions. In these positions, effective comprehension of written and spoken English is mandatory as well as the problem-solving and organizational skills essential to insure safe, high quality patient care.

Additionally, the Massachusetts Nurses' Aides Training Act requires all existing and future nurses' aides to pass a standardized, written test. It is administered in English only and mandates a minimum fifth grade reading level for one to be tested with any effectiveness. Considerably anxiety has been generated among long term employees who face losing their employment if they fail this

exam.

Development of a program to improve the educational skills of this workforce is fundamental to providing upward mobility within the organization and enhancing staff retention. It is imperative to provide employees with transferable skills (not life skills) in reading, writing, English comprehension, reasoning and problem solving and other job related skills which will enable employees to be promoted to new positions with increased job responsibilities, or even to retain current positions, as well as to improve their employability and career mobility, both within the GAH and the health care industry as a whole.

The MCDI, at the request of the GAH, provided each program participant access to individualized learning programs to develop the basic skills which could enable the employee to perform the present job more effectively and provide the foundation for career advancement. The GAH and the Union outlined jointly the functional skills required for each class of jobs in the GAH structure. The MCDI tailored the learning experience for these identified functional skills. These skill requirements appear to be traditional Adult Basic Education skills, but they are required by the employer to provide efficient patient care. All educational objectives are developed around employees specific applications in the GAH environment. Language development focused on job related terminology and comprehension tasks; math skills reflected solutions, mixtures and are directly applicable to tasks required

to be accomplished by the worker; interpersonal skills and motivational training is concentrated on the skills needed to relate with the patient and to being an effective member of the health care team.

All educational services funded by this grant were provided to GAH employees in order to allow them to maintain their current jobs, increase their effectiveness and productivity, and to provide the foundation for career advancement opportunities. Each potential participant was assessed to determine their basic skill abilities and self-esteem levels. (See Final Evaluation Report, 9/31/93). Each learner had an Individual Education Plan (IEP) that outlines the goals and the learning experiences required to attain them. The student participated in the development of the IEP and enumerated job tasks and functions to be mastered with the educational goals.

All educational services were offered at the on-site classroom provided by the GAH, which eliminated transportation problems. One-half of the scheduled classroom time was paid release time by the employer. The MCDI provided on-site counseling services to all participants in the program. The counselor became familiarized with GAH practices and Local 1459 policies by their respective personnel in order to insure the dissemination of appropriate information during counseling and to insure continuity among all partners.



All students participated in a motivational program which identified systems to think critically, solve problems, and relate with co-workers.

The partners for this effort, GAH, United Food and Commercial Workers Union Local 1459, and MCDI, remain committed to providing workers the skills for an effective, upwardly mobile workforce.

Both partners were eager to be involved in the planning, development, implementation, monitoring and ongoing improvement of this program to increase the skills of the on-site work force and to participate in a project that can be used by future employees of the GAH.

#### Extent of the Need for the Project

GAH staff educational needs can be divided into two groups. There are a number of people functioning at very low levels who require ESL and/or ABE in order to move in any direction within the organization. An example would be a laundry worker who aspires to be a nurses' aide. Secondly, there are a number of nurses' aides who wish to attend LPN or RN training programs but lack high school diplomas. This group would benefit from a GED program and would then be able to attend LPN or RN programs, while working part time and taking advantage of the GAH tuition reimbursement program. Chronic staff shortages in the health care industry, coupled with the GAH commitment to retrain staff, guarantee these newly licensed nurses positions within the GAH at wage increases of \$4.00 to \$6.50

per hour.

The following demographic information describes the 310 employees of the GAH, a public non-profit agency serving the elderly of the Greater Holyoke community:

**EMPLOYMENT LONGEVITY:**

16%	employed	10 - 30 years
16%	employed	5 - 9 years
23%	employed	2 - 4 years
18%	employed	1 - 2 years
27%	employed	Less than 1 year

**OCCUPATIONS:**

3%	Administrative
18%	Supervisory (includes RN's and LPN's)
6%	Clerical Support
4%	Technical and Professional Support
69%	Direct Service Employees

**WAGE LEVELS:**

26%	Over \$10.00 per hour
24%	\$ 8.00 - \$9.99 per hour
26%	\$ 7.00 - \$7.99 per hour
24%	\$ 6.00 - \$6.99 per hour

**EDUCATION:**

16%	3 or more years beyond high school (includes RN's)
11%	1-2 years beyond high school (includes LPN's)
30%	completed high school
43%	less than high school

**SKILL LEVEL:**

68%	currently in positions not requiring schooling beyond high school
6%	currently in positions specifically requiring high school diplomas
20%	currently in positions requiring schooling beyond high school, but less than a 4 year degree (includes LPN's and RN's)
5%	4 year degree or higher required

**SEX:**

81%	Female
19%	Male

**AGE: (16-77 years)**

8%	Over 60 years of age
18%	50 - 60 years of age
20%	40 - 50 years of age

19%	30 - 40 years of age
25%	20 - 30 years of age
10%	under 20 years of age

NOTE: Some category totals do not equal 100% due to rounding

ENGLISH SPEAKING ABILITY

Nineteen percent of the current workforce is Hispanic. This is the fastest growing segment of the workforce and reflects 25% of the employees hired in the past year. English speaking ability varies widely in this group from complete fluency to basic conversation levels with minimal ability to read or write. Low levels of written and spoken English are definite barriers to advancement.

The largest group of employees is nurses' aides. They comprise 35% of the workforce. Maintaining their current status requires successfully passing the State Nurses' Aide exam. Advancement for them is to become LPN's or RN's, positions requiring one to four years of education beyond high school. Approximately 50% currently are not high school graduates, and they must remove this barrier to advancement before they can consider attempting an LPN or RN program.

MCDI conducted a variety of on-site basic skills and job related educational programs for GAH employees including English as a second language, adult basic education, high school equivalency diploma (GED) preparation, and motivational/life skills management

training.

Based upon these data, it is estimated that 43% of 133 members of the GAH workforce require a program of ABE/ESL or GED to upgrade their skills and improve their prospects for promotion. The majority of program participants come from the following segments of the workforce:

1. nurses' aides
2. kitchen staff
3. laundry staff

These groups realize that educational upgrading can lead to job retention and/or promotion.

The commitment of the GAH to upgrading the educational skills of its workforce is evidenced in a tuition reimbursement program included in the collective bargaining agreement and an on-going agreement with the local vocational high school for continuing education programs particularly in the area of advanced nursing skills.

The GAH will derive three direct benefits from this program:

1. Improved patient care resulting from a higher level educated workforce.
2. Reduced turnover because of access to opportunities that require higher educational levels than available presently.

3. Increased confidence and self-esteem levels by staff educated through programs which can translate to more positive attitudes with the patients and greater ability to participate in the overall mission of the institution.

### Quality of Training

MCDI has a history of more than twenty years of providing educational services to adults throughout Hampden County. All of the curriculum uses, whether locally developed, commercial text or Computer Assisted Instruction, are directly related to the workplace and selected or developed with a sensitive respect for the unique needs of the adult learner. Our skill in this area has been recognized by the Massachusetts Department of Education which requested MCDI to develop and distribute workplace specific curriculum which, in turn, has been implemented at several sites. In addition, we have hired, through our current Workplace Literacy Grant, a staff person with extensive experience in developing and field testing competency-based curricula.

MCDI staff continued to meet with GAH staff to ascertain the functional competencies required by various job categories. Based on these functional competencies, MCDI developed learning objectives that presented basic skills acquisition in a framework directly applicable to the GAH workplace; i.e., vocabulary development related to the needs of the GAH employee at the job site.

All students were assessed to determine their present academic functional skill levels, self-esteem level and their career goals. In addition, a workplace-specific assessment tool was developed and administered as a pre-test. These data provided the MCDI counselor baseline information to assist the GAH employee in developing an individualized educational plan to outline the goals of the learner and the interim steps to attain them. These steps may include specific learning objectives, interpersonal skills development, motivational workshops, obtaining a GED, and supportive services. The IEP was the program outline and could be modified at any point based on the progress of the adult learner on newly identified needs.

MCDI offered all instruction on-site in classrooms provided by the GAH. Employees involved in the program received paid release time for one half the hours they spent in the program. The fact that the learning laboratory was onsite in GAH classroom space made this program readily accessible to employees and meshed well with their schedules.

MCDI, as an educational provider and grantee, is affiliated with the Springfield Public Schools (LEA) and has been the recipient of several grants and contracts from the Massachusetts Department of Education. MCDI educators, assessment specialists, counselors and administrative staff will provide direct services to GAH employees. MCDI's educational programs are provided in a sequential, competency-based format. To continue the next planned learning

objective the learner must display mastery of the materials. If not mastered, other methods will be employed by the educator to assist the learner to achieve success. These strategies may include small group instruction, one-on-one instruction, technology assisted learning, drill and practice, etc. Each objective will have several alternatives to present the material.

### Plan of Operation

The Massachusetts Career Development Institute, Inc., in conjunction with the Geriatric Authority of Holyoke (GAH) and Local 1459, United Food and Commercial Food Workers Union, AFL-CIO, provided a replicable program model for on-site workplace education to upgrade the basic literacy and analytical skills of employees in the health care industry. The project operated for a period of eighteen months, eight months of which was a continuation of our current program.

This project provided education development skills to 60 GAH employees. The program provided adult basic education, English as a second language and high school equivalency (GED) services in concert with workplace requirements and enabled GAH employees to enhance their prospects for upward mobility.

### PROJECT OBJECTIVES

1. Provide educational services to 60 GAH employees during the contract period.
2. Assess during the first two months of program operation



all GAH employees interested in participating in the program.

3. Provide each ABE or ESL participant a set of educational experiences to insure a minimum of 75% of them improved at least two grade levels in basic reading and math skills.
4. Provide each GED participant educational experiences to insure 85% of those who completed the GED exam would pass.
5. Provide appropriate educational experiences to program participants resulting in 85% of those individuals tested would pass the state Nurses' Aide Licensing Exam.
6. Demonstrate that at least 85% of the individuals participating in the project would come out with an improved level of self-esteem.
7. Demonstrate improvement in productivity and/or quality of work by a minimum of 85% of those individuals participating in this program as measured through a pre and post test utilizing a survey instrument developed by GAH supervisory personnel, Union and Administration.
8. Increase self-esteem, motivation, interest in a career, improvement in workplace literacy skills and/or satisfaction with the educational programs for all participants.
9. Develop a successful model of Workplace Literacy Education for replication locally or nationally.

## PLANNING PROCESS

Massachusetts Career Development Institute staff met with GAH and Union representatives to discuss the expansion and continuation of the existing program. It was decided that, in order to provide a more effective program for employees, and to develop, field test and refine workplace specific curricula, patient/employee interaction become a focus of the effort.

Issues discussed at Program Advisory Committee meetings included: paid release time for participants, recruitment/outreach, testing, upward mobility, curriculum design and the roles of management/labor in planning, design, implementation and monitoring. Particular emphasis was focused on how to approach sensitively with employees the issues of literacy and confidentiality.

Advisory Committee meetings were attended by MCDI staff and administration, GAH's personnel and executive directors, business representative from Local 1459, United Food and Commercial Workers Union, AFL-CIO, representing 6,000 members in Western Massachusetts and 220 employees at the GAH, various workforce representatives, including supervisory personnel from various departments, and the program evaluator. Issues discussed included the ongoing commitment of management, union, and workforce representatives regarding the need to continue and expand the current program and to assist in recruitment, service on the advisory board, and submittal of letters of support. Issues discussed on an ongoing

basis were confidentiality, class schedules, days and locations of classrooms and recruitment. The specific roles of all groups/agencies were delineated clearly and agreed to by all participating agencies and groups.

Union and workforce input and support have been crucial and have performed a major role in recruitment. These planning meetings have been very successful and made all partners feel informed and involved in the process.

### PROGRAM DESIGN

The Massachusetts Career Development Institute, as grant recipient, provided GAH a program of on-site workplace education. This program design emphasized ABE, ESL, and GED educational units which provided opportunity for 60 employees to become successful in their employment and to establish options for upward mobility within the GAH.

Based on our experience in previous workplace education programs we incorporated two critical elements from our "lessons learned almanac":

1. The program offered a minimum of 200 hours of instruction, much more than the average ABE model. While it can be documented that many participants achieved a two grade level upgrade in fewer than 200 hours, it was the recommendation of demonstration project staff and participants to increase the hours of instruction since

learning retention was an issue.

2. An oversight committee, consisting of representatives from MCDI, GAH management and Union, was established to monitor the program on a monthly basis in order to address potential problems in a timely and effective manner.

Based upon data provided by the GAH Personnel Office, it was estimated that a minimum of 133 employees were functioning at reading and learning levels that would be addressed by this program. With assistance and support from the union and the workforce supervisors, a broad recruitment effort was implemented to publicize the program to the entire workforce and to attract the maximum number of participants. MCDI assisted in the outreach effort and provided assessment and ongoing counseling.

Instruction was provided in ABE/ESL and GED preparation. All instructional programs and curricula were integrated with workplace-specific terminology so the participants could better relate what they were learning to their daily jobs. As part of the planning process, MCDI staff attended a seminar held by the Massachusetts Long Term Care Foundation, "ESL - Helping Employees to Learn". This seminar identified more than 1,000 words which related to nursing home employees in the performance of their job. MCDI staff worked with the GAH in-service coordinator to incorporate the material into the program curriculum.

The program was developed in a flexible, open-ended learning lab environment for Adult Basic Education. The program was structured, sequential and individualized as appropriate for adult participants, whether individually or in groups.

Individualized Educational Plans (IEP) were developed for each participant based on assessment results and criteria outlined by GAH management and the Union, to establish the learner's sequence of instructional activities.

The Learning Lab is located on-site in space provided by GAH. Many educational strategies were used in the Lab: grouping of various individuals who are studying similar concepts; individual, one-on-one tutoring; group presentations; and use of Computer Assisted Instruction (CAI) units for drill and practice as well as reinforcement. Educational programming took place under the direction of instructors with many years of experience in management of individual adult education situations. Their expertise enabled them to counsel students and reduce the fear in adult learners caused by being placed in formal educational settings.

The instructors provided private learning time mixed with group discussion and teaching, resulting in a most positive learning atmosphere for adults. This program was designed so that each participant had an individualized learning plan so that he/she could proceed at his/her own pace, without undue peer pressure.

There were four separate classes conducted with an average of fifteen students per class. Classes met twice each week for forty-four weeks. Classes meeting times were from 1:00 p.m. to midnight. This schedule allowed participation by all members of the workforce. Of the four hours of instruction each week for each employee, two were through a process of paid release time during normal working hours and two were on each employee's own time. All participants received a minimum of 200 hours of instruction.

#### OUTREACH AND RECRUITMENT

Recruitment strategies were implemented through staff meeting, surveys of all employees, weekly multi-lingual newsletters and flyers distributed with paychecks, a letter from Local 1459 to all members, and small group orientation meetings conducted by Union, MCDI and GAH staff. This comprehensive approach enabled the entire workforce to learn about the program, as well as to make MCDI staff and program partners available to answer questions and address concerns which employees may have.

The key component in the outreach and recruitment effort has to make all employees feel comfortable by explaining the need for and importance of upgrading programs which were tied specifically to work related skills and would enhance job security and career advancement. We emphasized the positive aspects of confidentiality and promotional opportunities while discussing the sensitive issue of literacy.

## ASSESSMENT

The initial assessment involved a complete testing procedure for all potential students. This was done over a period of 2-3 weeks and will be conducted on site at the GAH. An Assessment coordinator oversaw the testing, compiled the results and set individual counseling sessions with each participant. He was assisted by a bilingual assessment specialist. The following assessment instruments was utilized:

### TEST OF ADULT BASIC EDUCATION (TABE)

The Test of Adult Basic Education is designed to measure achievement in reading, mathematics and language. The counselor utilizes these test results to obtain pre-instructional information on the client's status in these three basic academic areas, to identify areas of academic weaknesses and to function as a basis for preparing an individualized program adapted to the client's needs. This is the instrument that was used as pre and post test to measure participant achievement.

### MATHEMATICS BATTERY

The major objective of the mathematics battery is to assist the student and the assessment staff in determining the present level of mathematics capability. Areas covered include addition, subtraction, multiplication and division of whole numbers, fractions and decimals. There are fifteen word problems covering a variety of areas and ten measurement problems.

## INTER-AMERICAN SERIES

The Inter-American Series is designed to determine reading and general ability levels of Spanish-speaking people. The primary use of these tests is to determine the client's level of learning, comprehension and ability in his/her native language.

## BASIC ENGLISH SKILLS TEST (BEST)

The BEST is a test of elementary listening comprehension, speaking, reading and writing. It is intended for use with limited English-speaking adults for whom information on the attainment of basic functional language skills is needed. This test provides information that is useful in placing students at the appropriate level and in planning learning activities for a student.

In addition, we have developed a workplace specific pre and post test instruction which relate directly to the curricula which were being developed and field tested. The workplace specific assessment tool was developed to quantify job specific basic skills, readiness for promotions, and improved patient care.

The assessment tool identified provided us with a measure of individual academic and language ability in the workplace and classroom. This base line data guided the level of lesson development and the instructional presentation. The TABE was used to identify grade levels for each student and to establish a basis for corresponding academic work. (Work specific skills tasks and terminology were incorporated into the assessment as well as each



student's educational skills by grades of schooling completed.) The Inter-American Series indicated the level of student literacy in their native language to determine the extent of the ESL component prior to the introduction of work specific information and topics. The BEST was used to identify English communication and oral skills, and to determine the appropriate level of ESL instruction (i.e. beginning, intermediate or advanced). This instrument also identified abilities in English reading and writing for all limited English speaking students, Hispanic or otherwise.

A native language ability assessment was important to ascertain the functional capabilities of the 19% of the workforce that was Hispanic, with limited functioning in the English language. This instrument helped us to determine the scope of ESL and bi-lingual lessons to enhance the upward mobility and LES students and improve performance by being able to receive, understand and respond to questions and directions from patients, co-workers and supervisors.

#### INTAKE

Upon development of the assessment profiles, meetings took place between the assessment counselor, instructor, GAH management, Union, and workforce representatives to prioritize those participants who entered the program based upon need and Union contract parameters. Participant selection was consistent with the GAH affirmative action policy. It is at this stage that counseling from MCDI staff and peer support from co-workers was incorporated in the program to emphasize the positive aspects of the program in

terms of career opportunities. We utilized intake forms which had been developed at the EASCO Hand Tool Workplace Education Program to capture demographic data.

### THE LEARNING LAB

The Learning Lab was conceptualized to embrace two educational training objectives: to increase and encourage individualized learning and to provide a place, disassociated from the classroom setting, for development of English as a Second Language and to improve workplace skills. It is fully equipped with reference materials, Computer Assisted Instruction (CAI), and audio-visual equipment to accommodate the diverse personal, occupational and academic needs of the GAH employee.

The Learning Lab complemented and supplemented the instructor's curricula materials and provided an opportunity to focus on individual learning problems. Furthermore, it assisted the participant to achieve performance objectives where previous educational methods had failed. All curricula were integrated into the workplace specific terminology and vocabulary as a key component.

Utilizing the Learning Lab had many advantages. Since each participant learned in different ways and at a different rate, the Learning Lab provided the instructor with a means of measuring the growth consistent with the participant's abilities and development. By giving the participant a new interest in learning, it made it

possible for the instructor and participant to move ahead or repeat curriculum materials as individual needs arose and, also to retain a sense of continuity in the regular classroom setting.

#### ENGLISH AS A SECOND LANGUAGE

Participants whose native language was not English benefitted from the Learning Lab which provided assistance in the development of English as a Second Language. Since these participants had limited use of the English language, they required listening and communication skills before they could successfully achieve their goals and function in an English speaking environment. Utilizing the audio-visual equipment the participant learned to develop correct pronunciation, syntax and speech patterns. Furthermore, because audio-visual equipment deviates from standard instructional procedures and emphasizes individualized learning, the participant was motivated to learn, practice and review the fundamentals of English at his/her own rate.

#### INSTRUCTION - ENGLISH

English instruction is an important aspect of learning. It offers an opportunity to study and improve areas of weaknesses and to concentrate efforts on those aspects of the language determined to be difficult. By reviewing grammar, usage, comprehension, vocabulary, reading and writing skills, the participants increased their abilities to attain competency in English and to achieve their goals.

## ADULT BASIC EDUCATION (ABE)

The MCDI Adult Basic Education program is designed to provide individualized learning to those participants who need to develop, improve and/or reinforce the basic skills of reading, language and mathematics.

When the participant commenced his/her ABE program, he/she was evaluated to determine areas of strength and areas of concentration. Based on the results of assessment, a course of study was determined. The number of weeks to develop basic education skills and to achieve goals is contingent upon the needs, aptitudes and rate of learning of the individual student.

During this aspect of the program, strong emphasis was placed on attitudinal and behavioral development along with classroom training. It is the objective of the ABE program to assist the participant in developing positive attributes that will result in successful job retention and career mobility.

The participant was expected to demonstrate progress in the following areas:

1. Improve specific reading skills which are necessary to function successfully in occupational areas and to strengthen opportunities for future upward mobility in employment situations.
2. Improve mathematics skills.
3. Develop and improve vocabulary skills.

4. Improve pronunciation and listening skills.
5. Improve reading comprehension and language skills.
6. Improve and/or reinforce phonetics skills.
7. Improve writing skills.

#### HIGH SCHOOL EQUIVALENCY (GED)

For those employees with higher level academic skills a GED preparatory program was provided. The purpose of the GED program is to prepare students to take and pass the High School Equivalency Test in order to be qualified for promotional opportunities and career advancement. Lectures and class discussion focus on concepts, ideas and intellectual skills comparable to the objectives of a high school diploma. Periodic and regular testing in the areas of English grammar, literature, sciences, reading, mathematics, writing and social studies measure each student's preparedness to accomplish successfully the battery of tests inherent in the GED.

Goals of instruction are:

1. To prepare the student to pass the High School Equivalency Examination.
2. To improve the student's oral and written expression of English.
3. To provide the student with basic principles of selected areas of information in the social studies, the sciences, and general literature.
4. To improve the student's general reading speed and

comprehension ability.

5. To enable the student to understand and apply fundamental mathematics operations.
6. To encourage the student to think more logically, and, thus, more coherently and effectively.
7. To develop behaviors and attitudes which are at least the equivalent of those required in employment.
8. To develop the ability to accept and compete successfully the job interview process.

#### CURRICULUM DEVELOPMENT

Curriculum is the essence of the Workplace Educational Development Program, the basic tool used to implement and achieve the objectives of the program. Educators and a growing number of employers maintain that job performance, self-esteem, motivation and career mobility can be enhanced through curriculum materials solidly established through the employee's work experiences. The structure used for this process is Competency-Based Vocational Education (CBVE).

The total process for competency-based curriculum has four major components. Initially, an assessment battery is given to each employee to determine academic grade level, reading ability and oral and written English efficiency. These data are then used to develop job-related curricula that reflect each employee's academic scores.

In the second component, the curriculum developer meets with the supervisors of the Nursing Assistant, Maintenance, and Food Service components to identify and prioritize essential job skills in their respective areas. These skills form a check list which is the end product of the second phase.

From the job skills checklist, the curriculum developer writes an original employee workbook for each job skill. The enclosed checklist from the Nursing Assistant Program shows twenty-six skills used by Nurses' Assistant. Two of these skills, oral and rectal temperatures, were written into an original fourteen-page workbook, also enclosed. A short competency test is given at the end of each workbook to measure academic/literacy progress. Workbooks are field tested and reviewed by employees, union officials, teachers and work-place supervisors.

Similar workbooks are to be developed in Food Service and Maintenance as well as the remaining Nursing Assistant Skills.

The fourth component of the curriculum process is evaluation. Although a final evaluation of the entire program was done through Springfield College, the relevance or appropriateness of any curriculum lies in an employee's increase in self-esteem, job satisfaction and upward job mobility. A good curriculum ultimately leads to a better job and greater quality of work life.

The Massachusetts Career Development Institute has had numerous

experiences in Workplace programs over the last ten years. MCDI presently operates its own in-house Nursing Assistant and Food Service programs, along with many other areas. Because of these experiences, MCDI offers a curriculum structure that can be easily replicated anywhere else in the country. More importantly, however, MCDI possesses a knowledge of total "process" of job-related curriculum development. The process is the integrating element that links curriculum to each unique workplace facility.

#### PROGRAM MANAGEMENT

The MCDI Program Director supervised all instruction, assessment, counseling, workshop activities, and met with the MCDI program coordinator and all staff on a weekly basis.

The MCDI program coordinator/ABE instructor coordinated all schedules, classroom activities, testing and daily program components, and worked with the GAH in-service coordinator to review curriculum and refine it as needed. He/She reported to the Director on a regular basis to discuss the program as to strengths and weaknesses. Instructional and support staff reported to the program coordinator. The GAH in-service coordinator was responsible for working with GAH representatives and they reported to her as the program contact person. She in turn worked closely with the MCDI program coordinator to address all problems and issues.

All instructors and counselors maintained accurate records of each



participant's progress on a weekly basis and submitted and discussed these reports with the program coordinator on a bi-weekly basis. Progress was measured through GAH objectives and individual IEPs with a two grade increase minimum, or attainment of GED, as well as improved productivity and attendance, and greater employee retention and mobility.

MCDI faculty possess a broad spectrum of technical and educational experience as well as formal degrees in education or related fields. All possess many years of experience providing educational training. An aggressive staff development program ensures that MCDI staff are kept abreast of new trends in teaching. MCDI administration represents a combined total of more than 40 years of experience in the management and supervision of employment and training and remedial education programs. Throughout the Institute there are many staff members who are bi-lingual and/or bi-cultural. The MCDI is an Equal Opportunity Employer.

The GAH initiative was overseen and monitored by an advisory board consisting of representatives from MCDI, GAH management, the Union, and the workforce. This advisory board developed and finalized plans and decisions regarding the program.

The board met monthly, or as needed. In addition, monthly meetings between all instructional staff and counseling staff were conducted so that all direct service staff could share information as to what was working and what needed to be improved in each program, and how

those issues pertained to all programs.

### GAH GOALS AND PARTNERSHIP

The Geriatric Authority of Holyoke (GAH) is a public, non-profit provider of health care services primarily to an elderly population. The range of services includes long-term care, physical rehabilitation, transportation, and adult day health care. The GAH employs approximately 320 individuals accounting for about 250 FTE's. The largest number of staff is employed as Dietary Aides, Housekeepers, Laundry Workers, Activity Aides, and Certified Nurses' Aides.

The contract year ending August 31, 1993, was the third year in which the GAH experienced severe financial cuts due to reliance on public funds (Medicare/Medicaid). The year also was notable for the dramatic increase in acuity of the residents, and much more stringent enforcement of regulatory requirements under Federal OBRA legislation. In practical terms, this means that staff had to be better trained, more efficient, and more flexible. To say that the Workplace Education Program has been helpful during this challenging year is an understatement. The MCDI has been instrumental in allowing the GAH to develop necessary job skills with large number of employees who bring a wide range of educational backgrounds to the workplace.

The work based curriculum developed for Certified Nurses Aides is truly "state of the art". Each of the 120 CNA's has been able to

refine and develop her skills and participate in updated training at her own pace and with minimal disruption of patient care. The GAH is committed to carrying out this type of training into their Activities Department this year and expect the same gratifying results. It is important to note that payments for patient care have become documentation based in long-term care over the last three years. Staff who were previously able to function on an eighth grade level are currently spending one to three hours of their day developing patient documentation. Without the increase in reading and writing skills fostered by the Workplace Education Program, the GAH could suffer additional financial losses that would seriously hinder their ability to operate.

Naturally, the self-esteem generated by skill building reflects positively in the work performance of the staff. They are successfully caring for far more difficult residents. The turnover has dropped dramatically in the past three years, and GAH has a record number of staff participating in further education in the health care field. This can only help them to deal with the challenges that are certainly ahead in the national quest for health care reform.

The cooperative partnership is certainly crucial to the success of this effort. As the business partner, the GAH certainly recognizes the need for support from the Union which has always been forthcoming. The expertise of the educational partner, Massachusetts Career Development Institute, is part of the foundation of this

successful effort. Together, the GAH and the MCDI are meeting the educational needs of the staff on a daily basis.

### CURRICULUM DEVELOPMENT PLAN

The State of Massachusetts requires that candidates preparing for a license as a Nurse's Aide be knowledgeable of and have experience in twenty-seven basic nursing skills. To date, twenty-one of these skills have been creatively developed by the MCDI into seventeen job-related employee workbooks.

Each booklet averages fifteen pages of original writing along with 15% of supplementary educational materials (videos and readings) suggested by the nursing consultant. Workbooks developed to date are being field-tested by approximately sixty employees. In the past months, all workbooks were edited, revised and properly sequenced. Feedback for editing came from employees utilizing the workbooks, the classroom instructor, the nurses' training coordinator, the grant counselor, and the grant director. Meetings were convened monthly to evaluate the direction and development of the program.

A new and creative program of impacting additional employees has been developed since the last grant time phase, bringing the total number of employees served to date to eighty-one. The impact has been so positive that a number of the licensed nursing staff acknowledged that they too wished "they could have their own booklets and become part of the Workplace Development Program".

As a result of the employees' request to participate in the program, a unique curriculum was planned for this newly targeted group of nurses' aides. Five new skills areas beyond the original twenty-seven skills were developed. They include Alzheimer's Disease, Stress Management, Ethical Issues, Employment Professionalism, and Medical Forms Documentation.

In addition to the curriculum booklets, employees consulted with the instructor on a regular basis, did independent study and attended workshops. A number of new curricula booklets were developed focusing on patient/employee interaction.

#### PROJECT PRODUCT

One of the many products of this collaboration was to develop an excellent curriculum package for the position of nursing assistant of nurses' aide. The final curriculum consisted of nineteen individual booklets encompassing the twenty-seven job-related skills that nurses' aides need to pass successfully the state's training requirement for employment retention or fulfillment of continuing education hours. The names of the nineteen booklets are listed below. Samples of two booklets,

C. Patient's Bill of Rights, Ethical and Legal Issues and  
D. Infection Control and Isolation Procedures are included in this report.

- A. Role of Nurses' Aides
- B. Effective Communication Skills
- C. Patient's Bill of Rights Ethical and Legal Issues

- D. Infection Control and Isolation Procedures
- E. Safety Precautions
- F. Basic Human Needs
- G. Nutrition
- H. Bedmaking, and Measuring Height and Weight
- I. Transporting Residents
- J. Vital Signs
- K. Oral Hygiene
- L. Nail Care, Shaving
- M. Bathing, Dressing, Hair Care
- N. Fluid Intake and Output AM and PM Care
- O. Elimination, Medical Terminology Abbreviations and Vocabulary
- P. Alzheimer's Disease
- Q. Death and Dying
- R. Stress Management
- S. Employment Professionalism Daily Resident Care Flow Sheet

Each of the nineteen components is self-contained and includes an introduction, competencies, objectives, procedures, individual lessons, and testing to insure that the student achieves the skill levels required to pass the post testing for that unit. After each booklet was written, it was checked by medical staff at GAH and field tested in the classroom. Corrections and modifications were edited into the final document.

The use of this material has certainly benefitted staff in their personal development and with gaining or maintaining certification status, and, of more importance, the patients will be treated more professionally.

Another essential impact of the curriculum is to enhance employee job performance and productivity by:

- building confidence, motivation and self-esteem
- improving reading comprehension
- developing oral and written communication
- strengthening work-related decision making
- increasing opportunities for career advancement.

This competency-based curriculum can be replicated in any health care facility by integrating it with other work-related training programs, GED preparation, adult literacy, or college courses.

The Geriatric Authority of Holyoke sponsored a meeting with representatives from twelve different nursing home facilities within Western Massachusetts to discuss the Workplace Educational Development Program. On hearing about the program, the representatives requested copies of the curriculum for implementation within their respective communities. Additionally, other Health Related Occupational Programs at MCDI utilize the booklets applicable to their programs.

Sample booklets and a brochure were disseminated to nursing homes

and hospitals within Western Massachusetts and Connecticut. This process will be followed-up with a personal visit to each facility. An article about the curriculum was printed in the Massachusetts Visiting Nurses Association Bulletin, thus making the model program available throughout the state. There have been more than two dozen requests for the curriculum. Plans are now in process to publicize the availability of the curriculum in other medical publications throughout the country.

The curriculum content aims to improve patient care through better educated health providers both within a facility and in the health care industry as a whole. See appendix - A

#### COUNSELING AND SUPPORTIVE SERVICES

One of the keys to the success of any educational development program is the availability of supportive services and, more importantly, the effectiveness of those services. The vocational/guidance counselor's sole responsibility is to insure each student can complete successfully his/her Individual Education Plan (IEP). An integral facet of this responsibility is access to supportive services, day care, tutorial, etc. The MCDI has been in the employment and training industry for more than two decades; consequently, counselors know whom to contact for delivery of professional services targeted to the needs of the individual student and his/her family.

The counselor scheduled the individual meetings before, after or



during classes. At the beginning of the program, the counselor announced the availability of counseling services to each class and invited students to make appointments.

The counselor interviewed six (6) students to determine what they had accomplished over the past year, how it changed them personally and/or their goals, and also sought recommendations for the program. See Appendix - B

#### TEACHING METHODS

The goals set for this contract were in "learning to learn" skills where people learn how to learn on the job. This included identifying problems, experimenting, and working collaboratively. It established the fact the project would help workers develop and use their thinking and problem solving abilities to improve their workplace performance.

The project accomplished the following:

1. Employed a customized curriculum which related directly to the employees' jobs and also provided reading and comprehension instruction.
2. Focused on problem solving, thinking, and learning how-to-learn skills to improve workplace literacy basics. This not only developed and improved questioning, analytical, and learning skills in participants, but also helped them transfer these skills directly to improved performance at work.
3. Taught appropriate reading, math, terminology, and communication skills as needed. The project tailored its

educational methods to accomplish specific company strategies and goals.

4. Allowed the utilization of new teaching methodologies and curriculum to create a non-judgmental atmosphere that emphasized cooperation, teamwork, and creative decision-making needed characteristics and behaviors for workers in a total quality management and high-performance workplace.
5. Developed activities which emphasized responsibility, self-confidence, empowerment, and performance.

In keeping with the foregoing accomplishments, overall self-esteem in the facility improved tremendously in every area serviced. Job performance and attendance was better and medical workers were able to fulfill required contact hours to maintain certification.

Several Nurses' Aides advance to Licensed Practical Nurse studies and one aide is studying to become a speech therapist. The project achieved its goals by providing the participants with the "avenue to success on the job = education".

Within the last quarter, a new area was added which required MCDI's services and expertise--the Activity Department-- to work with the Activity Director and Activity Aides. They are responsible for individual and group activities designed to encourage social interaction and communication with all patients. These activities provide physical, spiritual, social, emotional, and intellectual stimulation for patients.

The students learned to meet effectively their patient's needs, maintain all required records accurately, participate in planning a monthly calendar of activities, work with patients on many different functioning levels, and insure patient safety at all times. This was accomplished by providing coursework in communication and writing skills.

Communication remains superb between MCDI, GAH, and the union. Scheduled monthly organizational meetings are established to exchange thoughts, ideas, needs, etc. There are informal meetings at least twice weekly. There is excellent representation from each of the three partners and from employees at GAH as well. It has been an excellent partnership enabling the MCDI to achieve its goals to provide educational services.

## RECOGNITION CEREMONY

On May 4, 1993, a recognition ceremony was held at the Geriatric Authority of Holyoke dining hall. Notices were sent to various officials, companies, and organizations inviting them to the ceremony. Press releases were sent to the local media to announce the open house and ceremony.

Thirty-six student/employees were presented certificates for their achievement in the Workplace Education Program. The certificates were distributed by the Honorable William Hamilton, Mayor of the City of Holyoke. Mr. Frank D. Gulluni, Chairman of the Board of the Massachusetts Career Development Institute, Inc. addressed the students and their families on "The Importance of Education as a Family Affair".

In attendance at the ceremony were family members of the participants, GAH executive director and director of personnel and staff supervisors, Local 1459 Union officials, and MCDI Administrators and staff. See Appendix - C

## SUMMARY

The Workplace Education Program at the Geriatric Authority of Holyoke (GAH) has again served the needs of its participants and achieved its goals and objectives during the established timeframe of this grant period.

Clearly, the needs are great. Nearly half the adults nationwide - or 100 million persons aged 16 and older - perform at the lowest levels of literacy. These individuals appear to be most at risk in our society, where literacy is a key to opportunity. The health care industry in the United States has been facing a shortage of workers to fill professional positions. There is a large pool of non-professional health care workers interested in advancing to Nurses' Aide, LPN or Registered Nurse. Many hold equivalencies and diplomas and could enter programs to prepare for jobs but have been excluded, because of limited literacy skills. This Workplace Education Program has afforded the employees and the management of the GAH to bring literacy levels to greater skill capacities. The self-esteem generated by skill building reflects positively in the work performance of the staff.

### GOALS/OBJECTIVES OF 1994

1. Provide each ARE or ESL participant a set of educational experiences that will allow 75% of them to demonstrate a two grade level increase in basic reading and math skills.

2. Provide each GED participant educational experiences that will ensure that 85% of those who take the GED exam will pass it.
3. Demonstrate improvement in productivity and/or quality of work by a minimum of 85% of those individuals participating in the project.
4. Develop a successful model of Workplace Literacy Education that can be replicated locally or in other areas of the country.

# APPENDIX A

**DISPLAY COPY**

**Workplace Educational Development**

**TRANSPORTING RESIDENTS**

© **Massachusetts Career Development Institute**

**Geriatric Authority of Holyoke**

**United Food and Commercial Workers Union Local 1459**



## TABLE OF CONTENTS

- A. Role of the Nurses Aide
- B. Effective Communication Skills
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- D. Infection Control and Isolation Procedures
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- H. Bedmaking and Measuring Height and Weight
- I. Transporting Residents
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- M. Bathing, Dressing, Hair Care
- N. Fluid Intake and Output: AM and PM Care
- O. Elimination: Medical Terminology, Abbreviation and Vocabulary
- P. Alzheimer's Disease
- Q. Death and Dying
- R. Stress Management
- S. Employment Professionalism - Daily Resident Care Flow Sheet

**COMPETENCY**

**TRANSPORTING RESIDENTS**

**OBJECTIVES**

1. To learn common elements to preliminary and concluding moving procedures.
2. To review guidelines for various lifting, transferring and ambulating procedures.

**PROCEDURES**

1. Preliminary and Concluding Procedures
2. Moving Resident to the Head of the Bed.
3. Moving a Helpless Resident to the Head of the Bed.
4. Turning a Resident Toward and Away from You
5. Moving a Resident from Bed to Wheelchair and from Wheelchair to Bed
6. Log Rolling Techniques
7. Ambulation
8. Moving a Resident from Bed to Stretcher

**SUPPLEMENTARY  
EDUCATIONAL  
MATERIALS**

- Reading:
1. Back Tips for Health Care provide
  2. SARA-MAXI-LIFTS
  3. Restraints and Safety Hazards
  4. Pivot Transfer

- Videos:
1. CNA 205 Lifting & Moving Techniques
  2. CNA: 207 Transfer Techniques

**COMPETENCY  
TEST**

Transporting Residents Competency Test

## INTRODUCTION

How would you feel if you were in bed, unable to move, and had to wait for someone else to change your physical position or get you out of bed? Many residents in nursing homes find themselves in this situation. They need to have their positions frequently changed in order to use their muscles and joints. Additionally, too much pressure on any one area of the body can cause bedsores (decubitus ulcer). Therefore, it is important that residents change their positions about every two hours. Most residents need help changing positions or moving from place to place. This booklet explains the more common procedures for moving, lifting and transporting residents.

There are specific procedures used with different lifting or moving tasks. For example, the way to assist a resident from a bed to a chair is different from turning a bed resident to his or her side. However, there are similar preliminary and concluding procedures that are common to every moving task. Rather than repeat these steps again and again, they are explained below, with the understanding that they begin and end each moving technique explained in this booklet.

1. As always, thoroughly wash your hands.
2. Assemble all equipment and take it to the resident's room.
3. Knock and pause before entering.
4. Identify the resident by checking the identification bracelet.
5. Ask visitors to step outside, tell them where they may wait and when they may return.
6. Draw the curtains to provide privacy. Drape the resident with a cotton blanket or sheet.
7. Explain what you are going to do. Allow the resident to ask questions.
8. Offer a bedpan if the moving procedure is long.
9. Raise the bed to a comfortable working height. Put the rail up on the opposite side of the bed, if necessary.

## **CONCLUDING PROCEDURES**

1. Make sure the resident is comfortable with fresh water, telephone or signal cords within easy reach.
2. Return the bed to the lowest horizontal position.
3. Make a general safety check to be sure there are no obvious hazards.
4. Return the equipment to its proper storage area and wash your hands.
5. Let visitors re-enter the room.
6. Report completion of the task. Document the time, observation, and signature on resident's chart.

## **MOVING RESIDENT TO THE HEAD OF THE BED**

Two methods may be used to help a resident move to the head of a bed. After doing the preliminary procedures listed above, lock the wheels of the bed. Raise the bed to a flat, horizontal position, at a comfortable working height for you. Place the pillow at the head of the bed for safety. Stand next to the bed with your feet about 12 inches apart, facing the direction you want to move the resident. The first method is to

- A. Place your arm nearest the head of the bed **UNDER** the resident's head and shoulders. Lock the other arm with the resident's arm.

To lock arms, the resident's hand is placed under your armpit and around your shoulder. Likewise, you place your arm under the resident's armpit and behind the resident's shoulder.

It is important at the count of 1-2-3, to ask the resident to help you by lifting the buttocks, bending the knees and pressing in the heels, while you smoothly move the resident toward the head of the bed. With arms still locked, ease resident down gently.

The second method of moving the resident to the head of the bed, is to slip your hands under the resident's back and buttocks. Working together at the count of 1-2-3, have the resident press in heels while you help raise the hips and move them upward in the bed.

The resident may also help by gripping the side rail at a higher position, or grasp the head board of the bed to help pull. If unable to do this, ask the resident to place one's arms at the side of the bed and push.

At the conclusion of either method, replace the pillow under the person's head and make the resident comfortable. Perform the concluding procedures mentioned earlier.

### **MOVING A HELPLESS RESIDENT TO THE HEAD OF THE BED**

Moving a helpless resident to the head of the bed is somewhat different. The main difference is that you cannot do the task alone. You must ask someone to help you from the opposite side of the bed.

After placing the pillow at the head of the bed for safety, lift the top bedding and expose the drawsheet on BOTH SIDES of the bed. Roll the edges of the drawsheet toward the resident's body. In this situation, the drawsheet is used as a lift.

Facing the head of the bed, both helpers must take the rolled drawsheet in the hand that is closest to the foot of the bed, while placing the other hand and arm under the resident's neck and shoulders.

Together on the count of three, raise the resident's hips and back with the drawsheet while supporting head and shoulders. Move the resident smoothly toward the head of the bed. When finished, replace the pillow under the person's head, tighten and tuck in the drawsheet and adjust the top bedding.

Before going on to the next lifting procedure, it might be worthwhile to learn some additional facts about the drawsheet. Sometimes it is called the turn sheet or the lift sheet. It plays an important role in moving bed residents from side to side or upward in the bed.

The drawsheet is found folded between the sheet and the person in the bed, covering from the shoulders to the knee area. It prevents friction from the sheet to the resident's skin. The drawsheet is used to lift heavy areas of the body by providing leverage and something to grip.

### TURNING A RESIDENT TOWARD YOU

To prevent bedsores on resident's skin or to help them be comfortable, they often have to be turned on their sides. To turn a resident toward you, follow these easy steps.

1. Go to the side of the bed where you want to turn the resident. Stand with your feet separated, one foot before the other, with knees slightly bent and thighs against the side of the bed.
2. Have the resident cross the far leg over the leg nearest you and cross the far arm over the chest. Bend the arm nearest you at the elbow, bringing the hand toward the head of the bed.
3. Place one of your hands on the resident's far shoulder and the other one on the far hip. Gently and slowly roll the resident toward you.
4. Go to the opposite side of the bed. Place your hands under the shoulder and hips and slowly move resident toward the center of the bed, properly aligning and safely positioning the body.
5. Place a pillow behind the resident's back. Push the sides of the pillow under the resident to form a roll.
6. Make sure the side rails are securely in place, if used.

### VOCABULARY EXERCISE

- |                 |  |
|-----------------|--|
| 1. transporting | - carry from one place to another        |
| 2. decubiti     | - pressure sores, bedsores               |
| 3. concluding   | - come to an end of something            |
| 4. drawsheet    | - blanket under resident to protect skin |
| 5. expose       | - lay open, to view                      |
| 6. aligned      | - bring into a straight line             |
| 7. catheter     | - hollow tube to drain fluids from body  |
| 8. lock         | - join or unite firmly                   |
| 9. preliminary  | - introductory or first step             |
| 10. grip, grasp | - way to hold securely, firmly           |

### VOCABULARY EXERCISE

Fill in the blanks with the vocabulary word that BEST describes each of the following statements.

decubiti  
preliminary  
transporting

lock  
aligned  
expose

drowsheet  
concluding  
gripping

1. Resident's hand is placed under aide's armpit and around shoulder; aide's arm is placed under resident's armpit and behind the shoulder.  
\_\_\_\_\_
2. Roll the edges of the cotton blanket toward the residents so it can be used to lift them to the head of the bed. \_\_\_\_\_
3. Place your hands under resident's shoulders and hips to arrange the body near the center of the bed. \_\_\_\_\_
4. A resident is brought to lunch every day in a wheelchair.  
\_\_\_\_\_

5. If a resident's position is not changed often, the skin can form bedsores.  
\_\_\_\_\_
6. Residents may help move themselves by firmly holding the side rail at a higher position and pulling. \_\_\_\_\_
7. The beginning steps for each transporting procedures are the same.  
\_\_\_\_\_
8. The ending steps for each lifting or moving procedures are the same.  
\_\_\_\_\_
9. When turning a resident toward you, loosen the top bedding without showing the body. \_\_\_\_\_

### MOVING A RESIDENT AWAY FROM YOU

Before moving a resident away from you, in addition to the preliminary procedures, be sure the side rail on the opposite side of the bed is securely up and that the resident is in the center of the bed. You may need to seek assistance from another aide to help you with this task.

Face the side of the bed with your feet separated, one foot ahead of the other, with knees slightly bent. Ask the resident to fold his/her arms over the chest.

Slide your arms under the upper part of the resident's back until your hands grip the far shoulder. The aide helping you places his/her arms under the resident's hips.

At the ready signal, both of you will draw your arms, moving the resident nearer your side of the bed but facing away from you.

If you are alone and need to move someone away from you, ask the resident to flex his/her knees. Slip one arm under the resident's back and far shoulder. Place the other arm as far as possible under the thighs. Lift and draw the resident toward but turned away from you.



## FROM BED TO WHEELCHAIR

Wheelchairs help residents live beyond the bed or bedroom experience. They help move people from place to place where they can participate in different activities.

Wheelchairs, however, must be used correctly to prevent accidents. Even a slight movement could cause an accident. Lock the wheelchair and raise the foot pedal out of the way before transporting resident.

1. Place the chair near the head of the bed, facing the foot. If possible, position the chair against a wall so it won't slide backwards. Cover the chair with a blanket, if necessary.
2. Lower the bed to its lowest horizontal position. Lock it and elevate the head. Fanfold bedding to the foot of the bed.
3. Help the resident sit up by placing your arm around the shoulders and your other arm under the knees. Rotate or pivot resident toward the side of the bed. Face the resident to prevent a fall. Assist resident with robe or slippers.

When ready, have resident place his/her feet on the floor with both hands on your shoulder. Your hands are on either side of the resident's underarms. Help the person slide off the edge of the bed to a standing position.

5. While in the same position, help the resident turn slowly, with her back toward the chair. Gradually lower the resident into the chair with the hips all the way back into the seat. Lower yourself by keeping your back straight and bending your hips and knees.
6. When the person is comfortable, cover the resident with the blanket and adjust the legs and foot rest. Place the resident where he/she can see activities or something to occupy one's attention.

## MOVING RESIDENT FROM WHEELCHAIR TO BED

Procedures for moving a resident from the wheelchair to the bed have many similarities as in the procedure for moving someone from a bed to wheelchair.

To prepare, lower the bed to its lowest horizontal position with the wheels locked. The head of the bed is raised, bedding is fanfolded and the opposite side rail is moved to an upward, secure position. The wheelchair is positioned at the foot of the bed. The wheels are locked and the footrests raised.

Have the resident place his/her feet flat on the floor and remove the blanket. Stand directly in front of the resident, keeping your back straight. Maintain broad foot support. Place your hands on either side of the resident's chest under the arms. The resident places his/her hands on your shoulders.

Gently help the person to stand, slowly pivoting the resident toward the side of the bed. Help the resident to sit on the edge of the bed. When comfortably seated, remove robe or slippers and move the wheelchair out of the way.

Placing one arm around the shoulders of the resident and the other arm under the legs, swing the legs on to the bed. Lower the head of the bed and assist the resident to move to the center. When the resident is comfortably situated, draw the fanfolded bedding over the person.

As in the other physical movement techniques, finish the task by completing the common, concluding procedures mentioned at the beginning of this booklet.

### EXERCISE

Answer true or false to the following.

1. Before moving a resident, check to see if help is needed for that particular procedure. \_\_\_\_\_
2. When turning resident toward you, have the resident place his/her far leg over the leg nearest you \_\_\_\_\_

3. It is not necessary to wash your hands often when moving a resident if you have washed them before the procedure. \_\_\_\_\_
4. Provide privacy before carrying out moving techniques. \_\_\_\_\_
5. Turning sheets make moving heavy resident more difficult. \_\_\_\_\_
6. A procedure is a step-by-step direction for performing nursing tasks. \_\_\_\_\_
7. To move resident away from you, place both arms under their far shoulders. \_\_\_\_\_
8. Even a slight movement of the wheelchair could cause an accident. \_\_\_\_\_
9. To move a resident from a wheelchair to a bed, have the person hold on to the belt of your uniform. \_\_\_\_\_
10. It is not necessary to lock the wheelchair when taking a resident from it. \_\_\_\_\_

### LOG ROLLING TECHNIQUES

The log rolling technique is used to move or turn a resident without disturbing the alignment of the body. To align the body is to arrange it in a straight line. It is usually done after spinal surgery, vertebral column injury, or recent back or hip injuries. Two people perform the task with a lift-turn sheet. After doing the preliminary steps, do the following:

1. Elevate the bed to a waist-high horizontal position and lock the wheels. Lower the bed rail on the opposite side to which resident will be turned. Remove the pillow and turn back the bed covers.
2. Both aides are on the same side of the bed. One keeps shoulders and hips straight, the other the thighs and lower legs. Together the aides reach over the resident, grasping and rolling the turn sheet toward the resident.
3. At a given signal, the resident is drawn toward the aides in one single movement, keeping the entire body in a straight position.
4. If permitted, pillows may be used behind the resident's back, head, neck, legs or arms to help maintain their position. Be sure to perform the concluding procedures explained earlier.

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## **ASSISTING A RESIDENT TO WALK (AMBULATE)**

If residents are physically able, they should walk daily. Walking keeps the body active and improves the muscles in legs. It provides residents with a sense of accomplishment and helps them maintain greater independence.

Some residents are able to walk alone without mechanical aids or prostheses. Others need aids like walkers, canes and crutches. They have rubber caps on their tips for safety. These aids are used for residents with good arms strength who need additional support to prevent falls. A physical therapist teaches residents how to use these devices.

Sometimes a gait belt is used during ambulation. The belt is placed around the waist of the resident and is used to held on to the resident in the event of a fall.

After completing the preliminary procedures, assist the resident into a standing position. Place one hand under the resident's bent arm to give her support. Walk slightly behind the resident to one side. Start with the same foot as the resident and keep in step. If possible, have the resident use the hand rail and talk to the person while walking.

Watch for signs of fatigue, check resident's pulse and be on your guard for anything that could cause a fall. After the walk, return to the resident's room and assist the person into a chair or bed. Remove gait belt if used. Carry out each completion procedure.

## **TRANSPORTING FROM BED TO STRETCHER**

1. Carry out the preliminary procedures. Ask another aide to assist you.
2. Lock the wheels of the bed. Raise it to a horizontal position equal to the height of the stretcher. (The stretcher is sometimes called a litter or a gurney.)
3. Push the stretcher against and parallel to the bed. Lock the wheels of the stretcher. Cover resident with bath blanket and fanfold bedding.
4. While one person is beside the litter and another is on the opposite side of the bed, help the resident to move onto the stretcher. If the resident is unable to do so, loosen the downsheet and pull the person onto the stretcher while the aide helps from the opposite side of the bed.

I-12

5. The resident is then strapped to the stretcher and the side rails are raised. The stretcher is pushed from the head so the aide's body can protect the resident's head.

Four people are needed to move an unconscious resident from bed to stretcher: one on the opposite side of the bed, one at the head, one at the foot and one against the stretcher.

Loosen the turning sheet and roll it against the resident. At a given signal, all four act together:

- . The aide at the foot of the bed lifts the feet and legs.
- . The aide at the head of the bed cradles the resident's head and neck with hands under shoulders, arm together.
- . The aide next to the bed lifts and guides the resident's body with a turning sheet.
- . The aide against the stretcher grips the turning sheet with both hands and raises and draws the resident onto stretcher.

When you read your supplementary educational materials as outlined on page one, you'll review the steps on how to move a conscious and unconscious person from stretcher to bed and lift a resident with a mechanical lift. Other pages describe mechanical devices to assist in ambulation and how to use the Hoyer Lift.

In addition to these readings, there is one on back tips for health care providers and pivot transferring techniques. Ask your instructor for these papers after you complete the vocabulary exercises below.

### VOCABULARY

Study these vocabulary words carefully.

- |                 |  |
|-----------------|--|
| 1. litter       | - gurney or stretcher                                  |
| 2. signal       | - a sound used as a command or message                 |
| 3. horizontal   | - flat or level  |
| 4. pivot        | - turn   |
| 5. elevate      | - raise to a higher place                              |
| 6. ambulate     | - walk or move about                                   |
| 7. independence | - freedom from control of others                       |
| 8. mechanical   | - having to do with machinery or tools                 |
| 9. prosthesis   | - artificial replacement for missing parts of the body |
| 10. conscious   | - knowing about one's surroundings                     |
| 11. gait belt   | - place around resident's waist to help in ambulation  |
| 12. fanfold     | - procedure for folding a sheet                        |

I-13

## VOCABULARY EXERCISES

Write the vocabulary word that BEST defines each of the following statements.

litter  
signal  
horizontal  
pivot

elevate  
ambulate  
independence  
mechanical

prosthesis  
conscious  
gait belt  
fanfold

### DEFINITION

### VOCABULARY WORD

1. freedom
2. artificial replacement
3. knowing what's going on
4. sheet fold
5. turn
6. move about
7. level
8. about machinery
9. gurney
10. helps in ambulation
11. raise higher
12. message

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## TRANSPORTING RESIDENTS COMPETENCY TEST

1. List three actions to be performed during preliminary procedures for moving residents.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  
2. List three actions to be performed during concluding procedures for moving residents.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_

Circle the letter that is the BEST answer to these statements.

3. Staying in one position for a long time leads to
  - a. improved circulation
  - b. skin breakdown
  - c. more flexible joints
  - d. greater comfort
  
4. Body alignment can be maintained with
  - a. blanket
  - b. catheter
  - c. pillow
  - d. turn sheet
  
5. The purpose of a gait belt is
  - a. freedom from control of others
  - b. to put around resident while ambulating
  - c. to substitute for a prosthesis
  - d. to serve as a decorative part of the uniform
  
6. A log roll technique is used to
  - a. move resident without disturbing body alignment
  - b. move resident to wheelchair
  - c. help resident sit up in bed
  - d. all of the above
  
7. To assist the resident to sit up in bed
  - a. keep feet close together
  - b. keep your face near resident's face
  - c. lock hands with resident
  - d. lock arms with resident

I-15

8. To prevent a decubitus ulcer
  - a. keep head of bed raised
  - b. tuck sheets tightly around the bed
  - c. change resident's position often
  - d. have resident take proper medication
  
9. To move a helpless resident to the head of the bed
  - a. position feet close together
  - b. get someone to help you
  - c. tighten drawsheet
  - d. lower bed to horizontal position
  
10. To move a resident with an IV
  - a. avoid stress on tube
  - b. twist the tube
  - c. remove tube until moving procedure is over
  - d. none of the above

Place the letter from Column II that BEST defines the word in Column I.

**COLUMN I**

**COLUMN II**

- |                        |                               |
|------------------------|-------------------------------|
| 1. ___ alignment       | A. protects skin              |
| 2. ___ decubitus ulcer | B. help in ambulation         |
| 3. ___ prosthesis      | C. to turn                    |
| 4. ___ litter          | D. drains fluid from the body |
| 5. ___ fanfold         | E. bedsore                    |
| 6. ___ drawsheet       | F. stretcher                  |
| 7. ___ catheter        | G. move about                 |
| 8. ___ elevate         | H. way to fold sheet          |
| 9. ___ gait belt       | I. straight line              |
| 10. ___ ambulate       | J. raise                      |
| 11. ___ pivot          | K. artificial replacement     |



## ANSWER SHEET - TRANSPORTING RESIDENTS

### VOCABULARY EXERCISE H-7.8

- |                 |                |
|-----------------|----------------|
| 1. lock         | 6. gripping    |
| 2. drawsheet    | 7. preliminary |
| 3. aligning     | 8. concluding  |
| 4. transporting | 9. expose      |
| 5. decubiti     |                |

### EXERCISE H-10.11

- |          |           |
|----------|-----------|
| 1. true  | 6. true   |
| 2. true  | 7. true   |
| 3. false | 8. true   |
| 4. true  | 9. false  |
| 5. false | 10. false |

### VOCABULARY EXERCISE H-14

- |                 |               |
|-----------------|---------------|
| 1. independence | 7. horizontal |
| 2. prosthesis   | 8. mechanical |
| 3. conscious    | 9. litter     |
| 4. fanfold      | 10. gait belt |
| 5. pivot        | 11. elevate   |
| 6. ambulate     | 12. signal    |

### COMPETENCY TEST

- |                  |                  |
|------------------|------------------|
| 1. Answers vary. | 2. Answers vary. |
| 3. b             | 4. c             |
| 5. b             | 6. a             |
| 7. d             | 8. c             |
| 9. b             | 10. a            |
| 1. I             | 7. D             |
| 2. E             | 8. J             |
| 3. K             | 9. B             |
| 4. F             | 10. G            |
| 5. H             | 11. C            |
| 6. A             |                  |

## **SOURCES FOR SUPPLEMENTARY MATERIALS**

Mullen, Lynn, and Fouts, Janet. Nursing Assistant Training Manual. Oregon: Medical Express, 1989, pp. 151-153.

Geriatric Authority of Holyoke. "Hoyer Comfort Seat 110 and Comfort Commode Seat III." Holyoke, 1990 (Photocopied).

Geriatric Authority of Holyoke. "Restraints and Safety Hazards." Holyoke, 1990 (Photocopied).

Back Tips for Health Care Providers. Daly City: Krames Communications, 1989, pp. 6-7.

# APPENDIX B

## G.A.H. WORKPLACE EDUCATION PROGRAM

### Student Interview form

1. What specific goals do you feel you have achieved while enrolled in the program?

Charlene is a new student who is preparing to take the G.E.D. exam. She said that she has had an increase in her self-esteem as well as in her academic level since entering the program.

2. Have your goals changed? Have you set any new goals?

Charlene responded yes. She said that she is seriously considering entering an accredited L.P.N. program after taking her G.E.D.

3. In what direction would you like see the program go in the future?

Charlene responded that she was satisfied with the program's direction at present.

4. Do you have any recommendations for the program?

Charlene suggested holding the classes in a different location in the building, one more accessible than the fourth-floor classroom.

## G.A.H. WORKPLACE EDUCATION PROGRAM

### Student Interview form

1. What specific goals do you feel you have achieved while enrolled in the program?

John told me that he felt the program was instrumental in successful passing of the state firefighter examination (John hopes to become a fireman after his training).

2. Have your goals changed? Have you set any new goals?

John said that, before entering the program, he wanted to be a firefighter, but did not feel that he had the ability to pass the exam. Now, however, he feels that the program built up his academic skills and self-esteem to such a level that he had no trouble taking and passing the exam.

3. In what direction would you like see the program go in the future?

John said he would like to see the program continue in much the same manner it has been (John still comes to class regularly in an effort to further increase his academic skills).

4. Do you have any recommendations for the program?

John said that he would like to see the series of workshops continue during the next grant year. He also mentioned moving classes to a more accessible location.

**BEST COPY AVAILABLE**

## G.A.H. WORKPLACE EDUCATION PROGRAM

### Student Interview form

1. What specific goals do you feel you have achieved while enrolled in the program?

Scott is presently a freshman at Holyoke Community College. He responded that participating in the program has helped him a great deal in the doing of his school work/homework, etc.

2. Have your goals changed? Have you set any new goals?

Scott replied yes. He said that now that he is enrolled in college and doing well, he hopes to find a better job upon graduation (he is presently a janitor in the House-keeping Department).

3. In what direction would you like see the program go in the future?

Scott said that he was pleased with the direction of the program at present. He said he was particularly happy with the individualized instruction offered by the program. He also said that he would like to see more workshops dealing with issue relative to his department.

4. Do you have any recommendations for the program?

Scott said he would like to see some of the job. Specific curricula developed for his department (he felt that too much attention was focused on the curricula for the nursing department).

## **G.A.H. WORKPLACE EDUCATION PROGRAM**

### **Student Interview form**

**1. What specific goals do you feel you have achieved while enrolled in the program?**

Fran responded that the most important goal she achieved in the program was obtaining her G.E.D.

**2. Have your goals changed? Have you set any new goals?**

Fran said that the only thing that has changed for her is her desire to continue with more education (perhaps some college work) sometime after she retires.

**3. In what direction would you like see the program go in the future?**

Fran said that she would like to see more workshops and presentations during this grant cycle. She also mentioned that she would like some to these to focus on issues connected with her department (dietary-Fran is a cook).

**4. Do you have any recommendations for the program?**

Fran mentioned that she would like to see some job related curricula developed for the dietary department.

**G.A.H. WORKPLACE EDUCATION PROGRAM**

**Student Interview form**

**1. What specific goals do you feel you have achieved while enrolled in the program?**

Sarah is a native of Cambodia. She entered the program in order to improve her English skills (E.S.L.). She said that she is very pleased with her improvement and credited it to her participation in the classes.

**2. Have your goals changed? Have you set any new goals?**

Sarah said that she simply wants to continue in the program in order to improve her written and conversational skills more.

**3. In what direction would you like see the program go in the future?**

Sarah said that she wants to see the classes continue as they are. She said that she preferred the individualized instruction and the amount of attention that set-up afforded.

**4. Do you have any recommendations for the program?**

Sarah said that the only recommendation which she could think of was a different location for the classroom, one more accessible (this seems to be the most common complaint on the part of program participants).



**G.A.H. WORKPLACE EDUCATION PROGRAM**

**Student Interview form**

**1. What specific goals do you feel you have achieved while enrolled in the program?**

Marie said that the most important goal she achieved in the course of the program was the obtaining of her G.E.D. She also remarked that the program was important in the building-up of her self-esteem.

**2. Have your goals changed? Have you set any new goals?**

Marie will be retiring from G.A.H. next year. She said that the program has instilled enough confidence in her that she feels capable enough to embark upon a new career, perhaps in Speech or Occupational Therapy.

**3. In what direction would you like see the program go in the future?**

Marie said that she would like to see the program continue along the same way it has since its beginning (She was one of the first G.A.H. employees to enter the program).

**4. Do you have any recommendations for the program?**

Marie said that she would like to see more job-related curriculum developed for her occupational area (housekeeping). Incidentally, Marie was the only employee to complete all of the Nurse's Aide curricular, and she is not a Medical Worker!

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# APPENDIX C

Massachusetts Career  
Development Institute  
Contact P. Camerota  
(413) 532-2683

NEWS RELEASE

The Massachusetts Career Development Institute, in conjunction with the Geriatric Authority of Holyoke, is pleased to announce an open house and ceremony of recognition for their Workplace Education Program. Geriatric Authority employees who have participated in this program which opened in August of 1991, will be honored at the ceremony on May 4 at 2:00 p.m. in the Geriatric Authority dining room.

The Massachusetts Career Development Institute and Geriatric Authority were awarded a federal grant by the U.S. Department of Education for a Workplace Literacy Program to serve 100 employees at GAH. The purpose of the program is to improve academic abilities among employees, to enhance the self-esteem of participants and to facilitate upward career mobility, promotional opportunity and earning power.

The health care industry will be one of the nation's fastest growing industries in the coming years. Many pressures on the industry make employee skill upgrading a necessity, especially for support personnel. Among these pressures are the changing health care needs of the aging American population, the increasing need for health care personnel to communicate clearly with patients

- MORE -

(a growing and disproportionate number of people seeking medical care have limited basic skills and limited English speaking ability), technological advances in treatment, heavy reliance on recent immigrants, low-skilled minorities (increasing minority youth) and other educationally-disadvantaged groups in support and entry level jobs (especially in nursing homes), time lost by managers and supervisors who must watch for support personnel mistakes, and high support staff turnover. (note: Nurses' aides, dietary staff, and other lower level workers have historically been paid low wages, thus contributing to the turnover rate.) Moreover, while rising cost and an increased emphasis on self-care are, in general, reducing the length of hospital stays, many patients remaining for longer periods of time often require highly specialized attention, thus requiring more highly trained staff.

To a high degree, the quality of care depends heavily on the ability of support and entry level staff--nursing aides, dietary aides, housekeeping, maintenance workers, and others--to perform their jobs well. These people must be able to communicate clearly with patients and to carry out instruction for administering medications and following nurses' orders and doctors' treatment plans. They must be able to operate new equipment and interpret the finding, follow strict measurements regarding patients' diets, know what procedures to follow in case of emergency, handle the day-to-day maintenance of their institutions, and so on--all

- MORE -

requiring solid basic skills.

Awareness of these issues is growing within the industry, and many hospitals, nursing homes, and allied groups have already begun to offer employees basic skills services through workplace literacy programs such as the Geriatric Authority of Holyoke/Massachusetts Career Development Institute program.

GERIATRIC AUTHORITY OF HOLYOKE  
CERTIFICATE RECIPIENTS

MARIE BARRY  
JULIE BOUTIN  
ANNETTE BRIDGEFORTH  
MARCIA DOYLEY  
DOROTHY FINGER  
ROSEMARY GAMBLE  
MARION GIBSON  
MARIE GORECKI  
NANCY GUIEL  
ANNA HILLARD  
FRANCES HURLEY  
BENETTA JACKSON  
JOAN KAEBLE  
PAMELA KNAPP  
MARGARET KNIGHTLY  
JENNIFER KUBETIN  
CAROL LA BOURSOLIERE  
KATHY MASAITIS  
SCOTT MILKIEWICZ  
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# Workplace Education Program

Awards this

*Certificate of Recognition*

to

For

*Achievement in Workplace Education Classes*

This \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

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Funded by the U.S. Department of Education



UNITED STATES DEPARTMENT OF EDUCATION  
OFFICE OF VOCATIONAL AND ADULT EDUCATION  
NATIONAL WORKPLACE LITERACY PROGRAM

GERIATRIC AUTHORITY OF HOLYOKE  
WORKPLACE LITERACY PROJECT  
FINAL EVALUATION REPORT  
OCTOBER 31, 1993

SUBMITTED BY

THE MASSACHUSETTS CAREER DEVELOPMENT INSTITUTE  
SPRINGFIELD, MASSACHUSETTS

PROJECT EVALUATOR

THOMAS J. RUSCIO, M.ED., CAS, CRC/LRC, PROFESSOR

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MASSACHUSETTS CAREER DEVELOPMENT INSTITUTE

HOLYOKE GERIATRIC AUTHORITY

NATIONAL WORKPLACE LITERACY PROJECT

PROJECT EVALUATION REPORT

FOR THE PERIOD ENDING

AUGUST 31, 1993

I. INTRODUCTION

The national workplace literacy program was initially authorized under Public Law 100-202. Current literacy programs have been authorized and federally funded through amendments to the Adult Education Act. The federal regulations provide "assistance for demonstration projects that teach literacy skills needed in the workplace through exemplary education partnerships between business, industry, or labor organizations and educational organizations". (Federal Register, Vol 54, No 159, p.34418)

The Massachusetts Career Development Institute, Incorporated (MCDI) developed and provided a program of Workplace Literacy for one hundred five (105) individuals during the 1992-93 project year. This was the second round of funding for this program. The participants have been concurrently employed by the Geriatric Authority of Holyoke, Massachusetts (GAH), a major non-profit nursing home and rehabilitation facility. MCDI staff provided English as a Second Language, Adult Basic Education, and High School Equivalency (GED) Preparation instructional programs which have focused on language, communication, cognitive processes, and content knowledge needed to function effectively and productively in the workplace.

The MCDI staff also provided ongoing educational and personal adjustment counseling, motivational sessions, and pre and post testing to establish initial functional levels and determine improvements in workplace literacy and productivity. This project is a continuation of MCDI's overall response to the problems of functionally illiterate adult workers and other employees whose continued employment and upward mobility is limited by deficiencies in any or all of the following areas: analytical thinking, reasoning and problem solving, listening, speaking, reading or writing, mathematics and specific workplace knowledge.

The following is an overview of the project goals and objectives, the training program, demographics information including trainee characteristics and trainees job characteristics, the evaluation design and evaluation results including the specific goals, measurements and outcome assessments of the MCDI-GAH Workforce Literacy Project

(1)



for the period ending August 31, 1993. The results of the assessments are provided along with a narrative analysis of the outcomes to this date. Finally, conclusions of project effectiveness and recommendations for future program development complete this external evaluation report.

## II. PROJECT GOALS AND OBJECTIVES

In its initial response to the Department of Education's solicitation for national workplace literacy programs, MCDI in 1992 engaged several businesses and employers pertaining to workplace literacy needs in order to identify a partner which recognized the need to upgrade employees' skills and demonstrated the commitment to implement a program of this nature. The Geriatric Authority of Holyoke (GAH), a public nonprofit agency which employs 310 people in a range of occupations which serves the allied health and human service needs of the elderly in conjunction with Local 1459, United Food and commercial Food Workers Union AFL-CIO, was determined to be the appropriate partner. This partnership has continued during this second year of the project.

The project has continued to provide educational development skills to GAH employees. Focus of the program is to provide Adult Basic Education, English as a Second Language and High School equivalency (GED) services that are consistent with workplace requirements and job retention or enhancement of upward mobility opportunities. The specific objectives have included the following:

- A. Provide appropriate educational services for 75-100 employees during the project period.
- B. Assess all GAH employees who are interested in participating in the program.
- C. Provide each Adult Basic Education or English as a Second Language participant a set of educational experiences that will allow 75% of them to demonstrate a two grade level increase in basic reading skills.
- D. Provide each High School Equivalency (GED) participant educational experiences that will ensure that 85% of those who take the GED exam will pass it.
- E. Provide appropriate educational experiences to program participants that will result in 85% of those individuals taking the State Nurses Aide License Exam to pass it.
- F. Demonstrate that 85% of the individuals participating in the project have an improved level of self-esteem.
- G. Demonstrate improvement in productivity and/or quality of work by 85% of those individuals participating in this project.

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- H. Increased motivation, interest in career, improvement in workplace literacy skills and satisfaction with the educational programs by 85% of the participants.
- I. Development of a successful model of Workplace Literacy education that can be expanded and replicated locally or in other areas of the country.

### III. PROJECT TRAINING PROGRAMS

The MCDI as grant recipient provided the Geriatric Authority of Holyoke with programs of on-site workplace education. The programs provided included Adult Basic Education, English as a Second Language and High School Equivalency (GED) educational units. In addition, specific job related curricula was further developed and refined along with a preparation program for the Nurses Aide examination. Support services and counseling to assist participants with personal and work adjustment problems, motivation and self confidence, employee responsibilities and career development issues were also provided on a daily basis. Emphasis continued to be placed on dealing with actual or potential problems in a timely and effective manner emphasizing participants' transferable skills and enhancement of career-workplace performance and opportunities.

#### A. Outreach and Recruitment

Recruitment strategies were implemented during planning meetings and small group orientation meetings conducted by union, MCDI and GAH staff. The MCDI staff and program partners were available to answer questions and address concerns which employees may have had. A key component to the outreach and recruitment effort has continued to be to make employees feel comfortable about the need for and importance of upgrading work related skills and enhancing job security and career advancement. Confidentiality surrounding job performance and literacy issues has also continued to be important.

#### B. Assessment and Intake

The initial screening and assessment involved the administration of a battery of tests including the Test of Adult Basic Education and other instruments as appropriate. Upon development of the assessment profiles and the selection of an employee for program services, the MCDI staff developed an individual educational plan (IEP) that outlined the employee's goals, basal educational achievement and the appropriate educational program.

C. Adult Basic Education

The MCDI Adult Basic Education program has been designed to provide individualized learning to those participants who need to develop, improve and/or reinforce the basic skills of reading, language and mathematics. Strong emphasis is placed on attitudinal and behavioral development along with classroom training that will result in successful job retention and career enhancement.

D. High School Equivalency (GED)

The purpose of the GED program is to prepare employees to take and pass the High School Equivalency Test in order to improve worker performance and be qualified for promotional opportunities and/or job advancement. Lectures, class discussions and assignments focus on concepts, ideas and problem solving skills which enable the employee to think logically, coherently and effectively as well as understand and apply fundamental English, Math and Science skill requirements related to job performances requiring at least a high school education.

E. English as a Second Language

Employees whose native language is not English were provided the opportunity to utilize the educational space on-site at the GAH to develop listening and communication skills in English. A variety of educational strategies are utilized by staff including the grouping of various individuals who are studying similar concepts; one-on-one tutoring, group presentations; and the use of computer-assisted instruction (CAI) units for drill and practice as well as reinforcement. The emphasis upon individualized learning through these approaches has been most helpful in motivating participants to learn the fundamentals of English communication at his/her own rate.

F. Job Related Curricula

The job related curricula was developed to specifically address the work knowledge and skill based aspects of the specific job requirements of the participating employees. Over thirty five specific workplace education topics were developed and refined during the second round of the project for the participating employees, each with their own competency based tests. The job related curricula included content for nursing aides-assistants, housekeeping, maintenance and food service positions. Topical areas taught ranged from oral and rectal temperatures, bathing, dressing and hair care of residents, to bedmaking, moving and lifting patients, painting and maintenance of facilities.

#### IV. TRAINEE CHARACTERISTICS

As part of the total evaluation process, descriptive data was again collected via a trainee and trainee job characteristics data form. Descriptive information on trainee characteristics during this project period includes age, sex, marital status, race, number of dependent children, country of origin, years of education, MCDI program enrollment, and hours of instruction completed. The following tables provide graphic results of this data.

TABLE I  
Age of Trainees

AGE RANGE	NUMBER	PERCENT	N=105
18 - 25 years	33	31.43%	
26 - 35 years	37	34.28%	
36 - 45 years	24	22.86%	
46 - 55 years	10	9.52%	
over 55 years	2	1.91%	

As can be seen from Table I, the majority of the employee participants were 35 years of age or younger. Only 11.43% were 46 years of age or older.

TABLE II  
Sex of Participants

GENDER	NUMBER	PERCENT	N=105
Males	14	13.33%	
Females	91	86.67%	

Table II indicates the majority of employee participants were women. This continues to be consistent with the high ratio of female employees at the Geriatric Authority of Holyoke.

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**TABLE III**  
**Race-Ethnic Background**

RACE-ETHNIC BACKGROUND	NUMBER	PERCENT	N=105
Black-African American	12	11.43%	
Hispanic-Latin American	27	25.71%	
Asian - Pacific	2	1.90%	
White - Caucasian	64	60.95%	

The racial-ethnic background of the participants included racial and cultural minorities reflective of the populations of the Greater Holyoke and Western Massachusetts urban areas although there was a slight decrease from the previous year. A total of 39.04% of the participants were of a racial-cultural minority as compared to 43.75% in the first year of the project.

**TABLE IV**  
**Marital Status**

STATUS	NUMBER	PERCENT	N=105
Married	52	49.52%	
Single	49	46.67%	
Divorced	4	3.80%	

(6)



**TABLE V**  
**Marital Status by Sex**

STATUS	NUMBER	PERCENT	N=105
Married Male	2	1.90%	
Single Male	11	10.47%	
Married Female	50	47.63%	
Single Female	38	36.19%	
Divorced Male	0	0.00%	
Divorced Female	4	3.80%	

Tables IV and V identify the marital status and marital status by sex of the employee participants. The majority are married (49.52%) and female (47.63%). Single females constituted the next largest group (36.19%).

**TABLE VI**  
**Dependent Children**

DEPENDENTS	NUMBER	PERCENT	N=105
No. Dependents	46	43.81%	
At least one dependent child	23	21.90%	
Two or more children	30	28.57%	
Three or more children	6	5.71%	

As can be seen from Table VI, the majority (56.19%) of the participants have at least one dependent child. A total of 36 (34.28%) have two or more dependent children.

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**TABLE VII**  
**Country of Origin**

COUNTRY	NUMBER	PERCENT	N=105
United States	91	86.67%	
Caribbean	12	11.43%	
Europe	1	0.95%	
Asia-Pacific Islands	1	0.95%	

While Table VII shows the majority of the participants were born in the U.S., it would appear, given the race-ethnic background data in Table III, that at least some are first generation. In addition, 14 or 13.33% immigrated to the U.S.

**TABLE VIII**  
**Years of Education**

YEARS	NUMBER	PERCENT	N=105
Less than 4 years	0	0.00%	
4 -- 6 years	1	0.95%	
7 -- 9 years	12	11.43%	
10 -- 11 years	22	20.95%	
12 years or more	70	66.67%	

More than half (66.67%) of the participants reported having at least the equivalent of a completed high school education. While 34 or 32.385% reported at least 7 to 11 years of formal education, 35 of 105 (33.33%) did not either enter or complete courses at the secondary level.

**TABLE IX**  
**Enrollments in MCDI Workplace Literacy Programs**

PROGRAM	NUMBER	PERCENT	N=105/161*
Job Related Curricula	103	98.10%	
Adult Basic Education	31	29.52%	
GED	8	7.62%	
English as a Second Language	9	8.57%	
Other (LPN/CP)	10	9.52%	

\* 56 employees participated in more than one program.

The majority of the employees, 103 or 98.10% were enrolled in the specific job related or workplace curricula. However, as indicated in Table IX, the need for the other areas of training especially Adult Basic Education was also strong.

**TABLE X**  
**Total Hours and Average Hours of Instruction Completed**

CATEGORY	TOTAL HOURS OF INSTRUCTION	AVERAGE PER PARTICIPANT	N=105
Job Related Curricula	19776 HOURS	103 HOURS	
Adult Basic Education	2976 HOURS	96 HOURS	
GED	1536 HOURS	192 HOURS	
English as a Second Language	864 HOURS	96 HOURS	

The majority of the participants completed an average of almost 100 hours of instruction in the ABE, and ESL programs and over 100 hours of applied instruction in the Job Related Curricula and GED Program.

## V. TRAINEE JOB CHARACTERISTICS

As a part of the demographic data collected, the job characteristics of each of the trainees was identified in terms of job titles, full or part-time employment, years of employment, second job or other employment and average hourly wage. The following tables provide the resulting information.

TABLE XI  
Job of Participants

JOB TITLE	NUMBER	PERCENT	N=105
Nursing Assistant	94	89.52%	
Housekeeper	4	3.82%	
Maintenance Worker	3	2.85%	
Cook	1	0.95%	
Other	3	2.85%	

The majority of participants for the workplace literacy project were employed within the nursing department at the Geriatric Authority of Holyoke as nurses aides or nursing assistants. In addition, there were some participants from the housekeeping, maintenance, food service and office service departments.

TABLE XII  
Employment Status

STATUS	NUMBER	PERCENT	N=105
Part Time	33	31.43%	
Full Time	72	68.57%	

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**TABLE XIII**  
**Years of Employment**

YEARS	NUMBER	PERCENT	N=105
Less than 6 months	0	0.00%	
6 - 12 months	17	16.20%	
1 - 2 years	36	34.28%	
2 - 5 years	49	46.67%	
5+ years	3	2.85%	

**TABLE XIV**  
**Additional Employment**

SECOND JOB	NUMBER	PERCENT	N=105
Yes	22	20.95%	
No	83	79.05%	

As can be seen in Tables XII, XIII, and XIV, the majority of the participants were employed full time, worked an average of 2 to 5 years in their positions and did not have a second job. However, it is also significant that over 50% were employed two years or less and approximately one third (31.43%) were employed part-time with 22 holding a second or additional job.

**TABLE XV**  
**Range of Hourly Wages**

HOURLY RATE	NUMBER	PERCENT	N= 105
\$6.00 - \$6.49	2	1.90%	
\$6.50 - \$6.99	3	2.85%	
\$7.00 - \$7.49	38	36.19%	
\$7.50 - \$7.99	8	7.61%	
\$8.00 - \$8.49	8	7.61%	
\$8.50 - \$8.99	43	40.95%	
\$9.00 - \$9.49	0	0.00%	
\$9.50 - \$9.99	1	0.95%	
\$10.00 - \$10.49	1	0.95%	
\$10.50 - 10.99	0	0.00%	
\$11.00 - \$11.49	0	0.00%	
\$11.50 - \$11.99	1	0.95%	

Table XV indicates the range of hourly wages of the participants. The highest percents were in the \$7.00 - \$7.49 and \$8.50 - \$8.99 range which is also reflective of the demand for highly skilled employees at GAH in such positions as nurses assistant and the number of months/years of employment at GAH.

## VI. PROJECT EVALUATION DESIGN

The Massachusetts Career Development Institute and Geriatric Authority National Workforce Literacy Project evaluation design followed the overall recommendation of Thomas G. Sticht, author of Evaluation National Workplace Literacy Programs (April 20, 1991) and MCDI's first year's evaluation format. For this evaluation the Project Director also requested that the evaluation incorporate any additional data on the following: Non-completion students if any, what are they doing now? Literacy gains, student reactions, principles, techniques and content learned, behavioral changes in job performance and results.

In addition to the descriptive data collection on the characteristics of the participants and the participant's jobs presented in the previous sections, the evaluation design

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incorporated measurements and outcome assessments in two major categories, Literacy Abilities and Work Productivity Indicators.

**A. Literacy Abilities**

Literacy abilities that were to be assessed included:

1. English Language Communication Abilities including listening, speaking, reading and writing skills.
2. Cognitive Processes including reasoning and problem solving abilities.
3. Content Knowledge including math skills, workplace, community and/or social knowledge related to functioning in the workplace.
4. Secondary Education leading to a High School Diploma or Equivalency (GED).

**B. Work Productivity Indicators**

Work productivity related indicators to be assessed were:

1. Ability to converse with supervisor, co-worker on job related instructions or directions, ability to read and write job materials, and general employment characteristics.
2. Attendance, work performance, productivity and job retention.

In order to measure literacy abilities and work productivity related to the MCDI-GAH Workforce Literacy Project measured outcomes for each category were identified.

**C. Measured Outcomes for Literacy Abilities**

The measured outcomes for literacy abilities included:

1. A minimum two grade level improvement in 75% or more of the participants as measured by the Test of Adult Basic Education.
2. A minimum of 85% of those eligible to take the GED examination will achieve the High School Equivalency.
3. A minimum of 85% of those eligible who take the State Nursing License Examination will pass and achieve the Nurses Aid License.

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4. At least 85% or more will demonstrate average to above average trainee employment characteristics as measured by the student evaluation.
5. At least 85% or more will demonstrate improved self esteem as measured by the modified Self Concept Scale.

D. Measured Outcomes for Work Productivity

The measured outcomes for work productivity were identified as the following:

1. Trainee performance will include at least 85% or more who demonstrate average to above average employment characteristics as measured by the Trainee performance evaluation form.
2. At least 85% of Geriatric Authority of Holyoke employees will demonstrate improved productivity and quality of work as measured by supervisors evaluations and employee records.
3. A minimum of 85% or more of the participants will demonstrate the ability to get to work on time and on a regular attendance basis as measured by attendance records.
4. Employment records will demonstrate improved job retention and reduced employee turnover for literacy project participants and graduates.

VII. OUTCOME DATA AND ANALYSIS OF RESULTS

For one of the outcomes measuring literacy abilities, the pre-screened participants who were determined to be in need of basic education services were administered a pre-test. This test was the reading-comprehension section of The Test of Adult Basic Education. Post-testing utilizing the same test was administered approximately six months later. Table XVI provides a breakdown of the outcomes and results.



**TABLE XVI**  
**Test of Adult Basic Education English Language - Reading Abilities**  
**Pre-Test and Re-Test Scores**

NUMBER/PERCENT PARTICIPANTS	PRE-TEST GRADE LEVEL	RE-TEST GRADE LEVEL	DIFFERENCE
105/105	voc 7.08	voc 9.52	+2.44 34.5%
100%	comp 8.01	comp 10.36	+2.35 29.34%
	total 7.46	total 9.94	+2.48 33.24%

As can be seen from Table XVI, all of the participants or 100% were both pre and re-tested during this project period. The participants' vocabulary grade level progressed from a pretest score of 7.08 grade level to a grade level equivalent to 9.52. This was a 2.44 (34.5%) grade level increase during this period. Similarly, the participants improved their reading comprehension grade level from 8.01 to 10.36. This was a 2.35 (29.34%) grade level increase.

In both instances the grade level increases exceeded the two grade level improvement established as the goal for this measured outcome. It also exceeded the projected goal of 75%, this was mainly due to the entry of many participants during the initial project period and the pre and post testing completions of participants who entered during this second year of the project.

Table XVII provides a breakdown of the next two literacy measured outcomes, namely the successful passing of the High School Equivalency Test (GED) and the Nurses Aide Examination for those participants evaluated as meeting the prerequisite requirements.

**TABLE XVII**  
**High School Equivalency (GED) and Nurses Aide Examinations**

EXAM	NUMBER OF PARTICIPANTS	NUMBER PASSED	PERCENTAGE
High School Equivalency (GED)	3	3	100%
Nurses Aide	0	0	---

To date, three (3) of the participants of the MCDI Literacy Project have been identified as being qualified and ready to take the High School Equivalency Examination (GED). All three of these participants (100%) successfully passed this examination. As of this evaluation report, no participants have taken the Nurses Aide examination which also has not been offered during this project period. In addition, there are approximately six (6) additional participants who are currently taking additional courses on a part-time basis in order to obtain eligibility to become Licensed Practical Nurses (LPN). Several other participants are expected to be eligible to take the high school equivalency in the next few months.

Developed by the Massachusetts Career Development Institute in partnership with the Geriatric Authority of Holyoke, a Student Evaluation Form was again utilized during this project period, in order to assess the outcomes of the basic literacy and work related curriculums. The project participants were evaluated on five core variables related to their job performance and the impact of their literacy educational training program. The five variables were phrased in the form of questions with a rating scale of one (1) to five (5) attached to each. One represented unacceptable performance or no improvement, three (3) represented average performance and five (5) was outstanding or exceptional. The five assessment variables were:

Does the student-employee follow direction better?

Has the student-employee's attendance at work improved?

Does the student-employee understand verbal instructions better?

Has the student-employee's required written work improved?

Has the student-employee's productivity increased?

Table XVIII provides the results of student evaluations on these questions.

TABLE XVIII  
Student-Employee Performance Evaluation

TIME/DATES	NUMBER/PERCENTAGE OF PARTICIPANTS	AVERAGE SCORE
May 1993	60 of 63	4.518/5
	95.23%	90.4%
June 1993	41 of 42	4.496/5
	97.62%	89.9%

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The student evaluation results indicate that the majority of the student employees achieved an above average to excellent rating as a group average in both the May 1993 (90.4% or 4.518 average score out of a scale of 5) and the June 1993 evaluation cycle (89.9% or 4.496 out of 5 average score). In addition, the goal of achieving 85% or more of the participants who achieved above average or better ratings was exceeded during the first testing cycle (95.23%) and surpassed during the second testing period (97.62%).

In order to assess the student employee's reactions and satisfaction with their Literacy in the Workplace program, and their work performance on the job, a student-employee satisfaction scale was added to the evaluation data form. A rating scale from not satisfied (1) to exceptionally satisfied (5) was utilized. Table XIX provides the overall results.

TABLE XIX  
Student-Employee Satisfaction

TIME/DATES	NUMBER/PERCENTAGE OF PARTICIPANTS	AVERAGE SCORE
May 1993	60 of 63	4.31/5
	95.23%	86.2%
June 1993	41 of 42	4.29/5
	97.62%	85.8%

As can be seen from the results in Table XIX, at least 85% of the student employees' reactions to their program included ratings of at very satisfied or better. This is consistent with the anecdotal information and feedback from the majority of the student employees who appear to be generally most pleased with the work related content and practical application of the curriculum as well as the individualized attention and support provided by the staff.

The Massachusetts Career Development Institute's Trainee Performance Evaluation was an assessment tool utilized to measure both literacy abilities and productivity in the workplace. In addition to attendance, safety compliance, and comments relative to employee-trainee performance on the job and in the work related curricula, the supervisor was required to rate the employees performance on nine employment characteristics. The nine variables were:

Quality of Work

Initiative

Independence

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Following Directions

Comprehension/Retention

Response to Supervision

Relationship with Coworkers

Attitude/Motivation

Employment Development/Rate of Progress

These characteristics were converted to a scaled score from zero(0) for needs improvement to two(2) for above average performance. Table XX provides the results of the Trainee Performance assessments of the MCDI-GAH Literacy Project participants.

TABLE XX  
Trainee Performance Evaluations

TRIAL DATES	NUMBER/PERCENT OF PARTICIPANTS	SCALED SCORE	MEAN SCORE
May 1993	60 of 63 95.23%	99.925	1.665/2 83.25%
June 1993	41 of 42 95.23%	67.35	1.683/2 84.15%

As can be seen from Table XX, in the initial trainee performance evaluation 60 of 63 participants were evaluated and as a group they achieved a mean score of 83.25% or 1.665 out of 2. In the second testing cycle, 40 of 43 participants were tested and they achieved a mean score of 84.15% or 1.683 out of 2. The results of the two testing cycles are most consistent and are indicative of an average to above average rating for these project participants on the nine trainee performance variables related to their training, employment and performance on the job. In addition, the goal of 85% of the participants demonstrating average to above average ratings was surpassed with 95.23% achieving this goal.

The relationship of self-esteem to literacy abilities and work performance and productivity has been one of the basic premises upon which the Massachusetts Career Development Institute in partnership with the Geriatric Authority of Holyoke, Inc. Literacy in the Workplace Project has been based. The theoretical assumption has been that as literacy skills improved so would work skills, work productivity and as a result enhanced self-esteem would be highly related to both.

In order to assess improvements in self-esteem, a modified version of the Tennessee Self-Concept Scale was again utilized during this project period. This instrument included 75 items in which the participant rated their responses in a Likert type scale from a valence of 1 disagree to 5 agree. Scoring was directionally corrected so that the higher the circled responses, the higher the self-esteem score. Only total scores were tabulated. Table XXI provides the results of the testing during this project year.

TABLE XXI  
Modified Self Concept Scale

TESTING GROUP	PRE-TEST SCORE	RE-TEST SCORE	PERCENTAGE DIFFERENCE
N = 63	2.894/5	3.715/5	+16.42%
N = 42	2.879/5	3.748/5	+17.38%

The results of the pre-test and re-test self-concept scores for both testing groups clearly show an increase in self-esteem. There was an average increase of 16.42% from 2.894 out of 5 to 3.715 out of 5 for 63 of the participants in the first testing cycle and an average increase of 17.38% from 2.879 to 3.748 out of 5 for 42 of the participants in the second testing cycle. The lower percentage of retests in the second cycle is largely due to some of the participants later dates of entry into the literacy program where more time in the program is needed before retesting.

Attendance and retention were the final two measured outcomes for the productivity indicators which were to be assessed. These were assessed not just in terms of on the job performance but in terms of attendance and retention in the literacy program as a whole. Table XXII provides the results of the overall attendance and retention rates.

TABLE XXII  
Attendance and Retention

FACTOR	PERCENTAGE LOSS	SUCCESS RATE
Attendance	2.98%	97.02%
Retention	0.00%	100%

The goal of the project was to achieve a minimum success rate of at least 85% in both attendance and retention. As can be seen in Table XXII, this rate was more than met (97.02% in attendance) and exceeded (100% in retention). Much of these exceptional success rates appears to be highly related to the MCDI-GAH Literacy Project's emphasis and insistence upon staff involvement, concern, empathic understanding and support for each individual participating employee in addition to the state of the economy and the employment retention efforts of GAH.

## VIII. CONCLUSIONS AND RECOMMENDATIONS

With the completion of this project period, the Massachusetts Career Development Institute Literacy in the Workplace program in partnership with the Geriatric Authority of Holyoke Inc. has achieved some significant accomplishments as indicated by the following measured outcomes:

Established and implemented a Literacy in the Workplace program of services with clearly defined and measurable outcomes on literacy and worker productivity variables.

Exceeded an average two grade level increase in English Language -- Reading abilities.

Achieved an average 2.4 grade level increase in English Language -- Reading abilities for all of the participant employees.

Obtained a 100% success (pass) rate in employee participants who qualified and took the high school equivalency (GED) examination.

Achieved an above average to excellent rating for 85+ % of employee participants on trainee performance variables including ability to follow directions, understand verbal directions, improve written work, attendance and productivity as well as student-employee satisfaction.

Demonstrated employee performance improvements on nine worker-trainee variables including quality of work, initiative, independence, ability to follow directions, comprehension, response to supervision, relationship to co-workers, attitude-motivation, and rate of progress for 95% of the participants.

Improved self esteem by an average of 16%-17% for the total group of 105 participants as measured by a modified version of the Tennessee Self-Concept Inventory.

Obtained an exceptional attendance rate of 97.02% for the project period.

Eliminated turnover and obtained a retention rate of 100% for the project period.

The MCDI-Holyoke Geriatric Authority Literacy in the Workplace project has clearly demonstrated measured outcomes which positively reflect its success during this initial project

period. The following recommendations are made with the intent of further enhancing and improving upon the demonstrated effectiveness of the project.

The MCDI-GAH project is to be commended for its vision, program implementation, and success in improving literacy in the workplace of its employee participants. The improvements in basic reading and comprehension are exceptional. It is recommended that consideration be given to further testing participants in related literacy abilities such as math and problem solving including pre and post testing to both encourage and achieve similar results in these areas in the future.

The successful accomplishments of the participants who took the GED examination is excellent. This reflects well on the careful preparation and education of the employees by the staff before the employee is considered ready or eligible to take the examination. Efforts should be made to assess the number of additional participants who need take the examination and its impact on workplace job performance, job promotions, salary raises etc. for those who successfully pass the GED.

The majority of the participants appear to be in allied health type positions. At GAH there is certainly a high need in these positions for the literacy project and the applied vocational education curriculum, methods and materials are most appropriate to these demanding positions. Further consideration should be given to expansion of the programming to increase meeting the literacy in the workplace needs of additional employees in day activities department, clerical, maintenance and food services. Recruitment of participants should be prioritized in identified areas of need.

The MCDI-GAH Literacy project has done well to schedule classes and services which meet the needs of the employer and employee to maintain a required regular work schedule. Additional workshops during this project period especially in such relevant topic areas as Death and Dying, Memory Loss and Stress in the Workplace have been provided. The project should continue to explore options such as individual or small group mentorships, and/or job coaching which might be utilized as additional supplements or alternatives to classes or work schedule conflicts.

An excellent process of ongoing communication has been maintained between GAH and the MCDI Literacy project staff. This has included both regular meetings as well as various contacts between supervisors, staff, employees and the MCDI staff. The development of this communication network has once again been critical to the success of the project during this project period. Related activities such as the awards ceremony and certificates of accomplishment should be continued and enhanced through the existing mechanisms already in place.

The Student Evaluations and Trainee (employee) Performance Scale continue to be effective, efficient rating forms which are not too complex for the rater to utilize. However, consideration should be given, to refining these instruments as well as the

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evaluation schedule and timetable to be better able to collect the evaluation data and discriminate levels and areas of new worker skills and improvements in literacy as they relate to specific worker tasks, productivity and performance. The MCDI instructor and the GAH supervisor should independently complete the same evaluation form on each employee participant including both literacy in the workplace and related worker productivity factors.

Record keeping, data collection and case file information are generally hand recorded, maintained appropriately and confidentially. Some data such as basic intake information, results of pre and post tests of Adult Basic Education etc. might more efficiently and effectively be stored in a computer data base. Consideration should be given to computerizing this record keeping system in the future.

The excellent success of this year's project appears to continue to be integrally tied to the close, daily working relationship that has been maintained between the employee, the MCDI instructor and staff, and the GAH supervisor, employers and staff. This positive, caring and motivationally supportive environment also appears to be highly consistent with employee improvements in self-esteem, as well as the exceptional attendance and job retention results. There should be further assessment in terms of a prototype model that may be replicated with other geriatric or similar allied health facilities where literacy abilities as related to employment and worker recruitment, productivity and performance are a major issue.