TO REACH THE FIRST RUNG AND HIGHER

Building Healthcare Career Ladder Opportunities for Low-Skilled, Disadvantaged Adults

by Forrest P. Chisman
and Gail Spangenberg

June 2005

Council for Advancement of Adult Literacy

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A Discussion Paper by

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PART I. INTRODUCTION

Too little attention is being given to the recruitment and training needs of entry-level healthcare workers in America. Yet they comprise a very large and vital part of the healthcare workforce.

It is estimated, for example, that certified nursing assistants (CNAs) working in nursing homes have, on average, more than two patient contact hours over a 24-hour shift – three to four times the number of contact hours of registered nurses (RNs) or licensed practical nurses (LPNs).[1]

Entry-level labor market problems are due in part to too few qualified workers. But labor market research also indicates that the problems are due as much to the high turnover rate of entry-level personnel – limited tenure in particular positions due to low wages, limited benefits, and poor working conditions. (In some nursing homes, the turnover of CNAs is estimated to exceed 100 percent per year.) Healthcare employers believe that this constant shifting of the workforce is very expensive to them because of the cost of training new employees to perform the tasks specific to each work site.

Employers are also concerned about the inadequate job training and poor basic skills of entry-level workers. Many entry-level people receive only a few days of training, which is often not adequate to perform their jobs as well as they should. And many either do not have sufficient reading, writing, or math skills to obtain the training they need or lack the prerequisites (often a high school diploma or equivalent) for certification.

[1] See: Frederic H. Decker, Jeannie Dollard, and Kevin R. Kraditor, "Staffing of Nursing Services in Nursing Homes: Present Issues and Prospects for the Future," Seniors Housing and Healthcare Journal, Vol. 9, No. 1, 2001. See also: Steven R. Gregory, "The Nursing Home Workforce: Certified Nurse Assistants," a background paper issued by the American Association of Retired Persons (AARP) in 2001, available at: www.aarp.org.

There is also growing concern that more and more entry-level healthcare workers (such as CNAs) have limited English language skills. In light of their extensive daily contact with patients, the poor basic and language skills of these people make for quality-of-service problems that are more evident all the time.

Over the past two years, CAAL has been exploring these and other issues that bear on preparing low-skilled adults to enter and advance in healthcare careers. With help from the Annie Casey Foundation, one recent strand of work examined six exemplary career ladder programs in various institutional settings, as indicated below. Our analysis of the programs leads to certain preliminary findings about the accomplishments, challenges, and directions for the future of programs intended to provide healthcare job opportunities for low-skilled, disadvantaged populations. Because of the urgency of the topic, CAAL thought it would be useful to share its perceptions and findings at this stage.

We made site visits to four of the six programs studied and conducted extensive telephone interviews with other two, all supplemented by a review of curricular and planning materials and other literature. The programs are:

- Jamaica Plains Neighborhood Development Corporation (Boston, MA) – Boston Healthcare and Research Training Institute programs
- District 1199C AFSCME (Philadelphia, PA) – Training and Upgrading Fund programs for low-skilled healthcare workers
- Children's Hospital Medical Center/Great Oaks Institute for Technology (Cincinnati, OH) – Project SEARCH
- Cabrillo Community College (Aptos, CA) – Health Career Ladders Program
- Owensboro Community College (KY) – Skills training at Owensboro Medical Health Systems
- Northern Virginia Community College (VA) – Medical Education Center career ladders programs

Many programs were suggested for our review; we chose these six based on consultations with several people knowledgeable about career ladders in healthcare. We also drew on knowledge gained during CAAL's two-year task force study of the role and potential of community colleges in adult education. All of the programs discussed here have national reputations for excellence. All are pioneering efforts to address major health manpower issues that have been too much neglected. And all have the following two goals:

- They recruit and train low-skilled, disadvantaged adults (such as welfare recipients, recent immigrants, and displaced workers) for entry-level positions in the healthcare field – primarily positions as certified or uncertified nursing assistants and medical records clerks;

- They create the opportunity for low-skilled incumbent workers (those without a high school diploma or equivalent, and/or with limited English language ability) employed by healthcare providers to advance within the healthcare field – for example, by helping food service workers at hospitals obtain entry-level clinical training, or by helping entry-level clinical staff (such as CNAs) obtain specialized training or advance to higher level employment categories, such as that of licensed practical nurse.

The programs attempt to achieve these goals through a combination of: (a) upgrade training in basic skills (reading, writing, mathematics, and English language ability); (b) vocational training in the skills required for entry-level and higher-level healthcare occupations; (c) career and guidance counseling, and mentoring; and (d) personal services aimed at recruiting low-skilled, disadvantaged workers for healthcare employment, assisting them in completing their programs, placing them in jobs, and helping them to get additional training for higher-skilled healthcare occupations.

The programs discussed here can be considered (and consider themselves to be) "career ladder" programs in some sense. Although they differ in how precisely they define the "ladders," and in how far up those ladders reach, they are important examples for several reasons:

(1) They provide realistic job opportunities for a large sector of the American workforce (low-skilled adults and immigrants with limited English ability) that is notoriously hard to place in stable employment that pays anything close to a living wage. The

requirements of entry-level healthcare positions place such jobs within reach of people who would otherwise have great difficulties in the labor market. Although entry-level wages are low, most job categories at least provide the possibility of exceeding poverty-level income, and they hold the prospect of advancement to higher paying jobs.

(2) They address manpower issues in the healthcare field that are seldom fully explored by research or adequately resolved by training. Labor market research shows labor shortages in virtually all categories of healthcare employment. It indicates that these shortages are likely to increase in the decades ahead. However, most attention in research and training has been placed on shortages at the higher professional levels (such as registered nurses and specialized technicians).

(3) They address issues of labor shortage caused by turnover and quality issues due to inadequate basic skills and/or technical training. Managers of these programs, and many employers, believe that these two problems are related. They think that more adequate training in both basic and technical skills – particularly if carried out with specific employers – will not only increase quality, but also reduce turnover by creating opportunities for higher wages through promotions and/or increased worker access to career ladders.

(4) They give entry-level or low-skilled incumbent healthcare workers a chance to ascend career ladders to better paying jobs. Thus, they can potentially enlarge career opportunities for marginal workers and fill manpower needs in higher-skilled job categories. In recent years, there has been considerable interest in career ladder models to achieve both goals – within the healthcare field and elsewhere. The six programs discussed here take up the career ladder challenge at its hardest point – on the bottom rung. They do it in different ways. Whatever the merits or success of their differing approaches may be, they serve as platforms for this important task.

(5) They address the issue of employment opportunities for low-wage, low-skilled workers in healthcare. They also address the issue of minority under-representation in

this field, a problem that has become increasingly apparent to both healthcare providers and labor market experts.[2] Because low-wage, low-skilled adults in the United States are disproportionately members of racial and ethnic minority groups, programs that give these groups access to the lower rungs of the healthcare career ladder open up prospects for them that otherwise would not be available.

Although all six programs reviewed are exemplary, we do not claim that they are the *best* national models because we have no basis for making such a judgment. But top professionals in the field consider them all to be successful in achieving their immediate and longer-term goals, even though they differ in how they implement particular program components. Thus, any institution interested in creating a new healthcare career program for low-skilled and disadvantaged adults, or in improving its existing program, will benefit from reviewing the experience of these programs.

The remainder of this report is divided into three parts: Part II (p. 6) summarizes our major findings. Part III (p. 10) discusses those findings in more detail. Part IV (p. 34) provides detailed profiles of each of the six programs examined. The many individuals and organizations that participated in our project are acknowledged on page 75.
The authors' bios are given on page 77.

[2] See: Missing Persons: Minorities in the Health Professions, a Sullivan Commission Report on Diversity in the Healthcare Workforce, September 2004, available at www.sullivancommission.org.

PART II. SUMMARY OF MAIN FINDINGS

Our analysis of the programs reviewed leads to several summary findings about their nature and effectiveness:

First. Collectively, they provide a wide range of services to low-skilled, disadvantaged workers, although not all programs offer a full range. They provide basic skills remediation, recruitment/career counseling, vocational training, and career ladder opportunities to both new entrants into healthcare careers and incumbent workers. They provide these services somewhat differently to people with very low basic skills (e.g., people reading at the fifth- and sixth-grade levels or with very limited English language ability) than to people with higher levels of skills (reading at the ninth- and tenth-grade levels, with high school diplomas or equivalents and/or with fairly good English language ability).

Second. The extent of basic skills remediation provided to both new entrants into the healthcare field and incumbent workers appears to be fairly modest in most cases. It rarely exceeds gains of one or two grade or ESL levels for very low-skilled adults, or completion of high school equivalency programs for adults who functioned at the ninth- or tenth-grade level when they entered the program.

Third. Most of the programs appear to do a fairly good job of recruiting low-skilled, disadvantaged adults into low-wage, entry-level health care jobs and in providing them with the basic skills and technical training required to fill those positions. It is reasonable to suppose that most of the people served in this way would not otherwise have access to healthcare careers, although there is no firm evidence on this point. However, the numbers served by these programs are fairly small (at most a few hundred per program), and the extent of their initial or long-term wage gains is unknown.

Fourth. Some programs report success in helping *very* low-skilled incumbent workers in entry-level positions improve their job performance and job satisfaction, gain promotions

within entry-level positions, and make lateral moves across entry-level job categories (for example, from cafeteria workers to nursing aides). However, few of the programs have adequate data to document these accomplishments.

Fifth. Most of the programs report some success in providing higher-skilled entry-level and incumbent workers (those with ninth- or tenth- grade reading scores, fairly high levels of English language ability, and/or high school credentials) with the basic and technical skills they need to function effectively in some positions above entry level.

Sixth. Some of the programs can document success in helping newly trained recruits to advance at least one step up career ladders beyond entry level. Most programs are successful in achieving this goal only for people who have fairly high levels of basic skills and/or a high school diploma or GED at the time they enter the program. The career ladder opportunities for higher-skilled, low-wage workers offered by these programs may be similar to those available to the general public. However, these programs are performing a valuable service by recruiting low-wage incumbent workers into career ladder programs that they might not otherwise pursue and by providing them with personal and financial support to pursue those opportunities. The number of disadvantaged people with these higher skill levels is not trivial. For this population, at least some of the programs reviewed appear to provide access to career ladders. Although the numbers of people who climb the ladders in most of the programs is unknown, available evidence suggests that the numbers are fairly small.

Seventh. Evidence from the programs themselves indicates that a large percentage of both entry-level and incumbent workers in low-wage jobs have very low levels of basic skills – for example, fifth- or sixth-grade reading levels or very limited English language comprehension. Because the programs do not raise the basic skills of this population to very high levels, these workers have limited prospects for moving up career ladders.

In short, most of the programs reviewed operate on two tracks, whether they define these tracks separately or not: For very low-skilled adults outside the healthcare field, they

provide access to entry-level jobs in that field, and, for very low-skilled incumbent workers, they may improve work attachment and promotion potential in low-skilled positions. For higher-skilled adults (particularly those with high school credentials), some programs provide access to training for positions above low-skilled entry levels and/or access to career ladders. However, *most of the programs have limited success in bridging the gap between these two tracks*, that is, in helping very low-skilled adults progress beyond entry-level positions.

The programs differ in how and how effectively they perform the particular functions mentioned above. One reason for this is that the start-up unit costs for such programs are high (several thousand dollars per student, depending on the services offered) – and the fact that start-up time is generally quite long adds to the cost. Most of the programs reviewed are underfunded, which limits the number of participants they can serve and the range of new program services they can provide.

Some programs face an uncertain funding future, though most of those reviewed have been able to secure the near-term future of their operations through a combination of public and private grants, contracts, support from employers, tuition reimbursement, and other sources of revenue. Because the programs rely heavily on soft money, however, all of them believe they are in financial jeopardy over the long term. As best we can determine, there are presently no substantial sources of public or private funding to support the creation of programs of this sort or sustain them over the long term.

Despite the fact that none of the six programs can afford to gather adequate data for program improvement or summary evaluation, they have amassed an enormous body of expertise – of "lessons learned" – about how to design and implement health career opportunity programs for low-skilled, disadvantaged adults. It appears that many of their overall design features or individual programmatic components could be duplicated in other sites. They certainly bear examination by those considering the development of career ladder programs.

CAAL's Main Conclusions

A number of major challenges face the programs. Among them are to: (a) increase the basic skills gains of program participants; (b) increase opportunities for very low-skilled entry-level or incumbent workers; (c) prepare more low-wage/low-skilled workers for positions above entry-level; (d) strengthen career ladders; (e) increase the total numbers served; (f) reduce start-up time, and reduce operating costs and/or develop larger funding streams; and (g) improve their management, service, and outcomes by collective learning and more adequate program evaluation data. Considering the importance of these programs for disadvantaged workers and the healthcare field, it is manifestly in the public interest to help them meet these challenges.

The six programs we reviewed were developed largely in isolation from each other, and each has a limited understanding of other programs pursuing similar goals. This is a recurrent theme in our conversations across the country. All of the programs have grown by "learning while doing," and all of them are still to some extent "works in progress." Because they have adopted different approaches, and because many of the lessons they have learned may well be replicable, these programs, and programs with similar goals elsewhere, would clearly benefit from opportunities for collective learning and additional program research. Moreover, they and similar programs would benefit from the development of "best practice" models based on their experience. Models of this sort could be of great value to institutions contemplating the creation of new programs in this field, and the availability of such models would help reduce start-up times and costs.

PART III: ABOUT THE PROGRAMS

The most salient features of the programs are discussed below under three main headings:

- Program Characteristics
- Problems of Serving the Least-Skilled
- Lessons Learned

Because no summary analysis can do full justice to the richness and diversity of these programs, the reader should read the detailed program profiles in Part IV for a fuller appreciation of their value, history, operations, achievements, and challenges.

A. PROGRAM CHARACTERISTICS

1. Program Growth

There is presently a great deal of interest nationally in developing programs to help low-skilled, disadvantaged workers enter and advance in healthcare careers. In many major metropolitan areas and regional medical centers, programs have been set up or are in the planning stages.

There are several major reasons for this widespread interest. Managers of the six programs reviewed cite these in particular:

- The healthcare field is one of the few major economic sectors creating large numbers of new jobs, and this job growth is expected to continue indefinitely. As a result, individuals and organizations seeking opportunities for disadvantaged workers see training for entry-level positions in healthcare as a way to create career opportunities.

- Most healthcare job categories have a shortage of qualified workers. Although hospitals and other healthcare facilities are presently able to fill vacancies for

entry-level jobs, they are concerned about the quality of the workers available for these positions. The major worries are low basic skills, inadequate technical training, and limited English ability.

- Employers also worry about the high turnover rates of entry-level workers and the costs (estimated at upwards of $4,000 per worker by several of the persons CAAL interviewed) of retraining new entrants.

- Current programs to train nurses and technicians in the allied health fields are not meeting the demand. At least some employers would like to find a way to advance incumbent workers into these positions.

The concerns about social benefits, quality, and bottom line operational issues has led to a proliferation of career opportunity and career ladder programs.

Although some of these programs have been in existence for more than a decade, most are fairly new – created over the last four or five years by visionary individuals in the job training field or in the middle management ranks of hospitals. Most began with fairly modest goals and expanded as their founders identified new programmatic opportunities. In most cases, the founding directors became progressively less involved with the programs over time.

2. Populations Served

Virtually all of the people served by these career ladder programs – mostly African Americans or immigrants – are economically disadvantaged. In fact, immigrants are the main source of low-wage and/or entry-level workers in the healthcare field in many parts of the United States.

Some of the programs primarily serve incumbent workers. Others provide entry points for low-skilled, disadvantaged individuals. Most attempt to do both, although they do so with a primary emphasis on either incumbent or entry-level workers, and their initial focus is still their primary focus.

Program managers point out that the incumbent and entry-level populations served are more similar than often imagined**.** The incumbent workers are usually in support positions at medical facilities – such as food service, house keeping, or maintenance. By contrast, most entry-level workers are welfare recipients, displaced workers, immigrants, and day laborers. But, in terms of skill levels, work attachment, and personal problems that may make employment difficult (e.g., day care problems, housing, domestic violence), these two categories of workers have much in common.

At the same time, according to program managers, there are two important differences: (a) many incumbent workers, even in low wage jobs, identify with the healthcare field and have some understanding of its culture, and (b) incumbent workers have incomes that stabilize their lives somewhat, and they may be eligible for employer benefits such as tuition reimbursement, healthcare, or day care. Neither is the case for entry-level populations.

Sometimes, an initial goal is to provide entry-level workers with training and job placement services that allow them to obtain *any* job in the healthcare field – i.e., to get them on the first rung of career ladders – so that they can eventually benefit from the advantages enjoyed by incumbent workers, and hopefully advance up career ladders.

(3) Skill Levels

Although most of the people served by these programs are economically disadvantaged, their levels of basic skills (e.g., in reading, writing, math, and English language ability) differ in ways that pose challenges for program designers.

By most standards, almost all of the people served by the programs CAAL reviewed have inadequate basic skills. Both incumbent workers in support positions and many disadvantaged entry-level workers often test as low as fifth- or sixth-grade level in reading and math. Few have high school diplomas or GEDs. However, a surprising

number in both categories have basic skills that are high enough to make high school completion or a GED an achievable goal in the near term.

Deciding whether or how to serve people at different skill levels is a challenge for these programs. The near-term technical training and career advancement opportunities of people with very low basic skills differ significantly from those at the high school level. Many programs attempt to serve both, as well as people with intermediate levels of skills. This means that they must create several different technical training and remedial education components.

Because of the growing importance of immigrants in the healthcare workforce, English language skills are a major concern. The English language ability of entry-level and other low-wage immigrants differs widely, as does their prior educational background. This poses tough design issues for career training programs. Entrants into these programs may, for example, be nurses from the Philippines who require only a little brush-up English, or they may be Mexican farm laborers with very little English language ability and practically no prior education. Programs to serve the full range of immigrants seeking entry into the health field are difficult to devise.

Finally, many employers are just as concerned that entry-level and low-wage incumbent workers have deficient soft skills or workplace skills (such as punctuality, etiquette, problem solving, and teamwork) as they are about deficiencies in basic language and literacy skills. To incorporate training in soft skills into career ladder programs adds another dimension to the challenges of program design.

4. Services Provided

To accommodate the needs of entry-level and incumbent workers with various skill levels, most of the programs reviewed provide a fairly large number of services. These may be structured as formal classes or courses, or they may be instructional modules that are less formal and of shorter duration. Among the services most commonly offered are:

- **Orientation courses** aimed at improving understanding of career options in healthcare and how to pursue them for both entry-level and incumbent workers.

- **Works skills courses** aimed at improving soft skills and, often, at orienting people to the special culture of healthcare institutions.

- **Basic skills instruction** in reading, writing, math, and English as a Second Language (ESL). In some cases, these are offered as independent courses, and in others they are offered as contextualized courses in conjunction with work skills training, technical training, or both. In contextualized instruction, the aim is to improve simultaneously basic skills and work/technical skills. For example, instead of teaching generic basic skills, courses may teach math, reading, or language skills specifically applied to healthcare situations.

- **Preparatory, prerequisite, or brush up courses** aimed at improving basic skills, study skills, and knowledge about healthcare to levels that will allow participants to undertake technical training for a healthcare profession.

- **Technical skills instruction to prepare students for entry-level positions** or to help incumbent workers take the next steps on career ladders. Although the menu of first-step instruction differs somewhat, most programs at least provide instruction to prepare students to become unlicensed nursing aides, certified nursing assistants (CNAs), or medical records clerks.

- **Next-step technical instruction** that will help students enter job categories such as licensed practical nurse or take the first step on career ladders in the allied health field. In some cases, these programs may contain brush up basic skills components.

5. Definition of Career Pathways

The programs reviewed differ in how clearly they define career pathways and the specific preparation required for them. Most programs offer well-defined multistep sequences of instruction to participants seeking low-wage, entry-level jobs. The number of pathways, in this sense, differs among programs. Some programs offer sequences by which participants trained for entry-level jobs can advance up career ladders to higher-skilled occupations. But in most of the programs reviewed career pathways are not very well defined. These programs rely heavily on guidance or case management systems

to tailor career pathways for program participants rather than on defined career tracks. It is hard to evaluate how effectively they provide access to pathways outside of defined tracks**.**

6. <u>Numbers Served and Cost</u>

Most programs reviewed are quite small in relation to the size of the healthcare workforce in their areas. They serve on the order of 300 to 600 people in some way.[3] Because almost all of the programs have multiple components (see below), this means that the size of each component is quite small as well.

The operating budgets of the programs reviewed range from about $100,000 per year (Owensboro) to about $5 million (Local 1199C). Most have budgets at or slightly below $1 million per year.

Although these budgets are fairly modest, they translate into a cost per student of several thousand dollars for some program components. Moreover, most of the programs and components have been custom designed and developed at some expense. In short, the unit cost of creating and maintaining these programs is fairly high.

Whether or not this should be a concern depends on their benefits to employers and employees. Unfortunately, there is very little evidence on this point (see below). It would certainly be beneficial if unit costs could be reduced by lowering program development expenses. This might be achieved by greater sharing of curricula, program design, and

[3] The precise number of low-skilled, disadvantaged workers served by programs in the District 1199C effort is hard to estimate. This is because the program provides a very large number of basic skills and health training programs for both union members and the general public. Although some of these are targeted specifically at low-skilled, disadvantaged workers seeking careers in healthcare, workers who meet these criteria may well participate in many other 1199C programs that would advance their prospects for employment in this field. Counting the number of participants in program components compared to those found in other programs reviewed by this project, a reasonable estimate of the numbers served by the 1199C program per year is about 600 people, although other means of estimating would yield somewhat larger numbers.

research among existing programs and between them and start-up programs that share their goals. There has been a good deal of inefficient "reinventing the wheel" in the field of healthcare job training.

7. <u>Funding</u>

All but one of the programs reviewed are supported primarily by grant funding from multiple sources. The exception is the Philadelphia Local 1199C Training Institute, which receives most of its income from employer contributions under a Taft-Hartley settlement. However, even this program receives about one-third of its $5 million annual budget from grants, and one of its larger grants is about to expire.

Funding for these programs comes from some combination of foundation grants, training contracts with the Workforce Investment Act's One-Stop career centers or welfare agencies, special federal and state government grants for job training, support from employers and, in some cases, tuition (sometimes paid in part by tuition reimbursement programs of employers).

Among the more unusual funding sources are the strong support received by the Cincinnati program for training people with physical and mental handicaps to pursue healthcare careers. This support comes from the state disabilities training agency. Another much-sought-after form of support is the federal Health Careers for the Disadvantaged Program administered by the Health Resources and Services Administration (HRSA) of the U. S. Department of Health and Human Services.[4] Both the Owensboro and Local 1199C programs are general-purpose adult education providers in their localities, and at least some of their healthcare training is supported by

[4] In 2004, this program was funded at a level of $14 million and awarded 35 grants. HRSA also administers the "Centers of Excellence" program, for which healthcare training programs for low-skilled, disadvantaged workers would qualify. This program was funded at the level of $6 million in 2004.

federal/state adult education funds.[5] Finally, the U. S. Department of Labor has supported development of a number of programs to train low-wage adults and displaced workers for entry-level positions in the healthcare field.[6]

So far, the programs reviewed have been able to survive and grow by patching together various forms of soft money funding. All of them believe that they are constantly in financial jeopardy, however, and all are in search of stable, long-term funding.

In most cases, the only solution they see to this problem is greater funding by employers. Most programs do not consider this an unrealistic prospect. Most already receive both cash and in-kind support from employers in differing amounts, and an important employer contribution to some programs is paid release time for incumbent workers to attend classes.

Program managers believe that if they can show that they add value to employers in terms of better-skilled workers to meet workforce needs as well as reduced turnover, the employers will contribute the fairly modest amounts required to cover operating expenses. If programs serve multiple employers, this is an even more realistic hope.

Employer financing has yet to be put to the test, however. It is a more likely source of support for ongoing programs that have proved their worth than for start-up programs. Virtually all of these programs were initiated solely with grant funds, often from private foundations.

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[5] Among the other union-supported programs identified by CAAL are those organized by League 1199 of the Service Employees International Union (SEIU) in New York City, upstate New York, and Connecticut. CAAL also obtained information about an innovative partnership between the Private Industry Council of San Francisco and the SEIU to train and place entry-level healthcare workers.

[6] The U.S. Department of Labor's Employment and Training Administration (ETA) has awarded a number of grants to support pilot programs aimed at addressing the shortage of healthcare workers. Among the most relevant for these purposes is a $1.9 million grant in 2003 to the Council for Adult and Experiential Learning (CAEL) to develop a nursing "career lattice" program. ETA has also sponsored research and leadership activities in this field. Of particular interest for purposes of this report is the research and report by Alexander, Wegner and Associates and published as "Healthcare Industry: Identifying and Addressing Workforce Challenges," February 2004, available from ETA. Other ETA funding has been made available for career ladder initiatives under the H1-B and School to Work programs.

8. Staffing

All programs have one or more full-time program managers. Some programs contract out all or some of their instructional and other services to allied agencies. Thus, the number of part-time and full-time instruction, guidance, job placement, and other staff employed by the managing operation varies greatly. The larger programs (except Owensboro) employ core staff of 3 to 4 people or more in various capacities and support as many more in allied agencies.

9. Evaluation and Success

The directors of all the programs reviewed are concerned that they do not have the resources to conduct adequate research on program outcomes. This means that objective evidence about their success is limited, and meaningful cost-benefit analysis is impossible. Simply stated, there is very little research to show how many students served by these programs gain and retain employment, how many progress up career ladders, and what benefits the programs convey in terms of increased wages or improvements in the quality of the workforce.

In most cases, programs know the percentage of students who complete particular program components. Usually this percentage is fairly high. Some components at some programs have clear exit criteria; others do not. Where exit criteria are established, success rates of particular components are quite high.

Very few programs have longitudinal information on the educational experiences, employment, or earnings of participants. Thus, they are often unable to determine whether students progressed from one educational component to another, what their post-program job placements were, or whether they experienced earning gains.

There are notable exceptions to this lack of research evidence, however. Some programs have information about the initial placements of students who participate in their

technical training components, and a few have information on short-term wage gains. For the most part, this evidence shows only small advances up career ladders and small improvements in wages for very low-skilled workers. For higher-skilled workers who graduate from these programs, initial placements and wage gains can be quite good.

The Jamaica Plains/Boston program has been able to document that people who complete its Healthcare Fundamentals course (a general orientation to healthcare careers aimed primarily at very low-skilled incumbent workers) have significantly lower turnover rates that comparable workers who do not take the course, although their immediate wage gains and advancement in job categories are small. The Cincinnati program tracks all graduates of its CNA course (aimed at welfare recipients) for one year and has documented a high rate of placement and retention in CNA jobs, as well as a significant number of participants who continue their healthcare education.

However, the available evidence is far too thin and anecdotal to support firm judgments about the success of these programs or the relative strengths of their components one way or another. Given the importance of the programs to participants and employers, as well as the growing national interest in developing similar programs, *an investment in outcomes research would be extremely valuable.*

B. PROBLEMS OF SERVING THE LEAST SKILLED

1. Connecting the Steps

The services most commonly provided by these programs tend to use career ladders at least in the sense that they allow low-skilled workers to gain employment in the healthcare field at various points – both at the entry level (in positions such as CNAs and medical records clerks) and at somewhat higher levels (such as LPNs and allied health assistants). The difference between these various points of access is significant in terms of wages. Entry-level workers in most healthcare facilities make on the order of $8 per hour. CNAs make between $8 and $12 per hour depending on the region where they live

and the nature of their employers. Home health and long-term care providers pay less than hospitals, and unionized employers pay more than nonunion employers. LPNs make more than CNAs and other entry-level workers, and many categories of medical technicians make far more than LPNs.

However, none of the programs studied operate as comprehensive career ladder programs for the lowest skilled workers. That is, they rarely enable a cafeteria worker reading at the fifth-grade level or an immigrant with limited English language or literacy skills to become an LPN or even a CNA (as contrasted to an uncertified nursing aide).

Most of these programs operate on two tracks: They help very low-skilled entry-level workers gain a foothold in the healthcare field (often by becoming unlicensed nursing aides or non-clinical support workers). And, they assist more highly skilled workers (those with high school diplomas, skill levels in the high school range, or immigrants with fairly advanced language and literacy skills) to take the first step on true career ladders (by becoming CNAs, LPNs, or office clerks). But they rarely connect these two instructional tracks.

There are three basic reasons for this disconnect:

- High-opportunity careers in healthcare require at least a high school diploma or equivalent, basic skills at the high school level (reading, writing, and math skills at about the tenth- and eleventh-grade levels, which many high school graduates do not have), and a fairly good command of English.

- None of the programs studied has devised instructional strategies that allow people with very low basic skills to improve their skills fast enough to achieve these skill levels in a reasonable amount of time – the amount of time they are likely to persist in the programs.

- The career structure of the healthcare industry contains few, if any, job categories for those with intermediate-level skills that low-skilled people might progress through professionally as they are improving their basic skills. For example, the skill requirements (both in basic and technical skills) of an unlicensed nursing aide are fairly low. The licensure requirements for a CNA in most states call for

a high school diploma and often more professional training. On the patient care track – as in most healthcare career tracks – there are effectively no jobs in between.

2. Bridging the Gap

For students with fairly high levels of basic skills (at the ninth- to tenth-grade level or above), it is usually not difficult to upgrade their skills and/or provide high school equivalency diploma instruction that will allow them to enter high-opportunity occupations. Most of the programs reviewed will not accept students lacking skills at the high school level and/or a high school diploma or equivalent into their high opportunity career training programs. Students with fairly high skill levels are referred to GED or advanced ESL programs (or both) that are either operated by the career ladder program itself or by an affiliated agency.

Many of the programs reviewed track these students and attempt to provide them with guidance, moral support, and in some instances, comprehensive case management as they upgrade their skills. The programs that track and support their higher functioning students in this way report fairly high success rates in terms of students obtaining GEDs, reaching higher levels of English proficiency, and subsequently entering training programs.

However, students with very low basic skills find it much harder to obtain access to training programs for high-opportunity healthcare careers. For these students, the programs reviewed have adopted several strategies. None of the programs appear to be wholly successful in moving these students beyond low-skilled entry-level positions and into higher-opportunity jobs. But they at least demonstrate possible approaches to doing so**.** Moreover, their strategies have other benefits for students. Among the strategies are:

(a) Vocational English-as–a-second-language (VESL) Programs. These courses are offered to students with low levels of English language ability. They are usually of quite high-intensity (meeting up to 20 hours per week) and of short duration (three to four months). Most of the examples in the programs reviewed are either general orientation

courses for the healthcare field, or courses that prepare students to become unlicensed nursing aides in the home health or long-term care industry. Students practice English while receiving hands-on training in patient care.

Professional ESL educators usually take exception to these courses on the grounds that they do not follow standard language learning theory or provide students with portable English language skills. At least one ESL educator likens contextualized programs of this sort to courses that teach "tourist English."

However, the completion rates of these programs are usually high, and the employers contacted by CAAL believe they provide real value by marginally improving the skills of caregivers and the ability of graduates to communicate with patients. Because many people employed in the home health and long-term care industries have virtually no English language or technical training, these marginal benefits may be enough in themselves to justify the programs. However, none of the courses reviewed provide the linguistic or technical foundation needed for pursuit of career ladders in healthcare.

The programs that offer VESL courses in healthcare hope that they at least encourage students to enter further healthcare training and reduce turnover, but they have not collected data that indicates whether this is the case.

(b) Longer-term contextualized ESL courses. These ESL programs are based on the same principles as short VESL programs. Only one was reviewed – at Jewish Vocational Services, a component of the Boston Healthcare and Research Training Institute's program. The program is essentially open-ended. Students can continue to improve their English using a curriculum based on healthcare tasks until they reach a level of proficiency adequate for employment or further technical training. The success rate of this program for low-skilled students was not determined by this review.

(c) Basic skills courses customized to help native speakers of English enter health careers. In most cases, these are courses to help improve participants' reading, writing, and math skills by practicing those skills in training programs. These usually take one of

two forms: (a) career orientation modules such as medical vocabulary, filling out forms, or calculating dosages, and (b) vocational training modules to refresh the reading, writing, and math skills of fairly high-functioning students who have been out of school for some time.

The effectiveness of most of these customized courses in improving either the skills they teach or portable basic skills has not been evaluated. Students are neither pre- nor post-tested on their basic skills abilities.

At the very least, most customized basic skills programs allow students to demonstrate sufficient proficiency in basic skills to pass the courses. They screen out students who lack that proficiency from either next steps in career ladder instruction or whatever credentialing the courses may provide. There is little evidence to indicate whether most programs of this sort improve the ability or motivation of students to attempt or complete the next steps on career ladders – either in education or in employment.

The customized basic skills courses offered by the District 1199C program appear to be the most promising examined. Most of them are designed as "prerequisite" courses for LPN or CNA courses of study. These include both pre- and post-tests and established skill levels for completion. They appear to be effective in both skills upgrading and in placement into LPN or CNA programs, although the numbers served are fairly small. It was not clear from our review whether low-functioning adults would be able to complete these programs.

(d) Guidance/coaching/case management. Most of the programs offer some form of career guidance for both low-skilled and other participants. The nature and duration of this support differs from program to program and among program components. The managers of most programs hope that these guidance services will help low-skilled workers improve their basic skills and technical training incrementally.

Unfortunately, most programs do not have sufficient longitudinal data on students to determine whether this strategy is successful. One possible exception is the District

1199C program, which offers a far larger menu of basic skills and job training programs than found elsewhere, providing both kinds of opportunities for students at virtually every skill level. Because the 1199C program provides ongoing service to union members and emphasizes guidance, it may succeed in tailoring career ladder programs for low-skilled workers. However, the extent of its success could not be determined.

(e) Technology solutions. One program studied (Owensboro Community College) uses instructional technology to allow incumbent workers to improve their basic skills at their own pace. The program is based on the WorkKeys[7] job skills assessment system and allied instructional courseware. It centers on a learning laboratory at a hospital. In principle, workers at any skill level can use the learning laboratory and targeted instruction from a resident trainer to upgrade their basic skills in their spare time, and at their own pace, until they reach levels identified as suitable for promotion or further technical training. In practice, the system is primarily keyed to higher-level learners, because only higher-level learners can be employed at the hospital where the program operates. Nevertheless, technology solutions of this kind may be a way for low-level incumbent workers to reach the proficiency to enter career ladder programs in a cost-effective, user-friendly way. At the very least, it may give workers without standard academic credentials (such as a high school diploma) a way to demonstrate their skill levels and thereby qualify for promotions within their job categories, lateral moves, or training programs.

(f) Creating headroom. Several of the programs reviewed have begun to work with both healthcare educators and employers to develop "headroom," or promotion potential. They have created intermediate-skilled job classifications that will allow low-skilled

[7] WorkKeys is an American College Testing job skills assessment system that measures such real-world workplace skills as applied math and technology, business writing, listening, observation, reading for information, and teamwork. It helps educators identify gaps between student skills and employment needs so as to improve program design and students' success in entry-level and subsequent jobs. It helps employers reduce turnover, overtime, and waste while "increasing morale through effective selection decisions and training processes." For information, go to: www.act.org/workkeys/index.html.

workers to progress beyond entry-level positions to jobs that require somewhat higher levels of skills (but not the skill levels demanded of traditional career ladder positions). In two of these programs, an important element is helping employees make lateral moves from job tracks that have little headroom to those that have more (e.g., from housekeeping to the less-skilled forms of patient care).

At Cabrillo, the College has made an effort to create intermediate-skilled training programs that are first steps toward allied health training (e.g., radiology assistant leading to radiology technician). None of these efforts are yet mature, but they may be viable strategies to creating comprehensive career pathways.

C. LESSONS LEARNED

Virtually every aspect of the programs reviewed can be considered a lesson learned, depending on the interest of the reader. However, the directors of these programs and the authors of this report have identified a discrete number of guidelines for success in mounting career ladder programs in the healthcare field. They are guidelines on which all the program managers agree, whether or not they presently follow them.

1. Partnerships with Employers

All programs of this sort involve partnerships between educational/job training organizations (community-based organizations [CBOs], community colleges, unions, or hospital training programs) and one or more healthcare employers.

This partnership is necessary because employers are the customers of these training efforts. Moreover, the requirements, job classification schemes, labor demand, and career opportunities among healthcare employers differ significantly, even within the same community and the same class of employer (e.g., hospitals or long-term care providers).

Hence, entry-level career ladder programs must be adapted to local circumstances. This requires the active participation of employers. Without their involvement, training programs will not result in jobs or improvement in job performance. In addition, employers that gain confidence in programs of this type can be substantial sources of cash and in-kind support.

Managers of successful health career ladder programs stress that the partnerships should be as comprehensive as possible. Ideally, they should extend well beyond good working relationships with human relations managers to include informed and active buy-in by CEOs, frontline supervisors, department heads, physicians, and others. All levels of the employer's staff should be involved in planning the program, refining it, and participating in it (by such means as mentoring, coaching, or tracking the progress of trainees).

Finally, *most successful programs collaborate with more than one healthcare provider*. This enables the programs to achieve economies of scale by operating larger programs.

2. <u>Partnerships among Multiple Service Providers</u>

Most of the programs reviewed are partnerships of multiple providers**.** Usually, a single agency serves as the management and development arm, but several different agencies provide the instruction. This is often the case because managers believe that building on the in-house expertise of existing providers makes for the most effective development of instructional programs. Often, curricula are adaptations of preexisting curricula and teachers are recruited from the teaching forces of the partner institutions.

Increasingly, however, there seems to be a tendency to bring instruction in-house at the management agency. This is partly due to the difficulties of managing multiple providers, but also to the perception that educational providers often are not fully invested in the core mission of the program. Thus, they may develop curricula that meet their own institutional priorities but are not fully responsive to the needs of career ladder programs.

It can also be expensive to contract out instruction (due to overhead charges), and it can be time consuming. Finally, as programs mature, curricula become increasingly customized, and the management agencies become larger. In these circumstances, management agencies may believe that they are best qualified to provide instruction themselves.

3. Formative Research

In successful programs, managers place great emphasis on formative research and planning. Many believe that any new program should invest at least a year on this function before it is launched, and that it takes a new program at least two years to be fully operational in even its initial phases.

According to the managers and to CAAL's own research, formative research should involve job audits of the skills and qualifications required for particular positions, projections of labor force demand, a careful examination of the institutional culture of particular employers, mapping of existing and potential career ladders, gaining the perspectives of employers' staff, and, importantly, assessing the skills of both incumbent and potential workers to estimate the upgrading needs.

Programs that did not begin with this formative research phase usually get off to a bad start and have to backtrack to conduct it. Few, if any, of the programs examined have conducted all of the preliminary research required, and their weak points are partly attributable to this fact.

Formative research should not be oversold, however. Even those programs that have conducted extensive planning found that they had to revise their plans as soon as the program was initiated, and all programs have to continue to refine their offerings.

4. Staffing

Program directors strongly emphasize the importance of hiring professional staff that can devote full time to program development and management from the outset. Programs that have not done this suffered from slow start-ups and poor quality until full-time staff was retained.

In part, the imperative for full-time staffing has to do with the complexity of career ladder programs. Equally important, it has to do with the fact that they are partnerships between education/training institutions and employers and among education/training institutions. In the words of one program director, "With the best will in the world, partnership and collaboration are not in the job descriptions of most educators or healthcare staff. But for these programs to succeed, they must be in someone's job description, and it's a big job."

None of the managerial staff in the programs reviewed had any special background in career ladder programs at the time they were recruited, and few had any background in healthcare, adult education, or postsecondary education. Instead, most have backgrounds in the managerial ranks of job training, welfare, or community service agencies. They are all highly talented people. But it is an open question whether these programs might take a different form, and whether they might develop more rapidly, if the backgrounds of their managers included more experience in the fields to which they are recruited.

5. Auspices

Program directors differ about the best institutional auspices for career ladder programs. CAAL reviewed programs under the auspices of a CBO, a trade union local, three community colleges, and a partnership between a vocational institute and a hospital. In all cases, the program directors contend that auspices matter and that their auspices are superior to any others.

Providers that are not community colleges voiced doubts about community colleges as either institutional auspices or training providers (although most made use of colleges for some training). In their view, colleges take too long to approve innovative programs and curricula, tend to apply traditional academic criteria to evaluate offerings (rather than user-responsive training criteria), often charge too much overhead, and are reluctant to work with other providers – i.e., they want to keep all aspects of the programs in-house whether or not this makes sense. In addition, critics believe that employers may be suspicious that colleges are using career ladder programs to sell them more expensive customized training.[8]

Colleges respond that they are a logical home for healthcare career opportunity programs because many of them already have the two major components required for these purposes in place: namely, extensive academic programs in the healthcare field, and developmental and adult education programs to assist people with low basic skills. In addition, colleges argue that entrepreneurial college leaders have shown that they can implement innovative offerings quickly by classifying them as continuing education or as trial curricula, that they apply high standards to program offerings, that their prices take account of full costs, and that in practice they outsource as much training as they can. In addition, colleges argue that they often have close working relations with local healthcare organizations, because they are among the major providers of allied health personnel.

The authors believe that these disagreements about auspices are misplaced. Whatever their managerial auspices, successful career ladder programs operate as essentially autonomous entities within their host institutions. Auspices do appear to matter, but the

[8] CAAL research on the role and potential of community colleges in adult education and literacy strongly indicates that the colleges are much more heavily involved in providing basic skills and transition services for adults than is recognized by either community colleges or the other provider groups. It also points to a need for both to work together more closely. According to the American Association of Community Colleges, "60% of new nurses are educated through A.D. programs, most at community colleges." Among the colleges identified by CAAL (but not discussed in this report) as providing course sequences and program components that offer low-skilled adults opportunities in the healthcare field are: LaGuardia, Kingsborough, and Queensborough Community Colleges of the City University of New York, Pima College (Tucson, Arizona), Portland Community College (Oregon), and the San Diego Community College District. There are certainly others.

criteria for suitable auspices are generic, and institutions of many different types can and do satisfy them.

Among the criteria identified by program managers are:

- A strong institutional commitment to create and maintain a career ladder program as a valuable offering in its own right – often demonstrated by expressions of support by the CEO, empowerment of the program management, institutional support in the form of staff time, facilities and funding, and a willingness to bend the rules if necessary to make the program succeed.

- Responsiveness to the needs and views of local healthcare providers, as well as credibility in their eyes as a "neutral" source of training – i.e., as a training provider that has no hidden agenda and is solely committed to the mutual benefit of students and employers.

- The ability to create and manage high-quality training programs, and a reputation for being able to do so.

- A willingness to work with multiple agencies outside the host institution, including other training providers, public welfare and job training agencies, and community organizations that cater to disadvantaged populations.

- A recognized commitment to serving the disadvantaged.

- Ability and willingness to create and respond to oversight boards or committees representing multiple stakeholders in career ladder programs – employers, educators, public agencies, funders, and the disadvantaged.

6. <u>Curricula</u>

Most of the offerings of the programs reviewed follow highly detailed, specified curricula. In cases where curricula have been less carefully specified in the past (i.e., where teachers have been given course outlines or syllabi and expected to make up the content themselves), there has been a tendency to make curricula more explicit and directive.

Not only are curricula fairly well specified, but they are often highly customized to the specialized orientation and training needs of low-skilled entry-level and incumbent

workers in the healthcare field – as program managers see those needs. From the evidence available, it is impossible to determine how much value these customized curricula add.

By itself, good curricula will not lead to successful programs. Program design, management, and support systems are equally important. However, programs place great value on their customized curricula. In fact, they are rarely willing to share them with anyone.

Interestingly, program components intended to improve generic basic skills (reading, writing, math, English language ability) or to help students over the threshold of high school completion are rarely customized – with the exception of the contextualized programs discussed above. Due to the barriers to career advancement faced by people with very low skills, all programs probably should give this matter more emphasis.

One curricular trend on which most program managers agree is the desirability of high-intensity, short-duration courses. At least some of the customized offerings reviewed consist of courses that meet five days per week for as much as four to eight hours per day over a period of several months. The programs reviewed place special emphasis on high-intensity, short-duration courses for several reasons:

- Many program participants are welfare recipients, referrals from career centers, or unemployed. For all participants, the window available for training is small. Public welfare and job training programs only allow (and will only fund) short-term training, and unemployed people must find ways to support themselves. Short, high-intensity programs pack as much training as possible into a brief period of time.
- Program managers believe that short-duration programs reduce attrition.
- For programs that train incumbent workers on paid employer time, high-intensity programs make it easier to schedule blocks of training time.
- Program managers believe that high-intensity programs have instructional value because they familiarize students with the high-pressure environment and work habits they will encounter on the job.

7. Guidance/Case Management

All of the programs reviewed recognize that low-skilled individuals entering the healthcare field would benefit from ongoing guidance and support. In community college programs, this support usually gives access to student service programs. In other programs, it takes the form of pairing students with coaches or mentors. In the Cincinnati program, it takes the form of comprehensive case management. We were not able to determine the relative merits of these different approaches. However, program managers believe that some special guidance/support systems should be in place, and these systems may be essential to enabling students to persist in the lengthy, frequently complex process of climbing career ladders.

8. Focus

Most of the programs began by offering a limited number of services through one or a few providers. Over time, the offerings have grown to include more services and more providers. Most programs would like to expand further. There is a tendency to try to devise program components to serve as many different types of learners in as many ways as possible – i.e., to serve incumbent and entry-level workers, people with high and low levels of skills, immigrants and native English speakers, people referred from multiple public and private agencies, and those aspiring to a wide range of healthcare careers. Likewise, there is a tendency to expand the number of employers served and the number of affiliated service providers. As program aspirations have grown, the number of components has multiplied.

Obviously, these ambitious goals are all to the good. However, this brief CAAL review suggests that some of the components of these increasingly complex programs are stronger than others. In addition, it is possible that the programs' growing complexity poses managerial challenges. It is not clear that the supervision of components in some of the larger programs is adequate or that enough thought has been devoted to how the various parts fit together in coherent career pathways.

Rapid growth may have led to a scattering of effort and a temptation to try to be all things to all people. The programs themselves, and those interested in them, might benefit from trying to do fewer things at a higher level of quality. In this project, true excellence is most apparent in programs or components that attempt to do a relatively small number of things very well.

PART IV: PROGRAM PROFILES

CAAL's examination of the following six programs took place in the late summer and fall of 2004. Because the programs are in many ways works in progress, some features may have changed in the months since then. However, the profiles are offered to provide a deeper understanding of program design and other program components to those considering career ladder programs for disadvantaged people in the healthcare field.

- **Jamaica Plains Neighborhood Development Corporation** (Boston) – Boston Healthcare and Research Training Institute programs – special emphasis on formative research, employer partnership, and multiple career paths, p. 35.

- **District 1199C AFSCME** (Philadelphia) – Training and Upgrading Fund programs for low-skilled healthcare workers – special emphasis on diversity of course offerings, guidance, and contextualized courses, p. 44.

- **Children's Hospital Medical Center/Great Oaks Institute for Technology** (Cincinnati) – Project SEARCH – special emphasis on case management, service to the disadvantaged, high-quality CNA program, and transition to LPN program, p. 50.

- **Cabrillo Community College** (Aptos, CA) – Health Career Ladders Program – special emphasis on VESL programs and allied health career ladders, p. 56.

- **Owensboro Community and Technical College** (Kentucky) – Basic Employment Skills Training for Healthcare Workers at Owensboro Medical Health Systems – special emphasis on technology for instruction, p. 65.

- **Northern Virginia Community College** (Springfield, VA) – Medical Education Center career ladder programs – special emphasis on recruiting disadvantaged students and pre-academic programs, p. 71.

A. BOSTON HEALTHCARE AND RESEARCH TRAINING INSTITUTE

(formerly Bridges to the Future)

Emphasis: Formative research, employer partnership, and multiple career paths
Management Institution: Jamaica Plains Neighborhood Development Corporation (JPNDC)

1. Background and History

Jamaica Plains Neighborhood Development Corporation[9] serves a formerly low-income area of Boston now experiencing gentrification. The area includes most of the city's major medical centers (the Longwood Medical Complex). Traditionally, the major focus of the JPNDC has been housing and job placement.

The JPNCD's program director has a background in urban development, from a public interest and business perspective. In 2000, she was head of program development. As such, she identified the adjoining medical centers as a source of job opportunities for low-income people in the neighborhood. She also came to understand that many people from the neighborhood were actually employed there in low-wage, dead-end jobs and conceived the idea of an education and training program that would help them gain opportunities. At this time, the Fleet Boston Charitable Trusts was interested in such programs. With a grant from Fleet and a few other small grants (totaling about $200,000), the program director devoted most of 2000 to a feasibility study. This entailed researching the job opportunities/career ladders available in the medical centers, job qualifications (job profiling), the nature of the workforce, barriers to advancement, skills of incumbent workers and related topics. The University of Massachusetts/Boston Center for Community Economic Development (CCED) conducted much of the research under contract from the JPNDC.

The JPNDC program director, together with staff from CCED consulted extensively with managers and staff at all levels in a number of the healthcare institutions. She believes this formative research was essential to: (a) understand the job structure, (b) understand the hospital corporate culture, (c) develop personal contacts and buy-ins by the hospitals, and (d) identify barriers and opportunities. Various advisory and research groups were also formed. A plan of operations was developed and funds were raised for 2001-2002.

2. Initial Findings and Offerings

Among the findings of the first year of research were: (a) staff turnover was a major concern, particularly in entry-level jobs (food service, housekeeping, patient care), (b) supervisors reported insufficient basic skills among low-level employees, (c) most career pathways for these employees were short (to advance they would have to move laterally

[9] Jamaica Plains Neighborhood Development Corporation is a large community development corporation (CDC). CDCs were originally funded by the federal government as part of the War on Poverty, and some still are.

into other fields – e.g. from housekeeping to patient care), (d) both basic skills and hospital culture (particularly supervisors' interest in advancing staff – i.e., they are important gatekeepers) were key to retention and advancement, and (e) hospital staff welcomed (in principle) career ladder programs as a way to boost motivation, skills, and retention.

In 2001-2002, with about $350,000 in funding from several public and private sources, the first components of the program were rolled out at four hospitals, first as a pilot, and then on a continuing basis. The first-year offerings were:

- A program for supervisors on how to be career coaches
- Information on employment and training opportunities in four fields: patient care, technician, technologist, and administration
- Piloting mentoring and job shadowing programs
- A 60-hour "foundation skills" course – initially provided by Bunker Hill Community College, but now provided by JPNDC
- A coaching program for all participants in the foundations course
- Precollege brush up courses in math and English
- A new hires program that recruited neighborhood residents to fill entry-level jobs that might be left vacant by people who are promoted

3. <u>Program Growth</u>

In 2002, the program, then called Bridges to the Future, had the good fortune to be one of five selected by Commonwealth Corporation (ComCorp) for $450,000 in grants to develop comprehensive career pathways programs. ComCorp has had an interest in career pathways for some time and has been funding them on a sectoral basis. In 2003, their grants were for health career pathways, with an emphasis on low-wage workers. Grants went to four community colleges and JPNDC. This increased the budget of the program to $600,000 and required program expansion in two directions: (a) offering ESL and GED training, provided by Jewish Vocational Services (JVS) in Boston, and (b) offering courses in patient care skills training (provided by Bunker Hill Community College), administrative skills training (provided by JVS), and assistant/technologist skills training (now provided by Roxbury Community College).

With some expansion and refinement, this is the structure of the program today, known since 2003 as the Boston Healthcare Research and Training Institute. In 2003-2004, the Institute's program budget was about $1 million with a core staff of thirteen (a project director, a coordinator, three management staff, five career coaches, two employment specialists, and one program assistant).

The program is presently supported by grants and employer contributions. In 2002-2003, it served about 300 employees (about 550 since inception) and had 12 participating healthcare institutions. The program hopes to be self-sustaining in the future by contributions from these institutions.

4. Program Components

The Institute provides services almost exclusively to incumbent workers of participating hospitals.

It offers, or has offered, a large number of courses or other services. Only some of these are listed below. In most cases, participating hospitals provide employees with fully paid release time to attend the courses (with the exception of basic skills in most cases – e.g., ESL is offered half on release time and half on the student's time, whereas GED is usually entirely on the student's time). This is a large commitment by the hospitals. Courses (except basic skills) are designed in high-intensity modules (or in other ways) to allow for scheduling convenience.

The courses offered to employees at each hospital differ somewhat, depending on the Institute's perceived need for training in different settings, and the hospital's receptivity and willingness to offer release time. The Institute prepares a separate course offering brochure for each hospital. Whenever possible, courses are given on site; when it is not possible, it is usually due to space considerations, the need to combine students from different hospitals, and other factors.

(a) Career advancement training components

Foundations skills course. This is the Institute's signature course. The 60-hour course teaches workplace soft skills– communications, problem solving, critical thinking, customer service, medical terminology, diversity, and time/stress management – in a healthcare context. It meets one day each week for eight weeks and enrolls 15 people in each section. Five cycles operated in 2003, graduating 63 students – a modest attrition rate from the 75 enrolled. The number enrolled in 2004 was higher. Bunker Hill originally offered the course, but the Institute now does. A great deal of research and thought has gone into constructing this course to cover generic foundation skills for healthcare workers. It continues to evolve drawing on inputs from staff and students.

All graduates are assigned to job coaches both during and after their participation. Coaches focus on career plans, further training, and supporting employees in their present jobs, as well as providing information on support services. All students are low-level workers in job categories where annual turnover may be as high as 100 percent per year. The Institute has documented that the retention rate of graduates is about 90 percent per year – far higher than other workers in the employing units from which they are drawn. That is, in any given year, turnover is much more likely from other employees in the same units than from the workers who participate in this program. Moreover, about 20 percent of participants become involved in further healthcare education. Institute staff

believes that the combination of course instruction and coaching motivates students to do a better job, increases work satisfaction, and encourages workers to seek advancement. In spite of these positive signs, improvement in wages and advancement up career ladders has been small, although work satisfaction and quality of performance on the job has apparently increased.

Supervisor training. This is a five-week course that meets for a full day each week. Two sections of 24 supervisors each were trained in 2003. The curriculum includes coping skills and strategies, workforce coaching/performance evaluation, retention/advancement strategies, workforce communication/diversity, team building/conflict management, and stress reduction. The theory behind the course is that supervisors are the gatekeepers for employee advancement. But most have never been trained in supervisory skills – they have simply been promoted from frontline positions. Thus, they may feel threatened by leading/advancing their frontline employees or simply do not know how to do so. Preliminary research for the Institute showed that supervisors are often barriers to career advancement. The aim is to enlist supervisors as allies in career ladder programs. Many coaches have been drawn from this program. The Institute takes it seriously enough that it was the first course to be introduced.

Mentoring. In late 2004, a small mentoring program was just beginning. It was inspired by research showing that most attrition is in the first few weeks of employment. The aim of the program is to train mentors (in a single eight-hour session) and help new hires "learn the ropes" over at least a three-month period. This includes orientation to the job, the department, and the institutional culture. The mentor program is based on a curriculum from the Wisconsin Regional Training Partnership.

Career ladder publications. These and other components of the Institute's programs are supported by published career ladder and job profile information covering a variety of healthcare fields.

(b) Basic skills components

GED. The Institute's GED program is managed by JVS. It is fairly new and cannot readily be evaluated. The program is not open-entry. A new class is formed as soon as 8 to 10 students are available to create it. There have been several classes to date. The curriculum is teacher-driven, adapted to the needs of the students. It is a standard, noncontextualized GED program. Students are pre-assessed using the TABE indicator. JVS and the Institute were astounded to find that most students tested at the fourth- or fifth-grade reading level. The program will serve students at no charge until they receive their GEDs. So far, there have been few graduates, and JVS staff members are concerned that students with such low skills may not persist long enough to pass the examination.

ESL. The Institute's primary ESL offering is "Beginner ESOL" – a 16-week contextualized program that meets four hours per week. There are 15 students per class, and four classes are held each year. A brief initial assessment (developed by JVS) is used to test oral, grammar, and reading comprehension skills. Contrary to its name, the course

is not intended for students with virtually no English skills (those who would be classified as "ESL literacy"). It is aimed at low-to-intermediate students. The course's primary purpose is to improve functional competency through practicing English in selected workplace situations (e.g., asking permission, reporting accidents, greeting patients) as well as to introduce students to American work culture/etiquette and give them a sense of career opportunities. By practicing English with these exercises, most students advance one or two levels in the JVS post-test.

In 2004, two other ESL courses have been added: a pre-college reading and writing course for non-native speakers, and an intermediate-level ESL course. The former is a 28-week course based on standard language learning concepts (e.g., subject-verb agreement, incomplete sentences) in reading and writing for students functioning at the high-intermediate level. It is aimed at increasing skills to the level where students can enter college developmental education courses. The latter is a 16-week course based on both functional competencies and language learning concepts (i.e., stronger emphasis on grammar and accent reduction) that will advance students beyond the level of the initial course. JVS does not have a record of the subsequent educational or employment experiences of graduates. However, modest skills gains are achieved by most students, retention is fairly high (12 or 13 in each class), and functional competence is improved.

English and math brush up. Offered by JVS, these 20- to 22-hour courses meet two evenings a week for five weeks (10 sessions). Their purpose, attendance, and content evolved since inception. The courses are not contextualized. The syllabus of the English course concentrates on practicing reading and writing at the intermediate level. It is advertised as a precollegiate brush up in basic English skills for employees with high school diplomas or GEDs who may wish to take college placement exams. The math class is a somewhat more rigorous review of arithmetic, including manipulating fractions and decimals. The Institute and JVS intended to offer more extensive pre-college math and English courses in the fall. Effectively, these were to be college developmental education courses offered for institutional credit by Bunker Hill.

(c) Vocational training components

Administrative skills modules. This is an 80-hour course of instruction provided by JVS. Its goal is to improve both soft and hard skills for students who want to advance in administrative career pathways. The core of the program is 16 hours of soft skills training in areas such as time management, prioritization, and conflict resolution. From this core, students can then go to a 24-hour module on medically-based skills that focus on medical terminology and health insurance. And/or they can go to a 20-hour module on basic supervisory skills and teamwork. Finally, they can go to a 20-hour module on research-based skills that includes business writing and editing, financial management, and research on the Internet and in the library. Few students have elected the research module.

This sequence has been offered in five cycles with 15 people in each cycle. Their subsequent employment or training experiences have not yet been determined. The course is aimed at students with basic skills at the high school level or slightly below. A great deal of research into job functions and requirements has gone into developing the course.

Patient skills training course – *Principles of Clinical Practice***.** This is a 100-hour, three-credit course offered by Bunker Hill Community College. It meets once a week for 8 hours, over 11 weeks, and provides three additional days of clinical exposure. Essentially, it compresses three courses offered by Bunker Hill (seven credits in total) into a single, high-intensity, short-duration course. The aim of the course is to prepare students to pass the CNA examination. Bunker Hill has been offering this sequence for 16 years. (Interestingly, it was originally intended for ESL students.)

Entering students are tested using the ACCUPLACER,[10] and must receive a satisfactory score to enroll. About 36 percent fail to score at college level. Those near the cut score are admitted, and others are referred to adult education. Strictly speaking, students need not have a high school diploma or GED to enroll in credit courses at Bunker Hill, although they must have these credentials to be certified as a CNA. Those who do not obtain a GED may find jobs in long-term care facilities or home healthcare where certification is not always required.

Bunker Hill runs two sections of 10 students each per year for the Institute and five sections per year for Brigham's Women's Hospital (which is not part of the Institute collaborative). The curriculum is very rigorous in both soft skills (such as patient interaction and rights) and hard skills (such as first aid, pharmacology, and EKG). It also includes components of basic anatomy and physiology. Almost all students graduate. The Bunker Hill staff believes there is a much larger market for this course. The number of students served is limited by budgetary considerations – how many slots the Alliance can afford.

The Bunker Hill coordinator tries to follow the careers of all of her students. Most find jobs in the $12 per hour range in hospitals, nursing homes, or temporary agencies. Only a small number progress to further education, although both the coordinator and others counsel them to go on.

Assistant technician/technologist course. This course was previously offered by Bunker Hill and is now given by Roxbury Community College. Its aim is to prepare students for jobs that support allied health technicians. It consists of three components: (a) a general introduction to technical careers; (b) training in general healthcare/workplace skills, such as customer service, communication, and team work; and (c) clinical or research tracls which introduce students to medical terminology, basic care skills, or (at the conceptual

[10] ACCUPLACER is a computerized test of The College Board designed to assess skills in basic reading, writing, math, and English. Its purpose is to help colleges place students in suitable skills upgrading courses and to support counseling and advising services.

level) research protocols, measurements, and notations. The research track is no longer offered due to lack of demand.

The course is for students with approximately high school level skills. It aims to refine skills for advancement and motivate students to pursue careers in allied health and give them a leg up. CAAL's review did not gather participant and outcome information on this course.

5. Replicability

The fundamental approach of assessing employee needs, job audits, and gaining employer buy-in is certainly replicable. The foundations, contextualixed ESL, and assisting courses may be replicable in large part. However, such courses should probably be adapted to the needs of employers and employees – as well as the capabilities of providers – in different locations. The Institute believes that the coaching approach is replicable, although it requires a great deal of preparatory work with employers.

6. Lessons Learned

The Institute's annual reports contain long lists of lessons learned, both great and small. Examples from this material and our own analysis are:

- Anyone undertaking a career ladders course should spend as much time as required, even up to a year, to thoroughly understand the employment categories, workforce needs, management, and corporate culture of the institutions to be served. This should include job audits and (if possible) employee assessments. This step is essential in designing a program that works for employers and employees and in getting employer buy-in and funding.

- Employer buy-in is key. Employers must see this as a good business proposition that will yield them a return on investment and will not be overly disruptive – rather than just an employee benefit. Stressing improved retention has been vital in this regard. Much of the design of this program is driven by the desire to show employers that they will have tangible benefits and to protect them against threats or losses.

- Supervisors must become partners rather than barriers. Getting supervisor buy-in has been essential.

- Programs need time to evolve. They should start with modest high-value offerings and grow as providers and employers gain confidence and experience. Offerings should continue to be refined with feedback from everyone involved.

- Certain structural problems in the healthcare employment system make it difficult to create true career ladders for most low-level employees. Most importantly,

these employees work in areas (e.g., food service) where there is very little headroom. To advance they must shift to other fields (e.g., patient care) where there is more headroom. *Even if they do this*, however, intermediate-level jobs are lacking in the three priority areas identified (patient care, administration, and technician). For example, there are few intermediate-level jobs between a CNA and an RN. LPNs are not widely used, and there are few training courses for them. Moreover, the leap from CNA to LPN is large in terms of the skills and training required. Compounding this problem, wage differentials in the available career ladders are small. For example, cafeteria workers with experience are paid about the same wage rates as CNAs. This "hour glass" job structure (many job categories at the bottom and top, but few in the middle) is a challenge the Institute does not think it has overcome.

- The Institute is surprised at how low the basic skills levels of frontline workers are. This limits their mobility. The program director wishes that she had identified this problem early on. She does not believe she has found an adequate solution to it. The contextualized basic skills courses offered improve job performance somewhat, but lead to only small gains in portable skills. The longer-term GED and ESL offerings may be impossible for most workers to complete. Hence, the Institute can at best provide improved functioning and small career advancement for workers with low basic skills, and opportunities for high-school-level workers to pursue career ladders. For those below high school level, it may provide only limited mobility and wage gains, although it may increase job satisfaction and performance. In short, the basic skills component needs to be strengthened.

- The unit cost of the program is high – approaching $2,000 per participant. Sustainability is an issue.

- The partnership has its problems. The program director and the various providers sometimes have different views of what is being offered and, in some cases, why. Supervising providers can be difficult. There is a tendency (sometimes good) for providers to adapt programs to what they already do, rather than to fully customize them, or to see the Alliance as just one customer among many. Increasingly, the Institute is pulling offerings under a single roof for cost and managerial reasons.

- The program director believes that community colleges often face challenges in providing customized training services. On one hand, colleges may think in terms of conventional courses, take a long time to approve them, and may bear higher overhead costs than other providers. On the other hand, colleges have recognized curricular standards, and the Bunker Hill CNA course is one of the Institute's most effective offerings. The program manager agrees that it is the nature of the leadership rather than the type of institution that matters.

- Tracking the progress of students in instruction and employment is a key to effective program development, evaluation, partnering, and funding. The program

manager believes that the Alliance has not been able to track outputs/impacts of its offerings as well as it should have. The exceptions are the fundamentals course, which apparently leads to increased retention, and the CNA course that (due to tracking by the Bunker Hill coordinator) results in good placement rates (but only small wage gains).

- The program director is concerned that the existing research findings may not be adequate to continue to make her case. She wants to implement a better tracking system.

The program director is well aware that even though the program serves 500 to 600 workers per year, it is barely making a dent in the problems of workers and employers in recruiting and training low-skilled disadvantaged workers. It is hard to know how the program can grow large enough to reach "scale."

6. <u>CAAL Observations</u>

The very multiplicity of offerings may be a problem for this program. Although it appears to provide multiple points of entry and to satisfy multiple needs, few students are enrolled in any one offering. In addition, supervision is difficult, program development costs are high in relation to benefits, and both managers and potential students can become confused about exactly what tracks to follow if they want to ascend career ladders. The program has grown organically. The Institute might do well to select and consolidate offerings to meet fewer needs and/or concentrate on a few clearly defined pathways.

There is some recognition that this diffusion is a problem. At the upper end of the training continuum, plans for the future involve offering (or partnering with) allied health certification programs. At the lower end, plans involve more recruitment from the community into the healthcare field – although the low-wage, low-skilled portion of the Jamaica Plains community is shrinking due to gentrification. Moreover, it is not clear whether employers would value this because they already have recruitment mechanisms (employment agencies public or private) for low-wage workers.

B. DISTRICT 1199C AFSCME TRAINING AND UPGRADING FUND PROGRAMS

Emphasis: Diversity of course offerings, guidance, and contextualized courses
Management Institution: District 1199C AFSCME Training and Upgrading Fund,
— National Union of Hospital and Healthcare Workers

1. Background and History

The District 1199C Training and Upgrading Fund (of the National Union of Hospital and Healthcare Workers of the American Federation of State County and Municipal Employees) is a union-sponsored training institute. It was established 30 years ago by Taft-Hartley settlement. It is directed by a 24-member board comprised equally of union and employer trustees. The employer trustees include hospital human resource directors, other managers, and physicians. By virtue of the settlement, the program receives 1.5 percent of the gross payroll of its members for training. Members are at 59 Philadelphia healthcare institutions, including all major hospitals and nursing homes. In 2003, this funding from employers generated income of approximately $3.5 million, which is used primarily to serve union members.

In addition, in 2003, the Fund received $1.5 million in grant funds to provide general adult education services, health-related adult education, and some healthcare training from various other sources. These sources include the State of Pennsylvania's Adult Education Program. The 1199C Training Fund is a designated Title II provider of adult education services to the general public in Philadelphia and a GED testing site. In this capacity, it serves 400 adult education students per year with about $400,000 in state funding. Other sources have included the U.S. Department of Labor (under the H1-B program, which has been terminated) and both state and local welfare agencies, as well as WIA Title I. All of these other sources are cutting back their training budgets. As a result, the 1199C program is concerned about its ability to provide a high level of service to the general public, and it has had to terminate several programs.

The Fund occupies four floors of an office building in central Philadelphia (the Breslin Learning Center) and also operates in satellite sites. It has a full-time staff of 40 and employs about 90 part-time teachers.

In 2002-2003, the Fund provided educational services of some type to 4,634 students – 787 of them in continuing education or basic skills training. It reached a total of 17,320 participants in that year through either education or an array of other services including job placement, certification, recruitment programs for healthcare workers, GED testing, a job fair, and various kinds of assessments.

In addition to basic skills training, the Fund offers a certified CNA program, a nursing aide program primarily for home health workers and nursing home employees, and the only part-time LPN program in the area. It also offers some foundation courses for

registered nurses and allied health personnel. In 2002-2003, more than 1,000 students graduated from its various vocational programs. Recently, the Fund finalized an agreement with Thomas Jefferson University that allows college credit for some of its courses. In addition, employer funds provide scholarships for union members to continue their healthcare education at colleges and universities.

2. Population Served and Goals

The Breslin Learning Center serves both union members and members of the general public. All programs are available to union members free of charge and to the general public for a fee. Practically speaking, due to grant funding, almost all students receive free service.

The Philadelphia area does not have a large language minority population. As a result, ESL services are available only on an occasional basis on demand. (The union is leading an effort to recruit more immigrants to the local healthcare industry.)

Virtually all students are African American. District 1199C of Local AFSCME primarily represents the invisible staff in hospitals and nursing homes – e.g., housekeepers, food service workers, and orderlies. Because of union membership, their wages are fairly high (e.g., $16 an hour for housekeepers), but their skills level is as low as that of welfare mothers, displaced workers, and others also served by the program.

As a result, union members served by the Fund cannot be considered economically disadvantaged by some standards. But many are low-skilled. Moreover, many union members consider themselves to be locked into dead-end jobs. For these workers, one goal of the Fund is to create opportunities for upward mobility.

In addition, the Fund serves nonunion populations (through TANF[11] and WIA funding) that are both economically disadvantaged and low-skilled. The goal for most nonunion participants is to enable them to enter the healthcare industry and gain the same opportunities for advancement available to union members.

3. Program Components

The Fund is a large enterprise, with a wide range of generic and customized basic skills courses and other offerings. Because the purpose of this review was to investigate the provision of heath career opportunities for low-skilled, disadvantaged adults, only program components related to basic skills upgrading in some way are discussed below.

The Fund's basic skills components can best be viewed as: (a) a core adult education program, (b) various customized programs, and (c) a wide range of personal and career support services. Practically none of the Fund's instruction is contextualized in the usual sense of the term. Program managers believe that a sound background in portable basic skills at various levels should be a prerequisite for vocational instruction, rather than a

[11] The federal Temporary Assistance for Needy Families program.

component of that instruction. To ensure that students have the basic skills required for particular vocational tracks, the Fund incorporates intensive basic skills instruction into many of those tracks, rather than contextualizing it.

There is little use of technology for instruction. Some staff members have used the PLATO[12] program in the past and consider it inadequate. Many basic skills and other programs include instruction in computer usage, however, and the Fund has a number of computer labs.

(a) Core adult education

The Fund offers a core adult education program that serves about 600 students per year. This core program is offered in four levels: (1) First- to third-grade reading, (2) third- to seventh-grade English, math, and study skills, (3) seventh- to ninth-grade English, math, and science, and (4) precollegiate courses in all of these fields. Most students are at level 2, and program managers believe that completion of this level would probably give them the basic skills needed for entry-level healthcare jobs. Interestingly, a high school diploma or its equivalent is required for level 3. Thus, if a student were progressing sequentially, he/she would complete level 2 and then enter the Fund's GED preparation program or its Pennsylvania High School Equivalency program. The continuation of the basic skills sequence beyond these programs reflects the Fund's belief that many high school and GED graduates have inadequate basic skills (often at the seventh-grade level) and require additional instruction to be ready for vocational programs or college.

All students are pre-tested and post-tested at least every 50 hours using the TABE. Instruction is in single-level classes; that is, classes at various literacy ability levels are held separately, not mixed.

Roughly 40 percent of the students in core basic skills courses are union members; about 60 percent are members of the general public. The disproportion is largely due to the fact that the basic skills program is partly supported by grant funding from WIA Title II and from TANF to serve participants in those programs. The basic skills program has served more than 700 welfare recipients over the last three years.

Participants in this core adult education program may or may not be seeking careers in the healthcare field. Many are undoubtedly TANF or WIA participants seeking to upgrade their skills for other purposes. However, others are union members or members of the general public in search of healthcare careers who have been referred to basic skills instruction as a prerequisite for vocational training. The number of students in these core programs who are seeking health careers – or who subsequently pursue them – was not available at the time of this program review.

[12] The computer-based accountability, assessment, and instructional programs of PLATO Learning, Inc. PLATO programs provide online assessments tied directly to state and local standards and basic- to advanced-level courseware for K-12 students, colleges, job training programs, correctional institutions, military education, corporations, and individuals. For more information, go to: www.plato.com.

In addition, the adult education program offers intensive courses (6 hours per week) in math and English for students who may be deficient in either of these skills, but are proficient in other basic skills. In mid-2004, the intensive math course enrolled 74 students. It aims to increase skills by two grade levels in 24 hours of instruction. The intensive English program is primarily for Liberian students who speak English. Its aim is to improve their ability in American English.

(b) Customized programs

The Fund has incorporated basic skills components into many of its vocational programs. Virtually all curricula for these programs are custom made by the Fund's staff and are detailed and explicit. For example:

Pre-nursing bridge program. This is an intensive three-week preparation course for the LPN program that meets 6 hours twice a week and on weekends for a total of 144 hours. It enrolls 23 students at a time, and about 17 enter the LPN program. It consists almost entirely of intensive instruction in math, English, anatomy, and study skills up to the level required for entry into the LPN program. Students are assessed prior to entry and at exit to determine if their skills are adequate.

LPN prerequisite courses. This is a sequence of three-week courses in medical terminology, English, math, and computer usage. It provides a screen into the LPN program. Entry into the LPN program requires that students pass all of these classes. Some 60 to 70 percent succeed.

CNA program. The Fund's 16-week CNA program begins with a 4-week refresher course in basic skills and instruction in computer usage. Some 250 students have passed through the program in the last two years, and 80 percent have graduated and been placed in employment. The program is offered on a full-time basis for TANF recipients and on a part-time basis to others.

Nursing aide program. In a similar fashion, the Fund offers a part-time, uncertified, nursing aide program for home health workers – primarily young adults. The program lasts 60 weeks. Average entry-level reading score is fifth grade. The program begins with 15 weeks of math and English, raising scores one to two grade levels.

Return-to-service program. This is primarily an intensive basic skills, life skills, and work readiness program for TANF recipients and displaced workers who may wish to enter the healthcare field. Its goal is to raise skill levels by 10 to 25 percent. The program meets 30 hours per week for six months. In 2002-2003, 100 participants were served, and 60 percent of them entered the CNA program. The local TANF program has recently increased the number of slots it will fund in this program.

Childcare apprentice program. This is the only contextualized basic skills program offered among the programs reviewed. Its aim was to prepare staff for childcare centers.

It combined 60 hours of contextualized training in math and English with a supervised apprenticeship. At the time of the CAAL review, it had served about 100 students, raised basic skills approximately 2.5 grade levels, had an 85 percent completion rate, and resulted in a certified daycare assistant (CDA) assessment and certification. Regrettably, the program has been terminated due to loss of funding.

Project CARRE – This was a TANF-funded program ($4.5 million for four years) specialized to train and place welfare recipients in CNA positions. It combined basic skills and healthcare skills. During its lifetime, it enrolled 721 students, of whom 452 were placed in CNA jobs and 70 percent were retained for at least one year. In addition to instruction, it included post-instructional services with work incentives (e.g., gift certificates), driver's education, a generous subsidy to purchase an automobile, a fully paid scholarship to the Fund's LPN program, an on-the-job mentoring program, and extensive case management. Funding for the program was terminated in 2004. This is regrettable because CARRE was the most clearly defined career ladder program offered.

(c) Personal and Support Services

All of the Fund's basic skills programs (and other offerings) operate in the context of extensive recruitment/orientation, guidance, and job placement services. Students interested in a health career or incumbent workers wishing to advance up career ladders must attend a healthcare orientation class and meet with a counselor to discuss their options and plan the courses they must take. The various basic skills offerings are a shopping list from which counselors and students can select options to meet student needs. Guidance continues for students as they pursue various tracks. Following completion of the instructional program, the Fund uses its connections as a union-sponsored entity to obtain a high rate of job placement for the students.

4. Replicability

Obviously, the funding base of this program is not transferable. However, Fund staff believe that their curricula, their general approach of multiple options for skills upgrading, and the practice of embedding intensive basic skill's training in vocational programs are all transferable. In fact, they are often asked to lend them.

5. Lessons Learned

- The staff obviously believes that a large training provider that can maintain a strong core staff and offer a large number of options has many advantages.

- They strongly believe that training for entry-level healthcare workers requires a strong partnership with employers. But they believe that training providers should be independent of employers and other educational institutions if they are to maintain focus and flexibility, as well as serve the needs of workers. They contrast their program with employer-sponsored training programs that they

believe too often respond primarily to short-term workforce needs. They also contrast it to community colleges, which they view as slow to invent and approve new programs due to academic review procedures and established academic/programmatic turf barriers.

- Whatever the merits of different approaches to basic skills remediation may be, the staff believe that their program has demonstrated its success by serving large numbers of students and having high completion and placement rates.

- Staff members believe their success demonstrates that career ladders in healthcare can begin at a very low rung, but that high-quality, intensive service must be available at every level.

- Staff members also see a high level of basic skills as a prerequisite for any form of healthcare education, whether or not people have high school diplomas.

6. CAAL Observations

This program demonstrates clearly the benefits of providing opportunities for low-skilled, disadvantaged adults in a large, diverse training organization. The large base of students (or potential students) allows District 1199C to offer an unusually wide range of basic skills options and to creatively link basic skills to vocational training. Aside from benefits of scale, the program also gains strength from a stable core funding base and the fact that its focus is entirely on healthcare training. In these and other ways, the program enjoys advantages that other programs may covet and to which they may aspire.

Although it may seem difficult to duplicate conditions favoring the program, this is not necessarily the case. For example, large urban community colleges might be able to establish themselves as the comprehensive training providers of choice for healthcare institutions in their service areas. It is important to keep in mind that the 1199C program is based on years of development work. Other programs reviewed by CAAL may have the seeds to grow into more extensive operations under strong entrnepreneurial and marketing leadership.

Conversely, the 1199C program shows that it is hard to support high quality, innovative programs with grant funding. Some of the program's most successful offerings have been terminated due to lapses in grant support. Large program development investments, and potential benefits to individuals and employers, are lost when this occurs. Like the other program examined, 1199C shows that a substantial pool of national funding is urgently needed for the operating support of high-value instructional programs in the lower rungs of the healthcare training field.

C. PROJECT SEARCH

Emphasis: case management, serving the disadvantaged, high-quality CNA program, and transition to LPN program
Sponsoring Institution: Cincinnati Children's Hospital Medical Center
— in partnership with the Great Oaks Institute for Technical and Career Development, and the Hamilton County Board of Mental Retardation and Developmental Disabilities

1. Background and History

Children's Hospital is a large medical complex in downtown Cincinnati. It is located in a predominantly African American neighborhood. Some 2,000 of its employees qualify for the Earned Income Tax Credit (up to 300 percent of poverty level income). Great Oaks Institute is a large regional vocational institute. It offers both health programs (CNA and LPN) and adult education services (ABE/ESL/GED) in many sequences.

The overall goal of the Hospital's Project SEARCH is to provide "employment and education opportunities for individuals with significant barriers to employment," such as people with disabilities, those on public assistance, and the working poor.

The director of the emergency room at Children's Hospital initiated project SEARCH in 1996. She felt that the hospital should be hiring more people with disabilities. Partnering with Great Oaks and the County's Board of Mental Retardation and Developmental Disabilities (MR/DD), she launched Project SEARCH to recruit disabled people. As the program has grown, it has developed a sound working relationship and division of labor with Great Oaks. The program's founder now works full time with SEARCH and serves as its overall leader, manager, interface with the healthcare community, and fundraiser. The Great Oaks staff develops, manages, and provides the educational components. Although it is technically a unit of Children's Hospital, SEARCH is basically independent. It has its own advisory board and its own offices, and high-quality instructional facilities in a medical office building across the street from Children's and other major hospitals.

The total budget for SEARCH in its present form exceeds $1 million per year. Knowledge Works Corporation provides overall grant funding; ongoing funding for program development and tuition comes from WIA, TANF, Disability Services, and the local Empowerment Zone; and tuition reimbursement is provided for the LPN program. Although the program staff is worried about funding cutbacks from all of these sources, they believe that their reputation for quality will allow SEARCH to continue to grow.

2. Emphasis on Case Management

SEARCH is a fairly small program in terms of numbers served – about 300 per year in all program components. What it lacks in size, however, it makes up for in the extent of service it provides to participants.

The program is true to its mission to serve those with multiple barriers to employment. Virtually all participants are welfare recipients, displaced workers, or people with physical or mental handicaps. From the outset, program staff realized that these people require extensive support services. As a result, all of them get intensive case management support before, during, and after their participation in educational activities.

Case management begins with extensive vocational and personal assessments at the point of program entry. Participants receive whatever help they need in dealing with issues such as housing, transportation, safety, childcare, and other personal matters, and if necessary they are given referral for educational remediation. Other important components are criminal background checks (and expunging of criminal records where possible) and health/drug screening required for certification in healthcare professions. Staff members report that it is not unusual for the program to work with participants for six months prior to entry into education. Two full-time case managers are primarily responsible for this service, but all staff provides supportive services to the extent that they can.

In addition, most SEARCH programs contain job search and job placement strands. Participants must complete these components to finish the program and receive a certificate from Great Oaks. After students are placed in jobs, the program continues to provide case management and employment services for a year or more, as well as assistance in obtaining further education.

Staff members believe that this emphasis on case management is one of the keys to the program's high success rates. They also believe that its intensive case management system can be applied on a far larger scale. In fact, demand for the program is high, and it has been steadily expanding over the years. At present, the major limitation on growth is the size of the training facility. Program staff members hope to find more floor space and continue program growth. They note that the total healthcare workforce in the area is more than 100,000, and employers are hungry for qualified workers. There is plenty of room for program growth.

4. Program Components

Basic skills. Great Oaks offers a variety of basic skills courses to prepare students to enter vocational programs offered by Project SEARCH. However, none of these courses are specially customized for SEARCH participants even though working relations are close between some instructors and SEARCH staff. The adult education classes that support actual or potential participants in SEARCH are multilevel, scheduled at convenient times, and fairly conventional. Classes at the primary site meet Monday through Thursday from 2:00 p.m. to 6:00 p.m. and Friday to Saturday from 9:00 a.m. to 12:00 noon. Twice-weekly courses are offered at two other sites, including a library. Orientation and testing are required before entering classes. A young adult program (New Directions) helps high school dropouts complete their high school diploma or GED and pursue vocational options, with counseling.

Disabilities. A 13-week course to recruit people with physical and mental disabilities into healthcare careers was the original SEARCH offering. It is still in operation. The course is offered by Great Oaks. It focuses entirely on career orientation and recruitment. Important components are job shadowing and job placement services. Participants are people whose disabilities have been (or are being) remediated, and who are considered job-ready. Most test at the eleventh- or twelfth-grade levels in reading and math. Although this program has no educational component, many graduates progress to educational programs provided by SEARCH, often with assistance from the case management system. Over the last five years, 265 disabled people participating in this course have become employed, an 85 percent success rate. Funding comes from the WIA Empowerment Zone as well as Vocational Rehabilitation. About 70 people each year enroll in the SEARCH program, and it is replicated at other sites, adding 42 more. Intake for the program includes assessment to determine career and technical levels and an individual employment plan to target career technical competencies and training accommodations.

Health skills training program. In 1998, program leaders saw the need to recruit welfare recipients for healthcare careers. A TANF grant provided funds for a demand analysis. The viable career options identified were unit clerk (health unit coordinator) and state-tested nursing assistant (STNA, equivalent of CNA). Working with Great Oaks, SEARCH launched an intensive 16-week course in 1999 (5 days per week from 9:00 a.m. to 4:00 p.m.), which became its centerpiece activity. The course has gradually extended the program's reach beyond welfare recipients to other people facing multiple barriers to employment (such as participants in WIA displaced worker programs and individuals with disabilities). The course has several components:

- Prescreening for physical and criminal programs.
- Vocational and educational assessment.
- Case management to remove barriers to participation and employment.
- A requirement that all participants must score at least at the ninth-grade level in reading and the eighth-grade level in math on the TABE.
- A requirement that students must have high school diplomas or obtain GEDs, because high school completion is required for state licensure. Entrants without a diploma or GED are referred to an accelerated Great Oaks GED program near their homes before they progress in the course. They continue to receive case management services, and most obtain their GEDs. Students who are not quite at the eighth- or ninth-grade level in basic skills are also referred for adult education brush up. Program staff estimates that approximately half of all entrants require some adult education service. The program ties not to stigmatize these participants, and seems to consider educational remediation when combined with case management fairly easy and a matter of course.

- A three-week Healthcare Foundations component that includes basic healthcare concepts, CPR and first aid, work skills, communications skills, and elementary computer training.

- Subsequent to Healthcare Fundamentals, participants choose either state tested nursing assistant (STNA) or health unit coordinator (HUC) tracks.

- Participants in each track receive six weeks of instruction, including extensive hands on practice in a high quality facility – in their field.

- STNA participants then have 13 days of clinical rotation, including experience in a long-term care facility; HUC participants have a 10-day work rotation at Children's or another local hospital.

- All students must participate in a structured job search class, lasting four to six weeks, or until employment, and STNA students must pass the state certification test in this period.

Classes are small – a maximum of 16 to 20 people per section. The program offers five sections per year. Multiple instructors are used, many drawn from the staff of local hospitals.

Between 1999 and 2003, 345 participants were served by this sequence. Of these, 89 percent completed the program, 85 percent of graduates entered employment, and 72 percent of those who entered jobs were employed six months to four years after program exit (some could not be located). In 2004, approximately 100 people completed the program, with a 98 percent placement rate. In 2003, the average starting wage for graduates was $10.83 per hour, plus benefits. A significant number of graduates eventually pursue LPN or other healthcare education, although the exact number was not available.

This program is priced by Great Oaks at $4,500 per student.

LPN Program. Increasingly the focus of SEARCH has turned to incumbent worker training for the working poor. It was recognized that hospital employees were entitled to tuition reimbursement, but few used it. With Great Oaks, SEARCH launched an 18-month part-time LPN course for incumbent workers at Children's Hospital. The program is now offered in partnership with five hospitals managed by the Alliance chain in Cincinnati.

This program contains a basic skills component, in the sense that it includes a pretech module in medical math and terminology. Because LPNs require GEDs, referral mechanisms to the Great Oaks GED program were developed. In addition, ESL instruction on site was introduced. Entry requirements also demand an acceptable score on the WorkKeys assessment for LPNs. The curriculum is an adaptation of the standard Great Oaks LPN program. This program enrolls about 50 people per year with a high

success rate. Although it is partly funded by tuition reimbursement, employers reimburse only about $1,700 per year of the total $8,000 cost. This is one reason why the course stretches over two years – allowing a total employer contribution of $3,500. Still there is a funding gap, filled by grants from a number of sources, including foundations, WIA, and Disabilities Services. The average wage of graduates is $18.44 per hour.

High School Transition Academy. This program serves high school students with disabilities and special needs. Half the school year is spent in work site experiences at hospitals. Orientation is provided and work skills are developed as well as skills in communications and problem solving. The second half of the year is devoted to helping students create individualized job development plans. Numerous supportive and mentoring services are provided.

Health Professions Academy. The final program component of SEARCH is the Health Professions Academy. This is a partnership with Cincinnati State University. It provides a Healthcare Generalist Associate Degree Program. The aim of this program is to help people who want to enter the health field, but have not settled on a specialty, to gain basic academic credentials needed for any allied health career at the level of A.A., B.A., or above.

5. CAAL Observations

Compared to other programs reviewed, SEARCH is very small in terms of the numbers of students served, and it is relatively expensive. Its success rates probably justify its cost. SEARCH provides every conceivable service required to help members of some of the hardest-to-serve populations build successful careers in healthcare. And it succeeds. If this is the price of success, then it may be that other programs and their funders should be prepared to pay it.

One of the most striking aspects of SEARCH is its emphasis on quality, down to the finest detail. Its facilities look and feel like a high-quality hospital ward. Staff members are thoroughly organized, professional, and deliberate. Both instructional and other services are carefully planned. Curricula, procedures, and expectations are set forth in detail. Quality is not compromised in either curriculum or in expectations for student decorum. In large measure, this emphasis on quality may well arise from the program's affiliation with Great Oaks. SEARCH benefits from the depth of experience this large institution has developed in addressing an enormous number of vocational needs. In effect, SEARCH has applied the program standards of a high-quality technical institute to serving members of disadvantaged groups.

From the perspective of health career opportunity programs, SEARCH's only shortcoming is that it serves only students with fairly high levels of basic skills. Because of their multiple barriers to employment, however, most of these students almost certainly would not enter health careers without SEARCH. Moreover, SEARCH is one of

the few programs reviewed that takes on the responsibility of helping participants receive GEDs. By making the GED a program requirement, and helping students obtain the credential, SEARCH both addresses and demystifies this barrier to advancement in health careers. And it ensures that students with marginal educational attainments will not only take the first step on a career ladder, but subsequently be prepared to step higher up that ladder.

D. HEALTH CAREERS LADDERS PROGRAM

Emphasis: VESL programs and allied health career ladders
Management Institution: Cabrillo Community College

1. Background and History

Cabrillo Community College serves the southwestern part of Santa Cruz County, California. It is a smaller school than Foothills/DeAnza, which is in the heart of Silicon Valley. Its 2004 fall term enrollment was 14,872 students – almost all of them credit students. Its recent concentrations have been the same as Foothills, however – technology, switching to healthcare as the economy of the area has changed. The college's service area includes a large ESL population, primarily Hispanic, and this population is growing. Hence, ESL is the primary basic skills need served.

The college has long had a large allied health program. The program has grown in recent years, as jobs in this field have become among the few skilled entry-level jobs in the area, where the cost of living (especially housing) is high.

The connection of basic skills to the college's health programs came about as a result of the federal TANF legislation. This reduced the number of welfare recipients who could be enrolled in training by the local Human Resource Administration (HRA) office. (HRA combines welfare and job training – the Workforce Investment Board). Concerns by HRA and others led to the formation of a Coalition for Workforce Preparation in 1997. The Coalition includes HRA and most local education providers, including the college. The Coalition created a special workforce program to provide a fast track to work – providing as much training as TANF allowed, and starting a case management system that would encourage students to continue their education at the college and elsewhere.

The core of the program consisted of a general Introduction to Work VESL program, as well as VESL programs in healthcare, office careers, construction, and diesel mechanics. Program development for these courses was supported by HRA and special grants from the chancellor's office.

In 2000, the Coalition for Workforce Preparation received the first of four $250,000 annual grants from the Packard Foundation to develop career ladders in various fields. This led to creation of the Career Ladders program with specialties in healthcare, construction, and office services. Previous Coalition workforce programs, including the VESL programs, were placed under the overall Ladders umbrella.

A full-time staff of three people supervises the Ladders program. Although the staff is housed at the college, it is technically independent of all stakeholders and works through partnership committees with representatives from the college, adult schools, and industry representatives in the various vocational areas served. Staff responsibility is largely in the

areas of coordination and management. Faculty members at the college or adult schools have handled curriculum development and other functions in most fields. The college and/or HRA have engaged consultants to conduct labor market analyses/program design studies on several occasions. In the health area, no one involved with the Ladders program has been satisfied with the results of this research because the findings did not seem to correspond to either the perceived needs of the local medical community or the training capacities/preconceptions of the faculty.

The director of the Health Career Partnership also directs the overall Ladders project. Another manager handles relationships with VESL programs. Both managers have a background primarily in JTPA/WIA/TANF administration, rather than education. Although they are housed at the college, they are technically employees of the Ladders program. They consider this important because it overcomes potential "turf" barriers and strengthens the belief of partners that their interests are being considered. In particular, this "neutral" status has apparently been essential in bringing about the active involvement of employers, some of whom may otherwise have thought that the Partnership was just another way to sell them college contract education services.

The entrepreneurial efforts of a college executive, the HRA director, and the Adult School director have kept these efforts moving and supported their implementation.

In the health area, the Ladders program is now coordinated by the Health career Partnership – a steering committee of the college, HRA, the Adult School, and major healthcare providers in the area. Previously, various combinations of stakeholders supervised the health Ladders program. The more inclusive membership is beginning to result in curricular refinements that meet the needs of all as well as better articulation within the college.

Because it has undergone several managerial and programmatic changes, the Ladders project has been a "work in progress" during most of its history. The effort still lacks a data-matching system to track students across programs or determine their employment status after education. Hence, solid data on transitions or success does not exist. Developing such a system is a high priority for the future.

Regrettably, the future of the Ladders program was clouded by some doubt at the time CAAL staff reviewed it in 2004. The Packard grant, which has supported its core functions, was due to expire in 2005. Program staff were unsure whether or how these funds would be replaced.

2. Program Components for Low-Skilled Adults

VESL. There are two components to the Partnership's VESL offerings, Introduction to Work, and Introduction to Health Careers:

Introduction to Work is an open-entry, open-exit, multilevel ESL course provided by the Adult School. Its primary aim is to improve English language skills in the context of

teaching generic work skills. Originally it had no detailed curriculum; it was very much driven by the pedagogical ideas of the ESL staff at the school. Aside from suggested generic work skills, teachers are expected to provide orientation to the curricular options available in the career Ladders system and assist them in accessing those options.

At some point, Introduction to Work came to be seen as a "holding area" for students who wanted to access the next-rung VESL program or move into vocational courses. Because these are not open-enrollment programs, the Partnership leaders were concerned that students who sought to enroll in them between the start-up dates would be lost to the educational system unless there was some open-enrollment option to maintain their interest. Also, many people seeking enrollment were Hispanic field hands, who could benefit from orientation to work skills.

The program meets five days per week. Classes are scheduled for four hours in the morning at the Adult School and three hours each afternoon at the HRA center. Content is repeated on successive days, so that students who miss class or need more help can get it.

In 2001, Partnership's staff became concerned that this course had little curricular structure. The partnership thus hired a consultant to develop a course curriculum. The result is a 10-segment, detailed curriculum intended to be repeated every 10 weeks, but designed for open entry, open exit.

Introduction to Work serves all Ladders programs. Since 2000, it has enrolled 622 students. No figures are available on how many of them have been seeking health careers or on their subsequent placements. Other Ladders programs attempt to recruit the students, however, and many of them entered this course because they were seeking access to those programs.

Introduction to Health Careers is a contextualized ESL course for people seeking entry into healthcare careers. Originally (beginning in 2000), it was an intensive 12-week course based on "ProCare," a curriculum developed by a contractor for the local Volunteer Center (which never made any use of it). The Partnership bought the curriculum from the Volunteer Center. Classes meet Monday through Friday from 9:00 a.m. to 12:30 p.m. at the Adult School and from 6:00 p.m. to 9:00 p.m. at the college. There is repetition of content, but students are expected to go through the complete cycle in 12 weeks (repeating it if necessary to improve their English skills.) The course is not open entry, open exit. It begins every 12 weeks – hence the perceived need for the Introduction to Work "holding" course.

Demand for this program has been very high. Some 496 students have been served since 2000. Each 12-week cycle enrolls 28 students. Because demand is higher than that, Santa Cruz Adult School recently began to offer the same program to help meet the excess demand.

Among the reasons for the high demand is that the course serves as an entry point for jobs as home care providers (for which there is a great demand) without further training. It also serves as a transition point to other career ladder programs, particularly the CNA program offered by the Adult School (see below), which provides further training for home health workers. In fact, the Partnership advertises this as a pre-CNA course.

There is no data on how many VESL students pursue CNA training. However, the Partnership's staff believes that many of the students in the VESL program would probably be hired as home health workers without either VESL or CNA training. But they believe that the VESL program improves both career opportunities and quality of service, regardless of the subsequent careers of students.

Some students are referred to the course by HRA. Most are recruited from the community, often through ties to community groups. Although the course originated as a response to the need for training welfare recipients, the training window under TANF has become increasingly narrow. Also, the staff thinks that Hispanics are reluctant to enroll in welfare programs.

By 2003, the Partnership staff became dissatisfied with this course for three reasons: (a) it was a single-level course, and students with very low levels of language proficiency were a challenge for teachers and did not fare well, (b) feedback from employers suggested that the curriculum did not correspond very well to their perceived needs, and (c) the curriculum was not prescriptive enough.

Using their Packard Foundation funding, Partnership staff (with the aid of a consultant) worked with employers, ESL teachers, and college staff to craft a new curriculum for beta testing in fall 2004. This work was facilitated by the more inclusive nature of the Partnership Advisory Committee, which gave a larger role to employers. Employers suggested, for example, that some important skills – such as the etiquette of greeting patients – were not included in the previous course.

The new VESL offering consists of two courses – VESL Health I and VESL Health II. The former is intended for students having little English language ability. The latter is for students who speak some English, although no precise cut points or test scores have been set. It is divided into 16 modules, most lasting about one week. Each module is centered on certain healthcare tasks (e.g., greeting patients, washing hands, taking temperatures). The curriculum is highly prescriptive, but it allows for repetition of lessons as required.

The new VESL program will be largely "home grown." The Partnership staff, the college, and the Adult School all reviewed VESL programs at other colleges and proprietary curricula and found nothing suited to their particular health needs.

Although the old VESL program was theoretically a ladder to CNA programs offered by the Adult School and the college, as well as to allied health programs offered by the college, there appears to have been very little articulation. Students receive career information from teachers and are encouraged to move on. They are also encouraged to

use the guidance programs of both the Adult School and the college. There is no data on how many students make transitions, but the number has probably been small. Improving guidance, articulation, and student tracking are all goals of the new program.

Surprisingly, the VESL programs do not contain formal language testing at either entry or exit. Thus, there is no way to know the levels at which students enter or how much they improve their overall language ability. The emphasis is solely on functional language skills at the entry level in healthcare.

CNA. The Adult School offers two CNA courses, Nurse Assistant 1 (10 weeks for a fee of $148) and Nurse Assistant II (12 weeks for a $60 fee). The aim of the sequence – and the CNA – is largely to produce home health and nursing home aides, for which there is a good market. The goal is to get low-income, low-English-proficiency students into the healthcare field in some form and to get them a living wage, so that they can make transitions to enrollment in other allied health programs. CNAs earn between $10 and $12 an hour. Although this would still be near poverty-level income for some workers, it is steady work that pays better and is considered preferable to fieldwork – which is the relevant local comparison. Completion information for these programs was not available. In fact, the Partnership staff believes few people complete the courses because the market for CNAs is so strong that students are "pulled out" into jobs. These have not been certification programs.

Previously, there were several CNA programs in the district, but one benefit of the joint planning has been that all programs are now offered by the Adult School – at several locations, including the Cabrillo campus. FTE noncredit reimbursement and student fees cover the cost of the programs.

The CNA program is *not* contextualized. However, tutoring is available from the school's adult education faculty on an as-needed basis, and many students use it.

The program was greatly improved and expanded by staff support from the larger Ladders project developed with the Packard grant. An emerging problem indicated by the Partnership is that a growing number of employers want CNAs to be certified. Although certification instruments/tests are available, they are not yet integrated into this program.

Developmental ESL. Cabrillo's involvement in basic skills also includes developmental ESL for all credit students, as well as developmental English and math (managed by the English and mathematics departments). Developmental ESL has been provided by a separate ESL department, which also provides tutoring by students enrolled in college programs. In the fall 2004 term, 167 students were enrolled in developmental ESL and 718 enrolled students had previously been served in this way. No figures are available on the number of healthcare students served**.**

To improve its ESL offerings, the college is finalizing arrangements to have the Adult School take over management of all ESL on campus. Effectively, this will disband the

developmental ESL program. College staff members hope this will strengthen linkages and improve service to students.

GED. No one interviewed about the Ladders program seems to be very concerned about GED instruction – although many allied health programs require a high school diploma or equivalent. This may be because funding for GED instruction in California has been capped at 10 percent of all adult education funds, and GED instruction is virtually unavailable from public sources.

Incumbent Worker Training. Neither the Partnership nor the college offer incumbent worker training for low-skilled adults in the healthcare field. Under contract education, the college has begun to offer courses in medical assisting/customer service – funded by tuition reimbursement to incumbent workers on site. So far, these are small programs. The college hopes to use them to recruit students for its LPN and other allied health programs.

Other Health Career Services Related to Low-Skilled Adults. As part of the Ladders Program, Cabrillo has developed a number of articulated heath career curricular sequences. Among these are: career ladders in EMS (EMT to Paramedic), Nursing (Home Health Aide to Licensed Vocational Nurse to Registered Nurse), Radiology (Radiology Technologist through Radiology Practitioner), and Medical Assisting (File Clerk to Medical Receptionist to Surgery Scheduling/Unit Coordinator to Medical Records to Coding Specialist/Office Manager/Insurance Specialist/Transcriptionist). The Medical Assisting Ladders is by far the largest – with enrollments of 600 to 700 and about 150 full-time majors per year. This program is largely self-supporting through credit FTE reimbursement. The other programs are cross subsidized by the college. The RN program is partly supported by the area hospitals.

This articulated series of programs is very important, because it defines entry-level positions in the allied health field that students with intermediate levels of basic skills may be able to enter. Moreover, the college offers vocational programs (most of them at the certificate level) to fill these positions. As a result, Cabrillo has defined a far larger range of entry-level options in the healthcare field than any of the other programs reviewed. The exact requirements and success rates of these programs merit close examination.

Although the college attempts to market these sequences to students in the Ladders VESL and CNA programs, there is no reliable data about how many of these students make the transition to the opportunities they provide in the allied health field.

3. Replicability

Individual program components and the overall Ladders program approach to building bridges between them may be replicable in other sites. The new VESL program may be a model for other institutions seeking to build sequential, contextualized ESL instruction leading to healthcare careers. Likewise, the curricular sequences within allied health

fields may provide models for institutions seeking entry points into these fields for people with limited education attainment and/or a realistic next step up career ladders for people in entry-level jobs (such as CNAs). Everyone in the Partnership is anxious to share information about the program with other providers. They are also hungry for information about similar efforts nationwide that might help them improve their work.

4. Observations of Home Health Industry Employers

Two managers of home healthcare referral agencies in the Santa Cruz area were interviewed by CAAL. Both are very positive about the Partnership's VESL programs. The demand for home health workers is very great, and most of the available workforce has limited English. Some are highly skilled (e.g., Mexican nurses) and others are not. Most of the patients speak English and are distressed by their inability to communicate with providers, and some providers lack skills training in elementary functions, such as bathing. According to one of the managers, the VESL program is "the only thing out there that provides any kind of a solution." Although it may not solve all problems, it makes a meaningful difference in both communications skills and elementary care skills. Patients can choose their providers, and they are likely to choose those with at least somewhat better English.

As these employers see it, traditional ESL programs simply take too long to benefit either students or patients. As it is, this program requires a substantial investment of time on the part of low-wage people with little time to spare. The fact that so many students want to attend the VESL programs indicates how much they value it and their willingness to make an investment. The VESL program also fills a gap in the WIA job training system – most of the people in this program would not have a high enough English ability to qualify for WIA training programs.

The employers interviewed want satisfied customers. Although they have not been able to track customer satisfaction for VESL graduates, they believe the program increases it. *They appreciate the fact that they have been extensively consulted about the skills that need to be taught in the program.* They are also very supportive of the general career ladders project, because they have an even greater shortage of CNAs and allied health personnel to whom they can refer clients.

They are concerned that the Packard grant that has supported this work is about to expire.

5. Lessons Learned

- Relationships and trust are everything, and they are hard to build. The college has faced an ongoing struggle to establish trust and collaborations with the Adult School and HRA, and even among different departments.

- It has been especially hard to build collaborative relationships with healthcare providers, despite the demand for all kinds of healthcare workers. This has only recently been achieved in an ongoing way.

- It is essential to have full-time staff managing a collaborative career ladders project. This kind of innovation and collaboration "isn't in anyone's job description."

- The staff should be independent of any of the partners to ensure a focus on the task at hand and to be perceived as neutral in dealing with all of them.

- It is essential to have outside program development money. Colleges do not have enough spare funds in their budgets.

- Educators/administrators often do not know the methodologies for collaborative work. They compare themselves unfavorably to business people who have these management skills.

- The professional background of program managers affects the types of programs developed. In this case, the Partnership staff consists of people with a primary background in workforce development rather than education. They brought strong vocational focus to the program, but they may have found it harder to win the confidence of educators or refine the educational components.

6. CAAL Observations

The Health Careers Ladders program, and its VESL program in health, were very favorably reviewed by the Workforce Strategy Center in its August 2002 report, *Building Bridges to Colleges and Careers: Contextualized Basic Skills Programs at Community Colleges*.[13] Ladders is undoubtedly an extremely ambitious program with many important components. Its efforts to link those components together are especially noteworthy. Of all the programs reviewed, it probably comes closest to providing comprehensive career pathways for very low-skilled, disadvantaged adults – although the program is still seeking to strengthen the articulation between its components that would realize its full potential in this regard.

It is important to stress, however, that both the overall Ladders project and the VESL program are very much works in progress. In fact, both are being restructured due to dissatisfaction with prior models. Although some elements of the program are four years old, the college and its partners have continued to learn by doing. At present, articulation within mainstream allied health fields appears to be fairly strong, but articulation between them and developmental programs seems less strong, although the college and various partners have been working to improve it for four years. The persistence of everyone involved with Ladders in continuing to refine both the overall program and its individual components has been one of the program's greatest strengths.

[13] The Workforce Strategy Center, located in New York City (Brooklyn), is a nonprofit management consulting firm that works to "help create public systems that promote career pathways leading people to high-wage, high-demand employment." *Building Bridges to Colleges and Careers: Contextualized Basic Skills Programs at Community Colleges*, by Juliam Alssid et al, is available in full or as an Executive Summary at www.workforcestrategy.org/publications.

Although the program's future was clouded by financial uncertainty at the time CAAL reviewed it, its potential to achieve even more appears to be great. From a national perspective, it would be unfortunate if this pioneering program could not continue its work.

E. BASIC EMPLOYMENT SKILLS FOR HEALTHCARE WORKERS

Emphasis: Technology for instruction
Management Institution: Owensboro Community and Technical College
– in partnership with Owensboro Medical Health Systems (formerly Mercy Hospital)

1. Background and History

Since 2002, Owensboro Community and Technical College has managed the state adult education contract for Daviess County. But its involvement in workforce education predates the contract. The organization and enrollment figures of the Owensboro program reflect this fact. Adult education is located in the college's business and industry training unit. Workforce programs served about 75 percent of the college's 2,500 adult education students in 2002-2003. Of the eight full-time staff, five are industry trainers. Thus, Owensboro's adult education program has been primarily in the business of workforce education.

The Owensboro workforce program was created in response to local economic problems. Owensboro is the third largest city in Kentucky. In recent decades, it has been losing jobs to larger cities, both within and outside the state. In 2001, the local Chamber of Commerce concluded that ". . . the development of a quality workforce was the most critical element in the community's ability to achieve long term economic viability." Employers were experiencing rapid turnover in lower-level jobs and found it difficult to find employees with the foundation skills necessary. Plant closings left large numbers of underskilled workers stranded. Efforts to deal with this problem were fragmented. The Chamber asked the college to ". . . assist in developing a truly integrated workforce development and training system."

The college's first workforce basic skills initiative was undertaken in partnership with Owensboro Mercy Hospital (now Owensboro Medical Health Systems [OMHS]), the region's largest hospital and employer. This was made possible by a $105,000 grant in 2001 from the state's Workforce Alliance (a job training grant fund administered by the Kentucky adult education system). The grant has been renewed in successive years. In addition, substantial cash and in-kind contributions from the hospital, including a state-of-the-art learning laboratory, have supported the initiative.

2. WorkKeys

Like most offerings of Owensboro's workforce basics, the OMHS program is primarily technology-based. Specifically, it is based on the American College Testing (ACT) WorkKeys assessment and job profiling system. Ultimately, WorkKeys is derived from a categorization of applied workforce basic skills developed by the U.S. Department of Labor in 1991 (the SCANS system). It contains three primary components:

- *Assessment instruments that measure the level of an individual's basic skills in eight domains: reading for information, applied math, locating information, listening, observation, teamwork, writing, and applied technology.* The assessment is available in both a computerized form and a paper-and-pencil form. Individuals are ranked on a scale of 1 to 6 or 1 to 7 depending on the skill domain. A score of 4 or 5 is considered satisfactory for most jobs. All assessments, and the skills assessed, are generic. ACT asserts that they are portable skills across all employment areas.

- *A system for identifying the skills required in a particular occupational category or even a particular job.* Employers (or training providers) can use the system to determine which of the WorkKeys domains, at what level, is essential for successful performance in particular job categories. The profiling system is essentially a set of structured questions to which HR personnel, supervisors, and employees respond. The results are then coded by WorkKeys, and essential domains and skill levels are reported.

- *A database of the domains and skill levels required for more than 400 occupations (including most of those in the healthcare field).* The data base is composed primarily of an aggregation of thousands of profiling exercises carried out by employers, although ACT has itself profiled certain high-demand occupations. Thus, employers can either profile occupations themselves, or rely on the profiles in the database, or both.

Although WorkKeys is primarily used for pre-employment screening (and is designed to pass EEOC scrutiny), it can also be used to guide skills upgrading for incumbent workers and to identify the skills they need for promotion or further vocation training. For all these purposes, the state of Kentucky's adult education agency has purchased a license for WorkKeys for all of its adult education programs (including Owensboro). Licenses to use the system can be fairly expensive (on the order of $10,000 depending on the nature of the license and its use). The state negotiated a good bulk purchase rate and considers this to be a major contribution to the adult education system.

In addition, the state has established a system of Certificates of Employability based on the system. The aim of this is to create a recognized, portable credential of basic skills for workers who may change jobs. A Silver Certificate is issued to employees who score at least a level 4 in Reading for Information, Applied Mathematics, and Locating Information. A Gold Certificate is awarded to those who score a Level 5. Although crosswalks to other test scores from WorkKeys are imprecise, people scoring at Levels 4 or 5 would probably test at tenth- to twelfth-grade levels in reading and math on TABE.

3. Program Structure

The OMHS program consists essentially of an application of the WorkKeys system to the frontline incumbent workers at the hospital. OMHS uses WorkKeys scores as criteria for advancing existing employees in many OMHS departments including: human resource

and development, pharmacy, surgery, health information, nursing education, facilities (secretarial positions), and quality control. The hospital also uses it to decide which workers should receive tuition reimbursement for the wide range of training programs available to hospital employees. By both means, WorkKeys scores provide access to career ladders.

The OMHS program also uses WorkKeys to identify whether incumbent workers require basic skills instruction.

The participation of incumbent workers in either assessment or instruction is entirely voluntary. Workers demonstrate proficiency by taking the WorkKeys tests. They are encouraged to strive for Silver or Gold Employability Certificates. Those who obtain the certificates are awarded a $250 stipend by the hospital.

Most instruction in the hospital program consists of individual study using the hospital's learning laboratory. After initial assessment, employees are counseled about their skill levels and instructed in how to use the learning laboratory to improve their skills (if necessary). On-going assistance is provided in the lab. In addition, employees are advised about employment and training opportunities and the skill levels required for them.

Because WorkKeys does not have its own instructional component, another proprietary computerized instruction product (SkillTrain) linked to the assessment system has been used. In addition, both individualized tutoring and small-group-instruction are conducted as needed to assist students in upgrading particular skills. For the most part, this instruction is of short duration, but it may be extensive in the case of employees with very low skills.

All instruction is provided on employees' free time. Most use the learning lab, and classes are held between shifts or on weekends.

The program also includes classes in computer fundamentals –short courses (8 to 10 hours) on how to operate a computer and use basic applications such as e-mail and the Internet. OMHS has found this component extremely valuable. At the time it was implemented, some 600 nurses did not know how to use a computer.

For the most part, the program has relied on job profiles in the WorkKeys database. After discussion with hospital managers and staff, the program directors determined that the database covered most of the relevant occupations and skill categories. However, both hospital and college staff members believe that instructional services and placement could be improved by skills audits of job categories in which there is a high demand for employees at the hospital. At the time of our research, they were planning to conduct these audits.

4. Program Implementation

In the first year, the basic skills program at Owensboro Medical assessed approximately 300 hospital employees in the WorkKeys skills of reading and applied math, and then followed up with targeted instruction to upgrade skills deficiencies. In the second year, locating information was added to the battery of assessments. To date, a total of 800 incumbent workers have been served – 600 by the WorkKeys system.

In 2002-2003, a total of 335 incumbent employees were served. Of these, 235 received both basic skills training and instruction in computer fundamentals. Eighty workers received Kentucky Employability Certificates and $250 stipends. Targeted instructional services were provided to 28 workers who tested below WorkKeys Levels 3 and 4. Ten workers at Levels 1 or 2 received independent computer-based training and small-group instruction. All participating employees were given the opportunity to work toward advancement to higher WorkKeys levels if they chose to do so.

Beyond the licensing fee and the cost of instructional materials, the program is fairly simple and inexpensive to operate. A single resident trainer performs most functions and calls in other college adult education staff as needed for computer training and some aspects of basic skills.

5. Effectiveness

Both the college and the hospital consider the program to be highly successful. Some incumbent workers have used it to achieve learning gains. Others have used it to demonstrate their skill levels in order to seek better jobs. The hospital's human resources director reports that WorkKeys scores are frequently used as one consideration in determining job placements, particularly for workers who wish to make lateral career moves (e.g., from support to patient services) or to advance up career ladders in their present area of specialty. In addition, the director sometimes uses scores to retain employees who are considering leaving the hospital to make lateral transfers. The director also believes that the program improves morale by making employees feel more highly valued. This program is now mature and will probably continue for the indefinite future.

6. Replicability

Owensboro staff and Kentucky adult education officials believe that the program could be replicated at any medical facility. In fact, a number of other colleges in Kentucky are planning to replicate it, perhaps with adaptations, for their healthcare instruction with funding from the Ford Foundation's Bridges to Opportunity Program. In addition, Owensboro and other colleges use the WorkKeys system in a similar fashion in a variety of industries.

7. Lessons Learned

- The college president's commitment to workforce training of all kinds – including basic skills – was essential to launch and maintain this program.

- The hospital's commitment was also essential. This commitment was mainly the result of interest by the hospital's human resource director, but budgetary and space issues have required approval and commitment by the hospital administrator and other staff.

- Special grant funding was essential for launching and maintaining the program. Although the college is reimbursed for serving employees as adult education students, that reimbursement rate (very low in Kentucky) is not adequate to support the program, and certainly would not have been enough to launch it. Moreover, the availability of grant funding and the WorkKeys system enabled the college to get its "foot in the door" at the hospital.

- The program was built "from scratch" with no preconceptions about what form it should take. Thus, it was necessarily customized to the hospital's needs.

- Both the hospital and the college believe that an emphasis on portable, rather than contextual, learning is sound. Both institutions have long had a variety of training programs in job-specific skills. The basic skills program fills an important gap in maintaining a high-quality workforce and in opening up opportunities for advancement within the hospital, and in other jobs.

- The high rate of employee participation indicates that they value and use the program. In fact, participation levels would be higher if the learning lab was larger. In particular, many employees seem to view the employability certificate as a second (or in some cases, first) high school diploma that will both create greater job security and advancement.

8. CAAL Observations

Obviously the OMHS program does not meet all health career training needs. The major beneficiaries are fairly highly skilled incumbent workers who wish to advance up career ladders. However, this WorkKeys application is one of the few continuously operating programs uncovered by CAAL that is addressed to the basic skills needs of incumbent workers. Because of the cost-effectiveness of its computer-based approach, it serves very large numbers of workers each year. This focus and scale suggest that the Owensboro approach could be a valuable component of other health career programs.

Moreover, there is no inherent reason why the approach cannot be used to identify basic skills problems of very low-skilled workers and to plan remedial education for them.

Only a few workers fall into this category at OMHS due to the fact that workers with very low skills are screened out by other means. In healthcare settings where very low skills are a problem, however, job audits and instructional programs based on WorkKeys may be valuable strategies for addressing that problem.

F. MEDICAL EDUCATION CENTER CAREER LADDERS PROGRAM

Emphasis: Recruiting disadvantaged students and preacademic programs
Management Institution: Northern Virginia Community College, Springfield, VA

1. Background and History

The Medical Education Center is the sixth of Northern Virginia Community College's campuses. It is dedicated entirely to the health professions. Until 2003, it was a "virtual campus." Now it occupies its own three-story building in Springfield – the first floor of which is a free teaching clinic open to the community. Many of the college's healthcare programs are offered there, along with an array of supporting services. Enrollment began at 1,500 and will soon total 3,000 for all programs.

The centerpiece programs of the campus consist of seven for-credit A.A.S. allied health programs, plus a large number of continuing education certificate programs. Of these, the RN program is the most highly esteemed. The campus also offers transfer to B.A. and M.A. programs at George Mason and Virginia Commonwealth Universities. In addition, it has initiated pipeline programs with some local schools, and it offers high- intensity modularized courses for both upgrade training/certification of incumbent workers and certification in areas such as EMT.

The entrepreneurial provost of the Medical Education Center has pulled the campus together and pushed through development of its offerings for low-skilled, disadvantaged adults.

2. Programs for Disadvantaged Adults

The provost is acutely aware that Northern Virginia has a large language minority population and that many high school graduates are unprepared to succeed in allied health areas. She has developed numerous initiatives to respond to these needs. She is particularly committed to the idea that the area needs immigrants in the workforce, most especially in allied health, and that they too often miss opportunities and/or are poorly trained. For example, CNAs are in great demand at nursing homes, and some of the staff recruited may not have adequate skills. To address these problems, the Medical Education Center has developed the following components to meet the needs of disadvantaged, low-skilled adults.

Developmental Education and Tutoring. For the most part, the college takes a fairly conventional approach to basic skills remediation. Students who wish to enter credit courses must take a placement examination (for nurses, this is the Test of Essential Basic Skills [TEBS] – reading, writing, science, and math). For others, the COMPASS or ACCUPLACER are used. Those who do not pass at the eleventh-grade level are referred to developmental education at one of Northern Virginia's other campuses. There does not appear to be a system in place to determine how these students fare. Also, many of the

college's certificate and short courses require demonstration of freshman English and math, or both, and referrals are made to developmental education.

With regard to ESL, however, the campus has developed a fully contextualized English for Healthcare program. This is offered at no charge on an open admission basis at the Woodbridge Campus. The goal is to improve English and other skills to the level where students can pass allied health entry exams and have a leg up on health skills. Because this program has just been introduced, participation and success rates are unknown. The detailed curricular structure of this course was not available and may merit further inquiry. It appears to be aimed at immigrants who have fairly high educational levels but limited English proficiency.

In addition, tutoring in both English and other basic skills is available to students who enter allied health programs but experience difficulty in applying some skills.

Sequencing Instruction. For entry-level students, the Center offers various forms of orientation and guidance plus assessment exams and counseling and referral based on them. This guidance system aims to direct low-skilled adults to appropriate levels on career ladders. To facilitate entry into health careers, the campus provides a wide range of short courses. Although most of these have basic skills prerequisites, the entry requirements are lower than for the allied health programs, which are the primary focus of the Center (e.g., a three-week, high-intensity CNA course is offered for $900 with an English prerequisite; and a nine-week pharmacy technician is offered for $2,200 with math and English prerequisites). One goal of these programs is to help students stabilize their income, get a foothold in health careers, and continue their education from there. The short CNA program produces about 150 graduates per year.

The strategy of helping students obtain a foothold in the healthcare field appears to work quite well in terms of providing students opportunities to obtain financial aid for further education. Large employers, such as the nonprofit Inova Health System chain that dominates hospital and long-term care services in Northern Virginia, offer tuition reimbursement. A significant number of allied health students are recruited from this system for upgrade training in the allied health programs.

As another entry-level strategy, the college has introduced a sequence of Health Basics I and Health Basics II. These are generic healthcare courses that include contextualized English and math. Their aim is to help people with uncertain goals in healthcare to get a sound general background and orientation, as well as basic skills. Inova and others offer tuition reimbursement for some of these students as well – about 500 enrolled in the first year. Based on initial experience, these students seem to have a high transition rate to mainstream allied health.

Health Careers Opportunity Program (HCOP). This is a highly interesting program for disadvantaged adults. It is funded by a grant from the Federal Health Resources and Services Administration (HRSA) under their Health Careers for the Disadvantaged Program ($14 million – 35 grants awarded per year). HRSA also operates a very similar

Centers of Excellence Program ($6 million – 10 grants awarded per year). HCOP has a staff of three, and enrolls 50 students per year. Demand is high and program managers believe that it should grow.

The centerpiece of the HCOP program is a high-intensity 6-week summer program for disadvantaged adults. It includes orientation, basic skills (contextualized English and math), elementary health training, clinical exposure (visiting various clinical sites), study skills and related soft skills, and a great deal of guidance and counseling. Students who complete this program are guaranteed admission to allied health programs. Moreover, HCOP provides follow-up case management.

Student progress is reported to the HCOP staff on a regular basis. The students are assisted in meeting academic or other barriers as needed, and they are given at least two counseling sessions each year. HCOP also organizes each class of graduates into peer support groups. And it provides academic and study skills tutoring, both to its graduates and to other Center students on an as-needed basis. The primary goals of HCOP are recruitment and guidance for disadvantaged adults, and helping students receive financial aid.

Not surprisingly, most students are disadvantaged high school graduates or GED recipients with deficient basic skills. This is an important niche population for health career programs. The average GED recipient has reading and writing skills at about the tenth-grade level, whereas college programs usually require proficiency at the twelfth-grade level or above. With intensive remedial education and guidance, HCOP appears to provide disadvantaged students who would otherwise be relegated to dead-end jobs with opportunities in the healthcare field.

3. Funding

Most of the college's healthcare programs are priced at very high levels (several thousand dollars per student). They are largely supported by tuition, with some supplemental grants. No one involved with the Center appears to be concerned about cost or funding, however. Most students carry fairly heavy course loads and qualify for either state or federal financial aid.

4. Replicability

Of all six programs reviewed, the North Virginia initiative is probably most easily replicated by other community colleges. It applies fairly standard community college tools – developmental education and referral to adult education programs – to the problems of low-skilled individuals seeking to enter the healthcare field. To supplement these, it has developed high-intensity recruitment, career guidance, and skills upgrading components closely articulated with its major course offerings – all of which should be replicable elsewhere.

5. CAAL Observations

The Medical Education Center is one of three community college health programs that participate in the League for Innovation's College Career Transition Initiative. (The others are Miami Dade and Ivy Tech.) On the whole, it demonstrates a traditional community college reaction to the challenge of serving disadvantaged adults with low basic skills: a combination of developmental education, tutoring, entry-level courses, and scholarship programs.

With the HCOP program and the new contextualized ESL program, however, the campus is initiating more innovative approaches. Moreover, the health basics and short courses understand that even students who may be admitted to mainstream healthcare training programs may need basic skills remediation if they are to succeed.

The chancellor of Northern Virginia Community College is clearly committed to increased service to immigrants and disadvantaged adults. At this point, the Center's efforts are promising works in progress toward that general end.

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GAIL SPANGENBERG (President, Council for Advancement of Adult Literacy) founded CAAL in 2001. In the 1980s-1990s, she was a national leader in adult literacy as chief operating officer of the Business Council for Effective Literacy. Before that, she was a program officer at the Ford Foundation where she directed grant programs in educational technology, open learning and nontraditional higher education, adult literacy, and urban higher education in the U.S. and Western Europe. In the late 1970s, she was a member of the team led by former U.S. Commissioner of Education Harold Howe II that studied the governance, funding, and facilities needs of the City University of New York for Mayor Ed Koch. She has provided policy analysis and other advisory services to a wide range of education, philanthropic, arts, and governmental organizations, including The New York Public Library, the U.S. Department of Education, the William & Flora Hewlett Foundation, the Carnegie Corporation, Chemical Bank, and the British Broadcasting Corporation. Ms. Spangenberg has directed several major studies, including: *Even Anchors Need Lifelines: The Role of Public Libraries in Adult Literacy* (1976, Library of Congress); a one-year assessment of needs in adult literacy and the feasibility of creating a blue-ribbon commission on adult literacy (2000, funded by the Carnegie Corporation and Ford Foundation); and the Independent Task Force Study of the New York State Regents External Degree and College Proficiency Examinations Programs (1983, chaired by the Honorable Frank Keppel). She initiated the Ford Foundation's attention to the role of women in that foundation and its external grant programs. She has written widely on adult education and open learning. She serves/has served on many state and national governing boards, advisory committees, and task forces, including CAAL's study of community colleges and adult education.

FORREST P. CHISMAN (Vice President, Council for Advancement of Adult Literacy) has had extensive experience developing collaborative ventures in and among community colleges, including relationships in technology and in allied health. From 1988-1996 he was president of the Southport Institute for Policy Analysis, an independent policy research and advocacy organizations specializing in adult literacy, job training, welfare policy, and other aspects of human resource policy. His groundbreaking *Jump Start* report provided the blueprint for the National Literacy Act of 1991. From 1982-1988, Mr. Chisman directed the Project on the Federal Social Role, a bipartisan group of governors, mayors, and members of Congress investigating future direction of federal social policy. In this position, he also directed the Commission on Federalism and National Purpose. In 1977, he joined the Carter Administration as deputy associate administrator for policy and he was director of planning and policy coordination in the U.S. Department of Commerce's newly-formed National Telecommunications and Information Administration. Earlier, he was associate director of the Program on Communications and Society at the Aspen Institute as well as a senior program officer at the John and Mary R. Markle Foundation. He has written extensively on federal social policy, adult education, health care, employment, public opinion, social security, welfare,

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