

Expanding the CareerAdvance® Program in Tulsa, Oklahoma



Prepared for the Health Professionals Opportunity Program Administration for Children and Families U.S. Department of Health and Human Services and the George Kaiser Family Foundation

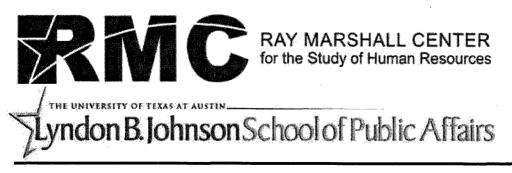
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Workforce development for parents was part of the vision of the Community Action Project of Tulsa County (CAP) to help improve the economic position of Tulsa's low-income families and to sustain the performance outcomes achieved by Head Start children. Steven Dow, CAP's executive director, realized the potential early on and promoted a twogeneration approach by adding parent training in Career*Advance*[®] from its inception through implementation. The staff of the CAP Innovation Lab, directed by Monica Barczak, translated the program design into reality. Micah Kordsmeier launched the program and managed it through its pilot year. Career Coach Tanya O'Grady quickly gained rapport with the program's participants and successfully established a strong atmosphere of mutual trust and peer support in the partner meetings from the beginning of Career*Advance*[®]. She also became an exceptional mentor to the participants. Grace Nelson added to the team in its second year. We especially want to thank Liz Eccleston, Tanya O'Grady and Elizabeth Harris of the CAP Innovation Lab for gracefully and promptly responding to numerous questions and requests for information.

From our initial visit to Tulsa in spring 2008 and during our regular conference calls with CAP staff, Hirokazu Yoshikawa of the Harvard Graduate School of Education shared his vast knowledge of relevant academic research and program implementation, which greatly helped in guiding the program.

The CareerAdvance[®] project is a collaboration involving many partners, who all have cooperated with project and research staff from the beginning. These partners included Tulsa Community College, Workforce Tulsa, Family & Children's Services, Union Public Schools Community Education Program, Tulsa Technology Center, Educational Opportunity Center (EOC) at Rogers State University, the Eastern Oklahoma Black Nurses Association, ResCare-Tulsa, and the Northeast Oklahoma Area Health Education Center (AHEC). Staff members of the Capital IDEA in Austin also were very helpful in training staff for the program in Tulsa. We want to thank the leadership and staff from all of these organizations for being helpful colleagues in this project.

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Sabol, and Emily Ross, who discovered Career*Advance*[®] on a nationwide search funded by the Gates Foundation in 2010 for exemplary two-generation programs. They made us all realize how special Career*Advance*[®] is. By joining the research team, they have added enormously to the program and the quality of the research effort. They have brought extensive expertise on families and children to the initiative.

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Finally, our thanks are due to Susie Riley and Karen White of the Ray Marshall Center who were especially helpful in providing logistical and research support for this project.

EXECUTIVE SUMMARY

CareerAdvance[®] began in Tulsa in 2009 as the parent training portion of a twogeneration strategy to end the cycle of poverty in families with a child enrolled in Head Start or Early Head Start. The driving theory of change behind CareerAdvance[®] is that family economic success will protect and enhance gains made through high-quality early childhood programs even after children transition into the public school system. The program is operated by the Community Action Project of Tulsa County (CAP), an antipoverty agency with a highly successful record in growing pilot programs into effective large-scale initiatives.

After a year as a pilot program, CareerAdvance[®] moved into regular operations, at which time funding from the Health Professional Opportunities Grant program (HPOG) from the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services enabled the program to expand and scale-up. This report reviews the progress of CareerAdvance[®] at the end of its initial year of operations as an HPOG program in September 2011.

Over the past year, CareerAdvance[®] grew from serving 26 participants to a total enrollment of 70 participants, adding two new cohorts of participants, comprising three classes of students. In addition to the original program for training in nursing occupations, the CareerAdvance[®] staff developed and implemented training for a new career path in Medical Assisting/Health Information Technology (HIT). CareerAdvance[®] also refined its procedures for recruitment, orientation, and enrollment as well as its criteria for selection, strengthened its approaches to providing supplemental basic skills and college-readiness instruction, and overcame several challenges during the past year, including personnel changes, working effectively with educational partners, and helping participants to overcome obstacles to advance.

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CAREERADVANCE®: AN INTRODUCTION

CareerAdvance[®] began operations in summer 2009 as a sectoral workforce training program for parents of children enrolled in Early Head Start/Head Start. It is part of an explicit two-generation antipoverty strategy focused on promoting family economic security by developing the human capital of parents while their preschool children are achieving in a resource-rich learning environment. The driving theory of change behind CareerAdvance[®] is that family economic success will protect and enhance gains made through high-quality early childhood programs even after children transition into the public school system. Launched and administered by staff of the Community Action Project of Tulsa County, CareerAdvance[®] builds on a strong network of Early Head Start and Head Start programs, adding high-quality training for parents targeted at selected healthcare occupations that offer family-supporting income, benefits and opportunities for career advancement.

It is now widely accepted across the scientific community that age 0-5 is a critical development time for children, reinforced by considerable evidence (e.g., Shonkoff and Phillips, 2000). Evidence is also accumulating to demonstrate that children perform better behaviorally and academically in families with stable employment and rising incomes (Yoshikawa, Weisner, and Lowe, 2006) and who are improving their own educational levels (e.g., Magnuson, 2007; Sommer et al., in press). Increasing the human capital of the parent(s) protects and enhances the investments in their children made through programs such as Early Head Start and Head Start.

BUILDING ON EARLY HEAD START/HEAD START IN A TWO-GENERATION FOCUS

Recent research suggests that young children can be a powerful source of motivation for parents to further their own education. Moreover, having children participate in quality early education centers can be a major new resource for promoting postsecondary education and training for parents.

Low-income parents often state that one of the most common barriers to postsecondary enrollment and completion is the lack of accessible, affordable, quality child care (Gardner et al., 2010; Sommer et al., in press, 2012). Early Head Start and Head Start provide up to five years of high-quality child development, allowing parents to further their own education and training.

Well-organized, welcoming early childhood education centers can offer parents peace of mind, a supportive community, and information and resources that create a unique platform for potential postsecondary success. If mothers and fathers view

themselves as part of a supportive community at the center, including other parents, teachers, support staff and administrators, then adding a postsecondary intervention component for mothers and fathers becomes feasible (Sommer et al, 2012). Parents already perceive early childhood education centers as reliable sources of information and guidance regarding child development and parenting. Center resources that actively serve the needs of parents could be expanded to include resources on postsecondary education and workforce development as well.¹

Theory and research together have shown that: (1) postsecondary education and training is likely to increase the financial stability and life-long learning of low-income parents; (2) financial stability and postsecondary education improve child outcomes; (3) increasing a mother's and father's education while their children are still young is more feasible and beneficial for parents and children than waiting until children are older and in public school; and (4) early childhood centers can provide an ideal context for implementing adult career and educational pathways while both parents and children are young (Somer et al. 2012)

To date, few programs have addressed the postsecondary education and training needs of young, low-income parents and children through a family perspective. The innovation of CareerAdvance[®] is to create a two-generation educational initiative that is focused on both parents and children advancing together.

THE COMMUNITY ACTION PROJECT OF TULSA COUNTY (CAP)

CAP is a comprehensive anti-poverty agency that addresses the multiple needs of low-income Tulsa families by providing programs in early education, housing, and financial and tax assistance. CAP has a history of partnering with schools and social service organizations in the Tulsa area, including Family & Children's Services, local school districts, Tulsa Community College, and the Tulsa Technology Center.

CAP is an innovator in early childhood education, asset development, financial education and other areas, and has recently evolved into a system of eight large comprehensive, high-quality learning centers, in addition to seven smaller centers, which together serve nearly 2,000 Tulsa children.

CAP began the CareerAdvance® project with a demonstrated track record of

¹ Recent work by the Ray Marshall Center (King et al., 2011) suggests that dual-generation strategies can build either from high-quality early childhood programs to incorporate sectoral workforce training, from leading-edge workforce training to high-quality early childhood programs. In some communities, it may only require connecting existing excellent programs; while in others it may require creating one or the other from scratch.

successfully implementing innovative programs, testing their effectiveness, and building them to scale. In their early childhood work, CAP increased the number of children enrolled in its program by 51% over three years, growing from 1,320 to 2,000. To reach this level, CAP developed strong and effective working partnerships with local public school districts and built five new state-of-the-art facilities. CAP also made remarkable strides in providing free tax preparation services to low- and moderate-income Tulsa families. CAP began preparing tax returns with the objective of ensuring that eligible families would receive the Earned Income Tax Credit (EITC) and other child-related tax credits to which they are entitled. Since its inception, CAP has become one of the largest free tax preparation programs of its kind in the country. The program experienced a more than ten-fold increase in the number of clients served, growing from 1,200 returns prepared in 1995 to 17,495 in 2010. Likewise, the amount of refunds generated increased more than 1,000% from \$1.4M in 1995 to a record-breaking \$35.9M in 2009.

A third program that CAP piloted and then took to scale was the Individual Development Account (IDA) program, which encouraged household savings by providing matching funds. In 1997, CAP was selected as one of 13 organizations to participate in a national demonstration project sponsored by the Corporation for Enterprise Development (CFED) to test the efficacy of IDAs as an anti-poverty strategy. Due to its early success, in 1998 CAP was selected as the premier demonstration site and underwent a rigorous evaluation conducted by Abt Associates and the Center for Social Development at Washington University in St. Louis. The large-scale program entailed adding 536 additional clients to the IDA program over four years – all employed with incomes below 150% of the federal poverty level at time of entry into the program.

Although CAP had long and extensive experience in working with low-income families, prior to CareerAdvance[®], CAP staff had no prior experience in administering workforce development programs.² CAP has been able to take the CareerAdvance[®] model and implement it successfully, demonstrating high rates of attendance and persistence.

EARLY CHILDHOOD EDUCATION AT THE COMMUNITY ACTION PROJECT OF TULSA COUNTY

CAP administers an exemplary early childhood education program. The National Association for the Education of Young Children (NAEYC) has certified CAP's ECE centers.

² However, Steven Dow, CAP's executive director, and Dr. Monica Barczak, CAP's Innovation Labs director, have served as members of the Tulsa Area Workforce Investment Board for several years, and have practical knowledge of the structures and activities of the workforce development system in the community.

CAP staff members are well qualified; all lead teachers have bachelor's degrees and are supported by master teachers and a strong array of professional development programs. Most of the CAP centers are purposefully located adjacent to or on an elementary school campus in the Tulsa or Union public school district in order to provide children and their families a smoother transition from pre-kindergarten to elementary school. Teachers from the elementary schools visit the early childhood centers so that children become familiar with them. Children also tour the elementary schools to become familiar with the facilities before they move up. The co-location facilitates future possibilities to partner with families over expanded time frames, such as in the pre-k through 3rd grade model advocated by the Foundation for Child Development (Shore, 2009).

Each family with a child in Head Start, Early Head Start or the State of Oklahoma Pilot Early Childhood Program is assigned a family support staff member from Family & Children's Services, who assesses family needs and works with parents to identify family goals at the beginning of each school year. During the year, the family support staff member works with the family on the goals it has prioritized and deals with any crises that arise. They also present workshops to develop parenting skills and knowledge. For example in 2011-12, family support staff are presenting workshops using materials from "The Incredible Years" programs to improve parent-child relationships and help promote the social competence and emotional regulation skills of children. Career*Advance*[®] staff collaborate with family support workers to resolve problems and overcome obstacles to success in school.

Progress of the children on social, emotional, physical, and cognitive scales is regularly measured through the Teaching Strategies GOLD assessment and the Bracken School Readiness Assessment. CAP's classroom environments are annually assessed and analyzed using the Classroom Assessment Scoring System (CLASS®) program. Professional development for teachers and other actions are taken to make improvements each year on the basis of assessment results.

THE DESIGN OF CAREERADVANCE®

The design of CareerAdvance[®] was built on extensive research regarding three aspects of the Tulsa environment: (1) an economic and industry sector analysis, (2) a review of the structure and capacity of area education and training providers, and (3) information about the parents and families to be served. The findings of this research are summarized in King et al. (2009). The report begins with an analysis of the Tulsa labor market and key sectors that provide opportunities for reasonably well-paid work with good employee benefits, job stability, safe working conditions, and opportunities for career advancement and wage growth. Included in the analysis is a discussion of leading employers and key jobs within the chosen sectors. Starting with the demand side of the market — employers' needs — is a significant feature of sectoral workforce development strategies and one that distinguishes them from more traditional workforce programs. Sectoral strategies are based on the principle, grounded firmly in labor market theory and backed by considerable research, that employers control the jobs and that programs must start from where people are and address gaps between this level and what employers need.

Several candidate industries were considered in researching the Tulsa labor market in 2008-09, including advanced manufacturing, energy, the aerospace industry, and healthcare sectors. The Tulsa Chamber of Commerce and the Oklahoma Governor's Council for Workforce and Economic Development also targeted these industries. However, by 2009 after the Great Recession had begun, only healthcare met the criteria of a growing industry offering the requisite wage and advancement opportunities. Within healthcare, nursing was clearly the occupation with the largest worker shortage.³

An assessment of workforce and educational providers in the Tulsa area revealed that the Tulsa workforce system was composed of multiple organizations with varying degrees of connectivity. Workforce Tulsa, the region's workforce investment board (WIB), and the two Tulsa Workforce Centers are primarily funded by federal dollars from the U.S. Department of Labor's Workforce Investment Act (WIA) programs. The other organizations include providers of workforce training – Tulsa Technology Center (Tulsa Tech), Tulsa Community College (TCC), and Oklahoma State University Institute of Technology – and the Tulsa Chamber of Commerce, which played an important role in bridging economic and workforce development through the pursuit of sectoral approaches in recent years. Tulsa

³ The shortage of nurses in Tulsa was subsequently validated and quantified by Plati (2010), which identified a shortage of 700 nurses annually.

Public Schools⁴, Union Public Schools, and the YMCA provide instruction in English as a Second Language and GED preparation.

Although Tulsa has strong technical education institutions, including Tulsa Tech and TCC, workforce preparation is fragmented and the Tulsa Workforce Board is weak, having purview only over funding from the Workforce Investment Act (WIA). Especially lacking in Tulsa have been labor market intermediaries, which could play an effective role in connecting educators, training providers and employers.

To gather information on the parents to be served, CAP staff — with assistance from staff of Family & Children's Services — conducted a pilot survey designed jointly by the research team. The survey, which covered a sample of CAP parents from five centers, confirmed that many mothers of children in Early Head Start/Head Start were interested in pursuing careers in healthcare; some had even tried to do so on their own in the past— without success.

Working closely with CAP staff, the design team developed a multi-component project that is grounded in the literature on best practices across several fields, including job training and sectoral workforce strategies, work supports, incentives and related areas. The design was tailored to Tulsa's unique labor market context, workforce structure, and capacity (King et al., 2009).

The strategy proposed was a sectoral workforce training program targeting jobs in a growing industry sector, with a ladder of education, training, and certifications in an occupational area offering potential opportunities for advancement and family-supporting income with fringe benefits. The concept was to provide a pathway of stackable training that allows individuals to stop-out (either temporarily or permanently) at multiple points along the pathway with an industry-recognized credential. The program design included: working closely with employers in a industry sector to identify, understand and fill their needs; training participants in a cohort (especially important at the beginning of training); fostering peer mentoring and support through facilitated weekly meetings; offering incentives for good performance; and paying for books, tuition, testing fees, uniforms, vaccinations, and other school-related expenses. In addition, the recommended design provided for wrap-around supportive services such as career coaching, selective tutoring as needed, gasoline monies to assist with transportation, and school-related childcare to overcome barriers and obstacles to success. Further, the program was to be nested in the

⁴ In summer 2011, Tulsa Public Schools dropped its adult education programs, leaving the Union Public Schools Adult and Community Education to fill the gap.

CAP Early Childhood Education Program, which already offered a family support worker assigned to each family, parenting education sessions, and opportunities to participate in screening for benefits eligibility.

In summary, the project design was based on familiarity with Tulsa's healthcare industry and its needs, the capabilities and strengths of local educational institutions that could become strong organizational partners with the project, and an understanding of the needs and challenges faced by the target population.

KEY COMPONENTS OF CAREERADVANCE®

- A shared expectations agreement spells out the mutual responsibilities and commitments of the participant and the program to one another. Signed by both parties at enrollment, this document is fundamental to the spirit of CareerAdvance[®] which is that the process requires a joint effort to succeed.
- Sectoral workforce development approach focuses on selective occupations in a specific industry sector that offer family supporting wages with benefits and opportunities for wage growth and advancement (see Giloth 2003; Glover and King 2010, and Maguire 2010).
- Effective employer engagement is a key feature of sectoral workforce programs, which operate as labor market intermediaries serving dual customers—both employers and workers (job applicants). They focus on employers in an industrial cluster that they come to know well, identifying shortages of skilled workers, collaborating with employers to clearly identify the skills needed, and finding ways to fulfill those needs. They do not market their program participants as "disadvantaged" but rather prepare participants to become the skilled and competent workers that employers seek.
- Career path training is organized as a progressive stackable series of segments, each step of which offers a credential valued by employers. The result offers a career path on which the higher one progresses, the greater earnings one receives.
- Career Coaching is a key staff function in the CareerAdvance® model. The Career Coach meets individually with each participant shortly after admission to the program to ascertain goals and to discuss his/her career plans. The Career Coach serves as a counselor, mentor, guide and advocate for participants, helping them negotiate the unfamiliar world of postsecondary education. The Career Coach arranges for school-related childcare, payment of tuition and other school expenses. The Career Coach works with family support staff and participants to resolve problems that impede success in schooling.
- Facilitated peer support is a central element in the CareerAdvance[®] model.
 CareerAdvance[®] builds a community of peer support for participants by organizing instruction in cohorts and holding weekly partner meetings. Career Coaches plan

and facilitate the partner meetings, which provide a forum for program participants to reflect on their experiences; conduct group problem-solving; hear guest speakers address a variety of topics (e.g., orientation to nursing careers, issues related to balancing work, school, and family, life skills, work readiness and workplace skills, and financial education); and practice exercises on goal setting, anxiety reduction, and motivation. The weekly meetings include occasional field trips to health care workplaces.

Participants are urged to offer encouragement and support to each other. A culture of collaboration and community of support develops in the group that results in unprompted informal peer support, such as group studying, helping one another with childcare, and car-pooling. The partner meetings also provide a convenient setting for the career coach to accomplish necessary project administrative tasks, such as making announcements, distributing gas cards, and assuring that everyone is on track.

Performance Incentives offer CareerAdvance® participants the possibility of earning \$200 per month for good attendance and performance, plus additional \$300 bonuses for accomplishing specific milestones, up to \$3,000 per year. The assistance is provided in non-cash forms to comply with federal requirements. The amount of the incentive is based in part on research regarding the effects of Earned Income Tax Credit (EITC) on children's achievement and later confirmed by Duncan and Magnuson (2011) who indicate that "an annual income increase of \$3,000 sustained for several years appears to boost children's achievement by roughly onefifth of a standard deviation" or "about two months' advantage in school" (p. 27).

Many have quit jobs or reduced their hours in order to participate in CareerAdvance[®]. Economists have long estimated that the opportunity cost of foregone income to be three-quarters of the costs incurred by individuals in education or training (Becker, 1993). The incentives partially offset the loss of income for family support during training. Participants are eligible to receive performance incentives only when they are actively taking classes.

Instruction to upgrade basic skills and provide preparation for college— CareerAdvance® aims to help assure that its participants are equipped with the reading and math skills to be successful in training and employment. As demonstrated in Washington State, Austin, Texas and other communities, the IBEST model has proven to be an effective approach to basic skills instruction (Jenkins et al. 2009). I-BEST incorporates a teaching approach that offers instruction in basic skills related and contextualized to the industry and career to which the student/trainee aspires. Participants who lack a GED are provided preparation to pass the GED examinations.

THE CAREER PATHWAYS

Figure 1 provides an overview of the design of Career*Advance*[®] career pathways in nursing. The program begins with training as a Certified Nurses Aide (CNA) at Tulsa Community College. This offers the advantage of making participants eligible to take the Oklahoma CNA assessment and receive a certification after the first 8 weeks of training.⁵ It also provides a continuing path of training into CNA Levels 2 and 3 leading to certification by Tulsa Community College as a Geriatric Technician, which also entitles recipients to participate in graduation ceremonies at the college. The CNA sequence of courses provides a meaningful start with a high rate of success, thereby building a sense of achievement and confidence among participants, who may have entered training with doubts about their abilities to succeed. Weekly peer group or partner support meetings foster a positive team environment, in which participants help one another.

The Licensed Practical Nurse (LPN) at Tulsa Technology Center offers a second stage in the nursing career track. The program begins with courses in Medical Terminology and Anatomy and Physiology progressing to Concepts and Fundamentals of Nursing, followed by four (4) blocks of learning in various basic aspects and specialties in practical nursing. Upon graduating from the LPN program and passing the National Council Licensure Examination for Practical Nurses (NCLEX – PN), a Career*Advance*[®] participant becomes certified by the Oklahoma Board of Nursing as an LPN.

As explained later in this report, an alternative pathway through the Patient Care Technician (PCT) program at TCC was developed this past year for individuals unable to gain admission to the LPN program. Completion of the PCT program qualifies an individual to take the Oklahoma Advanced Unlicensed Assistant (AUA) certification exam. Participants taking this pathway remain eligible to move up into Registered Nurse training. The alternative pathway through PCT is shown in Figure 1.

The final planned step in the career ladder is the Registered Nurse (RN) program at Tulsa Community College, which leads to an associate's degree in applied science and prepares the student to become a Registered Nurse upon passing the National Council Licensure Examination for Registered Nurses (NCLEX-RN). In order to enter the RN program, a student must have taken and passed 38 hours of certain prerequisite courses, including 6 hours of English, 6 hours of Social Science, 6 hours of Psychology, and 20 hours of Science.

⁵ The CNA Level 1 training is a 5-week program; but after the program's experience with Cohort 1, the Strategies for Academic Success program was added, thereby extending CNA Level 1 to 8 weeks,

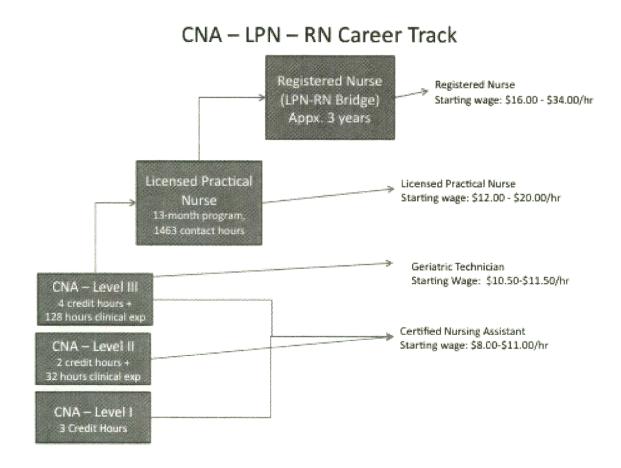
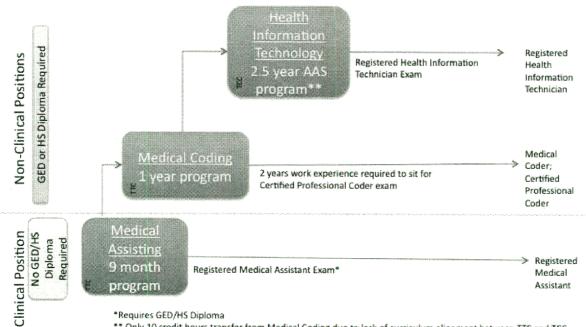


Figure 1. Initial CareerAdvance® Nursing Career Pathway

EXPANDING CAREERADVANCE® BEYOND NURSING

From its inception, Career*Advance*[®] planned to expand into healthcare occupations beyond nursing, as well as other fields should emerging labor market conditions merit supporting them. Starting in 2010, the CAP program staff worked with staff at Tulsa's educational institutions to develop and implement a new career path in Health Information Technology (HIT). The resulting pathway design is illustrated in Figure 2. Each step in the pathway offers a skill certification useful in the local labor market. The further along the career path one progresses, the higher the wage level that can be earned. The HIT career path was put into place beginning in fall 2011 with 15 students enrolling as part of Career*Advance*[®] Cohort 4.





** Only 10 credit hours transfer from Medical Coding due to lack of curriculum alignment between TTC and TCC

WHAT TO EXPECT: SIGNS OF A SUCCESSFUL PROGRAM

Reaching the top level of a career pathway takes several years of training and preparation. Not all participants will reach this level. Some participants will leave the program with stackable credentials at various points along the career path, effectively receiving a "lower dosage" of the program. Others will leave the program temporarily with the credentials they have obtained to go to work earning income to support their family. They may rejoin the program later to continue their training along the career pathway.

Major impacts of Career*Advance*[®] will develop over several years and require comparisons with a carefully matched sample of individuals and families or an experimental evaluation involving random assignment.⁶ Likewise, examining and documenting the impacts on children will be a long-term endeavor. However, indications that Career*Advance*[®] is successful should become apparent sooner, including:

- The completion rate for each training segment should be higher for CareerAdvance[®] participants than for others not in CareerAdvance[®].
- 2) Employers will find that Career*Advance*[®] trainees and graduates perform satisfactorily and will agree that the program helps to meet their needs.
- The pass rates on credentialing exams will be equal or higher for CareerAdvance[®] participants than the general passing rates on those exams.
- Individuals who leave the program at an intermediate stage to become employed will gain greater earnings and more stable employment than they experienced prior to the program.
- 5) CareerAdvance[®] participants will be able to use their credentials to find jobs in health care.
- 6) Students in GED preparation will be more likely to achieve GED certification.

⁶ A random assignment experiment will not be feasible until Career*Advance*[®] grows and becomes oversubscribed with a substantial waiting list.

THE EXPANSION OF CAREERADVANCE® FROM COHORT 1 TO COHORT 4

CareerAdvance[®] began operations in summer 2009 at two carefully chosen CAP Early Childhood Education (ECE) centers located geographically close to one another on the east side of Tulsa. With the start of Cohort 2 in August 2010, parents of children an additional Early Childhood Center became eligible to participate in CareerAdvance[®]. Parents from 6 early childhood centers were eligible to participate Cohort 3. By Cohort 4, any parent from any center operated by CAP was deemed eligible to enroll. Further, any Educare parent was welcomed to enroll in the HIT program.⁷ Thus, within a period of about two years, eligibility to participate in CareerAdvance[®] was expanded from families at two early childhood centers in east Tulsa to the entire networks of CAP and Educare early childhood centers all across Tulsa (See Table 2).

Pilot Demonstration Phase		Expansion Phase				
Recruitment began						
Cohort 1 Nursing	Cohort 2 Nursing	Cohort 3 Nursing	Cohort 4 Nursing	Cohort 4 HIT		
July 2009	May 2010	October 2010	April 2011	April 2011		
Classes began						
August 2009	August 2010	January 2011	August 2011	August 2011		

Table 1. CareerAdvance® Chronology of Implementation

Table 2. Expansion of Eligibility of Parents to Participate in CareerAdvance®

Cohort 1	Cohort 2	Cohort 3	Cohort 4 Nursing	Cohort 4 Health Information Technology
2 centers: Skelly Disney	3 centers: Skelly Disney Reed	6 centers: Skelly Disney Reed Reed ECDC Eastgate Bryant	12 centers: All CAP ECE centers ⁸	14 centers: All CAP centers plus 2 Educare centers

⁷ Educare is a separate network of early childhood centers in Tulsa, operating in partnership with the national Bounce Learning Network. Until 2009, CAP administered Educare, at which time Educare began operating under its own independent board. More information on Tulsa Educare is available at: http://www.educaretulsa.org/

⁸ Two early childhood program sites – Grove–Union (Asbury) and Jefferson-Union – operated in collaboration with Union School District were not included in part because the school district rather than CAP staffed these sites and due to restrictions on times the facilities were open and available for before- and after-care.

CHALLENGES MET AND OVERCOME

The second year of operations began with several challenges to the CareerAdvance[®] program. This section reviews challenges faced by the program and describes how they were overcome.

CHALLENGES WITH PERSONNEL CHANGES

The first personnel challenge was anticipated and came with plenty of advance notice. Project Coordinator Micah Kordsmeier left CAP on July 23, 2010 to enter graduate school at the University of North Carolina after making major contributions to all aspects of the CareerAdvance[®] program design and its launch and administering it in its pilot year.

The transition to new leadership went smoothly with plenty of time for information transfer and training from the former to the new program manager, Liz Eccleston. Eccleston, an experienced program manager at CAP, was assigned to take charge of Career*Advance*[®]. Kordsmeier's final two months were spent productively. On the basis of a year of pilot operations, he and Career Coach Tanya Glover revised key program documents, including the mutual expectations agreement, rules and regulations, enrollment interview questions, and the presentation used in orientations. Kordsmeier met with the incoming manager Liz Eccelston several times to communicate important information about program practices and participants. Kordsmeier's final month was spent writing a summary of the project's operations and accomplishments, which was subsequently used in a proposal by CAP to seek future funding.

Reorganization of *Workforce Tulsa* resulted in several layoffs, which affected Career*Advance*[®]. Alicia Plati, the healthcare industry coordinator, was laid off after state regulators determined that her role as a "labor market intermediary" did not fit with the Workforce Investment Act as it operates in Oklahoma.⁹ Her departure left the Tulsa Workforce Board without expertise, strong industry contacts, or staff to assist the healthcare industry meet its workforce needs. Darcy Melendez, executive director of the Tulsa Workforce Investment Board— who had been very supportive of Career*Advance*[®] subsequently resigned.

⁹ However, the function does fit within the requirements of the Employment Service and the Workforce Investment Act as "business services." Further, it is consistent with the Tulsa Chamber's Sectoral Initiative.

Wanting to continue building connections with healthcare employers, CAP hired Alicia Plati as a consultant to continue to help build and foster the program's relationships with Tulsa area health care employers.

PARTICIPANT CHALLENGES

Perhaps the most serious challenge encountered, several Cohort 1 participants did not score sufficiently high on the ACCUPLACER® college placement exam to gain entrance into the LPN program at Tulsa Tech. This effectively prevented them from moving up to the next step on the nursing career ladder. In response to this challenge, Career*Advance*® staff allowed those who were close to passing to stay in the program and re-take the ACCUPLACER® exam a second time. The program paid for tutoring and urged paid participants to make use of the Success Center at Tulsa Tech. If participants put in sufficient time studying for the exam, they continued to qualify for a monthly incentive payment.

With little prospect of advancing in their nursing education, a few low-scoring participants from Cohort 1 were faced with leaving the program and entering employment. Some hesitated to become employed either because they were in poor health, preferred to remain home with their children (at least until the children entered elementary school), did not pass the GED, or for other reasons. In addition, those with little or no employment experience were feared employment. Career*Advance*[®] staff counseled participants, talking through their fears about going to work, and assisted them with resume preparation, work readiness workshops, and interview practice sessions. Staff also arranged introductions and interviews with partner employers and invited employers to visit partner meetings. By September 2011, 9 of 14 healthcare participants from cohort 1 had found jobs working as a CNA either while in the program or after leaving it.

In addition, staff revised recruitment procedures and criteria for selecting future cohorts to avoid participants who resist employment. Expectations that participants would enter employment were firmly clarified in orientations for CareerAdvance[®]. The performance incentives component of the program was deemphasized in recruiting and orientation materials. Greater stress was placed on finding candidates who were motivated to work, who already had some work experience, and who exhibited a strong interest in healthcare employment.

COMPETITION FROM ANOTHER PROGRAM

Working with parents at the Educare Center, the Tulsa Children's Project started EduCareers, a program to train for nursing occupations using an approach similar to CareerAdvance[®]. This development raised concern about potential confusion among healthcare employers and educational providers, as well as inefficiencies and competition for limited nursing training enrollment slots.

Although not ideal, the existence of two similar programs in Tulsa did not become as much of a problem as anticipated. Staffs from the two programs have even collaborated on some endeavors. For example, the staff shared information, and both programs contributed students to meet the minimum class size to begin "jump start" classes in Anatomy and Physiology and Medical Terminology at Tulsa Tech.

OBTAINING FUNDING TO CONTINUE THE PROGRAM

Acquiring funds to continue CareerAdvance[®] beyond the start-up phase was an overarching issue facing the program near the end of its initial year of operation. In response, CAP applied for and won a highly competitive \$10 million grant from the U.S. Department of Health and Human Services (HHS) for five years of support to finance a ten-fold expansion of CareerAdvance[®] under the Health Professional Opportunities Grant (HPOG) program. The HPOG program is administered by the Administration for Children and Families (ACF) at HHS to help educate, train and provide services for low-income individuals to prepare for jobs in the rapidly growing and well-paid healthcare field. HPOG aims to strengthen and expand the healthcare workforce and address shortages, while also providing low-income families with a real opportunity for escaping poverty.

COMPLYING WITH FEDERAL RESTRICTIONS ON PERFORMANCE INCENTIVES

With federal funding came new restrictions, especially regarding the use of performance incentives: incentives could no longer be paid in cash, but must be paid in-kind, and the types of purchases that could be made were strictly limited.

CareerAdvance[®] staff explored several options to satisfy these new requirements. They checked with banks to determine if debit cards could be programmed to disallow purchases for forbidden items. They learned that this was possible but infeasible because the volume of spending by CareerAdvance[®]

participants was insufficient to justify the cost of the programming. CareerAdvance® staff then established a system for providing part of the incentive through a limiteddenomination gasoline debit card and the remainder through reimbursement for items that could legally be paid, such as rent and certain groceries upon presentation of a receipt. This arrangement was not ideal because checking receipts threatened to be too laborious, especially in view of the upcoming expansion of the program to nearly 300 participants. Further, the gasoline debit cards became problematic when it came to light that they could be used for purchases inside the on-site convenience store that sold, among other things, beer and tobacco—items that were on the restricted list. Subsequently, staff instructed participants to use their cards only to pay for gasoline at the pump. Further, Quik-trip, the company issuing the cards, agreed to provide records documenting whether the cards were used at the pump or in the store. Participants misusing the gas card would lose eligibility for this type of support.

CHALLENGES WITH EDUCATIONAL PARTNERS

Data Sharing Arrangements

Timely sharing of information on student performance, including attendance, grades and test scores, is needed for Career*Advance*[®] staff to monitor progress and to intervene early with students who are encountering difficulties. Such information is also needed to determine which students have earned their performance incentives each month. Executing agreements to obtain such information has taken time to arrange and required trust to be built between the schools and the program staff. Procedures for sharing are now in place, as authorized in the Memorandum of Understanding between CAP and the schools, which states in part [The school] "will work with CAP to oversee progress." [The school] will monitor attendance and grades for the students." Specific procedures are worked out between teachers and career coaches. Following the requirements of the Family Educational Rights and Privacy Act (FERPA), Career*Advance*[®] obtains authorization from the students to access this information.

Scheduling Classes and Avoiding Gaps

Particularly for CNA students, Career*Advance*[®] staff sought to schedule classes and program activities for cohorts during daytime hours to coincide with the daily Head Start class schedule: 8:30 am to 2:30 pm. Even so, CNA classes include clinical experiences, which are scheduled all day from early morning through late afternoon. On days with

clinicals, CareerAdvance[®] staff help to make childcare arrangements before and after Head Start/Early Head Start for families who had no or few alternatives available to them. This is easiest to achieve at CAP Centers with before and after care already in place and available. At CAP Centers without before and after care normally available, site staff are so committed to the success of CareerAdvance[®] that they alter their own schedules to provide the additional care needed. This is a big advantage of offering the program at early childhood education centers. It is most difficult to arrange before and after care for school-age siblings.¹⁰

Keeping the cohort together in classes is important to build the peer support essential to the Career*Advance*[®] model—especially at the beginning stages of the program. Accommodating cohorts was made somewhat easier by the fact that Career*Advance*[®] paid for the courses, which gave them greater leverage with education providers to arrange for special classes.

Postsecondary schools tend to have a strong bias in favor of traditional semesterbased schedules. At Tulsa Technology Center and Tulsa Community College, classes are typically not held during July or over the Christmas holiday season. Traditional practices often result in gaps within the program or between the conclusion of one program and the start of the next one on the career training path, and produce delays for participants in progressing up the career ladder. This extends the time it takes to complete the program. As Steve Jackop, executive director of Capital IDEA has observed, "Time is the enemy of completion." During periods when classes are not in session, Career*Advance*® staff urge participants to work in healthcare to gain experience and advance their learning; however, not all parents chose to do so.

Changes in the LPN Program Admissions Criteria

Tulsa Tech's LPN admission process has been ever changing over the life of Career*Advance*[®]. During the period from November 1, 2010 through April 30, 2011, the following elements were in place:

1) Academic preparedness as measured by scores on the ACCUPLACER[®] exam¹¹ (30 total points, 15 possible for reading, 15 possible for mathematics).

¹⁰ Over three-quarters of CareerAdvance[®] participants have more than one child; most of the siblings are school-age children (See Table 6).

¹¹ In spring 2011, the Tulsa Technology Center began using the Health Education Systems, inc. (HESI) test, in part because it includes a science component

- 2) Career interest (50 points).
- A structured site visit to the Tulsa Tech Health Careers Center with small group activities and orientation to nursing careers to help aspiring students become familiar with the school and the occupation of licensed practical nurse (20 points).
- 4) Certification as a CNA or Advanced Unlicensed Assistant (AUA) (5 extra points).

A minimum of 50 points (40 points for career interest and 10 for academic preparedness) was required. Applicants meeting the minimum score were accepted, beginning with the highest scores, until all spaces for filled.¹² As the total number of applicants to the LPN program dramatically increased, entry to the program became more competitive, and only individuals with the top scores were selected. The effect of this procedure was to raise admission criteria. In this new environment, Career*Advance*[®] participants faced a highly competitive situation. During the period from November 1, 2010 through April 30, 2011, the LPN program received a total of 620 applications from all sources for 80 slots (4 classes of 20 each). Of the 620 applications, 350 were considered viable candidates.

Bottlenecks in Admissions

In spring 2011, the LPN program at Tulsa Tech announced a sudden and unexpected reduction in the number of openings for admission to as few as 20 for the upcoming 2011-2012 school year. Coming at the same time that Career*Advance*[®] was expanding and at a time when participants would have to compete with an increasing number of applicants for admission, this was especially alarming news.

In response to this impending challenge, CareerAdvance[®] staff sought alternative pathways to RN status. They identified a program for Patient Care Technicians (PCT) at Tulsa Community College, which offered a potential alternative pathway to the Registered Nurse. The program leads to certification by the state of Oklahoma as an Advanced Unlicensed Assistant (AUA).

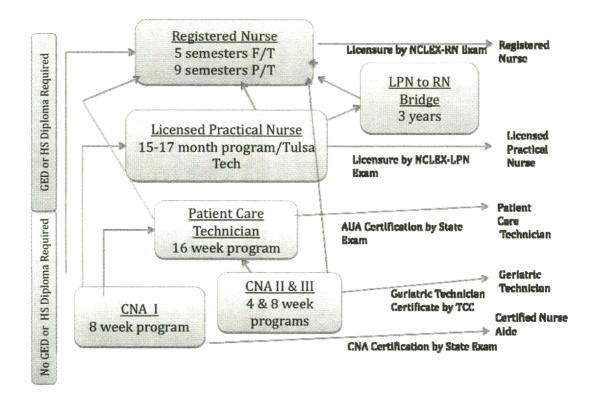
A PCT or AUA is trained to work under the supervision of the licensed nurse in providing patient care in acute care hospital settings, such as the Emergency Room and Critical Care Units. In addition to CNA skills, such as bedside care of the patient (bathing, feeding, lifting, turning, walking, etc.), PCT students learn advanced skills which include dressing wounds, taking specimens, insertion and removal of indwelling catheters, drawing

¹² Email communication from Jessica Busse-Jones, Admissions Consultant, Tulsa Tech Health Sciences, November 11, 2010.

blood, and performing EKGs.

The PCT program did not have such restricted admission criteria nor such large applicant-to-acceptance ratios as the LPN program. Career*Advance*[®] began using the PCT program as an alternative to LPN in August 2011. The PCT component does not replace the LPN component in Career*Advance*[®]. Rather, it offers an alternative pathway for participants who encounter difficulties gaining entry to the LPN program. Figure 4 displays the current Career*Advance*[®] nursing pathways including the PCT alternate route.

Figure 3. Career*Advance*[®] Nursing Career Paths with Revised Design to Include Alternate Patient Care Technician Pathway



Communications and Quarterly Partner Meetings

To facilitate good bilateral communication and promote collaboration among the partner organizations in Career*Advance*[®], CAP staff kept in touch with partner program staff through frequent meetings, phone calls, and emails. They also organized quarterly partner meetings at which reports were made on the progress and developments with the program, the evaluation plan for the project was presented, and input was invited from the partners.

EVOLUTION OF RECRUITING, SCREENING AND SELECTION OF PARTICIPANTS

RECRUITING

A variety of recruiting approaches have been used to attract participants into CareerAdvance[®]. An intensive recruitment campaign was undertaken, focused on the parents of children at the targeted Early Childhood Centers. CareerAdvance[®] staff met with center directors, instructors and family support workers to explain the program and solicit their help in recruiting interested parents. Orientations for parents were publicized in a one-page color flyer available in English and Spanish. Materials advertising CareerAdvance[®] were sent home with the children in their Tuesday folders. Notices were posted on bulletin boards at the centers. Parents who expressed early interest in joining the program were encouraged to help persuade fellow parents to attend an orientation to the program and alerted them to upcoming orientation sessions.

APPLYING TO CAREERADVANCE®

Entering the CareerAdvance[®] program is a multi-step process. The initial step is to attend an orientation session, held in Early Childhood Centers at various locations across Tulsa. Orientation sessions are held in the morning or afternoon or, to accommodate the schedules of working parents, in the evening.

At each orientation, CareerAdvance[®] staff explains the program and enrollment processes in English, using a Power Point presentation. The presentation covers an explanation of CareerAdvance[®] and its purpose, an overview of healthcare and nursing professions, and a preview of the CareerAdvance[®] enrollment process. Parents who express interest are encouraged to sign up for the next step--filling out an application and submitting it together with required papers. Subsequent steps include taking the COMPASS[®] college placement test and the Test of Adult Basic Education (TABE) and interviewing with CareerAdvance[®] staff.

Applicants to the first Career*Advance*[®] cohort had to contend with multiple applications and assessments. Within a period of five weeks, participants completed the application, assessment and enrollment process for (1) Career*Advance*^{® 13}; (2) Workforce Oklahoma, including the WorkKeys test (to become eligible for funding under the Workforce Investment Act); (3) the CNA/Geriatric Technician program at Tulsa Community College; and (4) the Licensed Practical Nursing (LPN) program at Tulsa Technology Center

¹³ Enrollment in CareerAdvance[®] did include any additional assessment exams.

(for admission the following year). Fortunately, the CareerAdvance[®] coordinator was able to negotiate special arrangements with Tulsa Technology Center for the pilot first cohort to use the COMPASS[®] test regularly used by Tulsa Community College in lieu of the ACCUPLACER[®] exam used for placement into the LPN program. This eliminated one of the four assessments of academic skills involved in the enrollment process for CareerAdvance[®] participants.

By Cohort 3, Career*Advance*[®] staff modified the application process. Because funds from Workforce Oklahoma were no longer used, completing the Workforce Oklahoma application and WorkKeys tests was no longer necessary. Also, completing the application process and taking the placement exam for the LPN program at Tulsa Tech was delayed until applicants were enrolled in Career*Advance*[®].

CHANGES IN SCREENING CRITERIA

At the beginning, the criteria for acceptance into the first Career*Advance*[®] cohort were minimal. According to the recruiting materials, the criteria consisted of only three requirements:

- 1) Be at least 18 years old;
- 2) Legally qualified to work in the US; and
- 3) Strong interest in healthcare careers.

No one was screened out of Cohort 1 because he or she failed to meet any other qualification. As the Career*Advance*[®] staff gained program experience and became more knowledgeable about the healthcare industry, the screening standards were refined and additional requirements for entry into the program were instituted, such as passing a criminal background check.¹⁴

¹⁴ Also, in order to work in healthcare clinical settings, participants must have completed a set of vaccinations, pass an annual tuberculosis test, and pass a random drug test arranged by Tulsa Community College. These requirements are fulfilled shortly after entering CareerAdvance[®].

THE SELECTION PROCEDURES AND CRITERIA FOR ENROLLMENT USED FOR EACH COHORT

This section discusses the recruitment and selection processes used in CareerAdvance® for Cohorts 1-4. It documents the changes made over time, explains why they were made, and discusses the results as procedures have become improved and more systematized.

Cohort 1. Aiming to serve disadvantaged persons who needed job training, CareerAdvance® staff rejected virtually no one who completed the application and enrollment process. This selection process resulted in a group that was notably more disadvantaged than average CAP families, with a lower portion of employed participants, lower household incomes, and lower educational attainment. After entering the program, enrollees were tested using the TABE test administered by the Rogers State Educational Opportunity Program (EOP) — but the results were not available in time to be considered in selection decisions, even if staff wanted to use them.

Nineteen individuals applied to CareerAdvance[®], of whom four already were certified CNAs. All applicants with a high school diploma or GED were invited to take the ACCUPLACER[®] examination in order to see if they could qualify for direct admission into the LPN program at Tulsa Technology Center. No pre-testing or preparation was provided and no one scored well enough on the exam to gain admission to the LPN program. CareerAdvance[®] staff then referred the four CNAs to the Tulsa Tech Success Center and urged them to obtain tutoring and preparation in order to re-take the ACCUPLACER[®] exam. None of the four followed this advice, nor did they enroll in CareerAdvance[®]. Subsequently, CareerAdvance[®] staff lost contact with them. Based on this experience, CareerAdvance[®] staff decided that the program was not yet ready and able to serve "mid-career" students.

One mother sought only instruction in English as a Second Language (ESL). She was enrolled in CareerAdvance[®] in ESL instruction—the only ESL student in the program—in a class where she studied with the seven CareerAdvance[®] students who were preparing to pass the GED exams at Union Public Schools while concurrently enrolled in the CNA training. CareerAdvance[®] staff arranged visits to healthcare worksites for this ESL student, but in May 2010, she decided against a career in healthcare and left the program. After this experience, only participants with an interest in healthcare were accepted into CareerAdvance[®]; those needing in ESL instruction were referred to other programs. Fourteen students entered the three-part CNA courses at Tulsa Community College. Among these, all but one participant achieved CNA certification (passing the CNA Level 1 course and the CNA certification exam). One enrollee scored sufficiently well on the ACCUPLACER[®] test that she was offered a position in the Licensed Practical Nurse (LPN) program at Tulsa Tech. Eight participants successfully completed the three-part CNA courses and became certified as Geriatric Technicians in May 2010. Three Cohort 1 participants eventually scored well enough to enter the LPN program – two in September 2010 and one in January 2011. Others resisted employment.

Nevertheless, by July 2011, nine of the fourteen Cohort 1 nursing participants had entered employment as a CNA, either while they were in training or after leaving the program.

- Cohort 2. Noting the hesitation of some Cohort 1 participants to join the workforce and seek employment, staff de-emphasized the incentive funding as a feature of CareerAdvance® in recruiting materials and orientations for subsequent cohorts. Beginning with Cohort 2, CAP staff also made clear to all applicants that the CareerAdvance® program was for individuals who wanted healthcare employment and who sought to improve their earnings prospects. CareerAdvance® also gave increased consideration to the educational attainment of applicants to help assure that participants would be successful and able to score well enough on the college placement exam to move on into the LPN program. No one with less than a high school diploma or a GED enrolled in Cohort 2.
- Cohort 3. CareerAdvance[®] staff took an even more systematic approach to recruiting and selecting individuals with at least a minimum level of skills for Cohort 3. Staff heavily emphasized motivation for employment and education in their selection interviews. All applicants took both the TABE and the COMPASS[®] tests as part of the enrollment process so that scores were available for consideration prior to final selection decisions.

The new, more systematic application and selection process consisted of a five-step process for applicants as follows:

 Attend an orientation session, where enrollment packets are distributed to all interested individuals. CareerAdvance[®] staff has generally offered 8 to 10 orientation sessions over a two-week period to recruit each cohort. In advance of the orientations, the program's career coach makes reminder telephone calls to alert individuals who have expressed interest and provided their phone numbers.

- Return the completed enrollment application with associated required documents (social security card, completed W-9 form, drivers license and other documents) to the Career Coach at CAP headquarters within a specific deadline (about 2 weeks).
- 3) Take the 4-hour COMPASS[®] test at Tulsa Community College.
- 4) Take the 3-hour TABE test, given by the Educational Opportunity Center (EOC) program at Rogers State University.
- 5) Schedule and participate in a one-hour enrollment interview with the Career Coach at CAP Headquarters, where the completeness of the application is verified.

After all applicants have been interviewed, the CareerAdvance[®] manager and career coach(es) separately rate all applicants on a scale ranging from 1 (lowest) to 5 (highest), based on the following eight criteria:

- Good attitude
- Desire to work
- High desire for healthcare employment
- Strong work history
- □ Work experience in the healthcare industry
- I (If currently working) flexible work schedule to accommodate school
- High motivation for school
- **Low debt ratio**

The last subject (low debt ratio) expands into a broader discussion of budgets in which applicants are specifically asked how they planned to support their family's living expenses while in school.

In Cohort 3, high levels of motivation and desire for healthcare employment overrode the weight given to educational attainment so that 4 of 15 parents enrolled in CareerAdvance[®] with less education than a high school diploma or a GED. The CareerAdvance[®] Manager and Career Coach independently rated the applicants, then got together to sort the applications and more closely examine individuals on the margin. To fill all 15 available slots in Cohort 3, they accepted all individuals rated as a "4" or "5". They then sorted those rated as "3" into "3 plus" and "3 minus." Only in this final screening did staff formally consider test scores, and only for selecting among applicants at the margin.

Cohort 4. At the encouragement from researchers, the selection criteria were further elaborated and standardized for use in selecting the 30 participants for Cohort 4 — 15 for nursing and 15 for the new health information technology pathway. The number of criteria considered in the enrollment interview was expanded to eleven, several of which focused on some aspect of motivation or interest in working in healthcare. The rubric in Table 3 displays criteria for the ratings assigned in enrollment interviews. As shown, ratings ranged from 1 (lowest) to 5 (highest). The ratings on these 11 criteria were then consolidated to produce a single rating ranging from 1 to 5 for each participant.

1 (Lowest)	2	3	4	5 (Highest)
Negative attitude	Poor attitude	Average attitude	Good attitude	Positive attitude
No desire to work	Little desire to work	Desire to work	Strong desire to work	High desire to work
No work history	Large gaps in work history	Inconsistent work history	Stable work history	Strong work history
No desire for nurse/HIT employment	Little desire for nurse/HIT employment	Desire for nurse/HIT employment	Strong desire for nurse/HIT employment	Hearts desire for nurse/HIT employment
No healthcare experience	Little healthcare experience	Some healthcare experience	Good healthcare experience	Strong healthcare experience
No motivation for school	Low motivation for school	Some motivation for school	Good motivation for school	High motivation for school
Inappropriate dress/language		Acceptable dress/language	n efter ministrational ann anns an an anns an anns anns an anns anns an anns anns an anns anns anns anns anns a	Appropriate dress/language
Inflexible work schedule	Occasional work flexibility	Intermittent flexible work schedule	Somewhat flexible work schedule	Flexible work schedule
Unable to financially support family	Family financial support is limited	Needs some financial Assistance	Usually financially stable	Financially stable
High debt ratio		Average debt ratio		Low debt ratio
No available transportation	Dependant on others for transportation	Access to transportation	Consistent transportation	Reliable access to transportation

Table 3. Rubric for Rating Applicants to CareerAdvance[®] in Enrollment Interviews: Cohort 4

Source: CareerAdvance[®] staff, March 2011

SUMMARY STATISTICS ON RECRUITING, SELECTION AND ENROLLMENT

Table 4 provides a statistical summary of recruiting, application and enrollment in CareerAdvance[®] for Cohorts 1-4. An applicant is considered enrolled as soon as she or he participates in any CareerAdvance[®] activity, which is counted as credit toward receiving the monthly performance incentive.

Altogether between nursing and health information technology, CareerAdvance[®] had enrolled 70 participants by August 2011. Thus, in two years from its launch as a pilot program in two CAP Early Childhood Education Centers in east Tulsa, CareerAdvance[®] expanded into a program offering education and training to parents across the entire CAP network of Early Childhood centers as well as to parents from the two Educare Centers in Tulsa.

	Cohort 1 Nursing	Cohort 2 Nursing	Cohort 3 Nursing	Cohort 4 Nursing	Cohort 4 HIT
# Eligible ECE Centers	2	3	6	12	14
# Orientations conducted	10	6	8	10	10+4*
Attended an orientation	31	29	53	1:	19
Began application process	24	21	31	27	28
Interviewed	21	15	25	25	22
Completed all application steps	19	15	25**	25**	22**
Selected for enrollment	15	13	15	16	16
Enrolled in CareerAdvance®	15	10	15	15	15

 Table 4. CareerAdvance® Recruiting, Application, and Enrollment Statistics,

 by Cohort: July 2009—August 2011

Source: Compiled from CareerAdvance® administrative data.

*The initial 10 orientation sessions held to recruit Cohort 4 covered information on both the nursing program and the health information technology (HIT) program. In order to fill the HIT class, four additional orientations were conducted for HIT only—two in CAP Centers and two at the Educare Centers

** Beginning with cohort 3, a completed application required taking the COMPASS® exam and the TABE tests.

	Number of Adult Participants enrolled in CareerAdvance®									
Early Childhood Center	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Totals					
Disney	5	3	4	2	14					
Skelly	9	2	1	1	13					
Sand Springs				9	9					
Eastgate		1	5	3	9					
McClure				7	7					
Reed		3	3	1	7					
ECDC Reed			2	1	3					
Eugene Field				2	2					
Frost				2	2					
Good Sheppard	1				1					
Newcomers-Latimer		1			1					
Educare I – Kendall-Whittier				1	1					
Educare II – Hawthorne				1	1					
TOTALS	15	10	15	30	70					

Table 5. CareerAdvance® Parents by Early Childhood Center: Cohorts 1-4

Source: Compiled from CareerAdvance® administrative data.

Table 5 displays the distribution of participants by early childhood center for the first four cohorts of CareerAdvance[®] participants. In all, CareerAdvance[®] participating families have come from thirteen early childhood centers.

PROFILE OF CAREERADVANCE® PARTICIPANTS AND THEIR FAMILIES

Table 6 profiles the 70 parents who have enrolled in Career*Advance*[®] and their families, comparing them with the total population of parents and families with a child enrolled in CAP Early Head Start or Head Start.

Participants are overwhelmingly females who are the mothers of children in Head Start/Early Head Start; only three participants are fathers. Nearly two-thirds (64.3%) are single parents. African-Americans are the largest racial-ethnic group served (37.1%) followed by Whites at 31.4%. Hispanics and families whose primary language is not English are underrepresented, perhaps because instruction and activities in CareerAdvance[®] are conducted in English.

The average age of Career*Advance*[®] parents is slightly younger than the average age of the general CAP parent population, especially due to the lower average age of Cohorts 3 and 4. At an average of 2.5 children, Career*Advance*[®] participants have approximately the same number of children as other CAP families.

CareerAdvance[®] participants tend to be better educated than other parents. Far fewer CareerAdvance[®] participants have less than a high school education (15.7% vs. 39.4%). Even so, a slightly lower proportion of parents were employed at the time of enrollment of their child in a CAP early childhood education center (44.3% vs. 48.0%).

About equal proportions (7 of 10) of Career*Advance*[®] families are in poverty as in the CAP-ECE population overall. The seven families with income above 130% of poverty either qualified for Head Start/Early Head Start through the provision for foster children or they qualified for the Oklahoma Pilot Early Childhood Program, for which eligibility is set at less than 185% of the poverty level.

Among the 70 families who have enrolled in Career*Advance*[®], there were 175 children, of whom 91 were enrolled in early childhood education at CAP or at Educare.

Table 6. Profile of CareerAdvance® Families: Cohorts 1-4Compared with all Families in the CAP Early Childhood Program (2010-2011)

			Enr	olled in CareerAdvai	nce®	
	All Adults in CAP	All Cohorts in				
	ECE Population	CareerAdvance®	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Total Households	1,630					
Adults in Households	All adults	Enrollees only	Enrollees only	Enrollees only	Enrollees only	Enrollees only
	2,578	70	15	10	15	30
Gender						Enrollees only
Female	1637 (63.5%)	65 (92.8%)	15 (100%)	9 (90.0%)	14 (93.3%)	27 (90.0%)
Male	892 (34.6%)	3 (4.3%)		1 (10.0%)	1 (6.7%)	1 (3.3%)
Unspecified/Blank	49 (1.9%)	2 (2.9%)				2 (6.7%)
Single Parent Families	872 (53.5%)	45 (64.3%)	6 (40.0%)	7 (70.0%)	8 (53.3%)	23 (76.7%)
Race/Ethnicity						
Hispanic	843 (32.7%)	8 (11.4%)	2 (13.3%)	1 (10.0%)	3 (20.0%)	2 (6.7%)
Black	617 (23.9%)	26 (37.1%)	5 (33.3%)	5 (50.0%)	5 (33.3%)	11 (36.7.%)
White	580 (22.5%)	22 (31.4%)	7 (46.7%)	1 (10.0.%)	6 (40.0%)	8 (26.7%)
Asian	36 (1.4%)	1 (1.4%)		1 (10.0%)		
Native American	99 (3.8%)	4 (5.7%)	1 (6.7%)			3 (10.0%)
Multi-Racial/Bi-Racial	108 (4.2%)	2 (2.8%)				2 (6.7%)
Other	137 (5.3%)	7 (1.0%)		2 (20.0%)	1 (6.7%)	4 (13.3%)
Unspecified/Blank	158 (6.1%)	7 (1.0%)		2 (20.0%)	1 (6.7%)	4 (13.3%)
English is Primary Family Language	1,443 (56.0%)	61 (85.9%)	12 (80%)	9 (90.0%)	11 (73.3%)	29 (96.7%)
Mean Average Age of Mother/Enrollee	31.6	30.4	32.3	35.1	26.3	29.9

			En	rolled in CareerAdvo	ance®	
	All Adults in CAP ECE Population	All Cohorts in Career <i>Advance</i> ®	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Adult's Education Level						
Less than high school diploma or GED or 12 th Grade	795 (39.4%)	11 (15.7%)	7 (46.7%)		4 (26.7%)	
High school diploma or GED or reached 12 th Grade	1,076 (41.8%)	35 (50.0%)	3 (20.0%)	7 (70.0%)	6 (40.0%)	19 (63.3%)
Some college or advanced training	214 (8.3%)	9 (12.9%)	3 (20.0%)	1 (10.0%)		5 (16.7%)
College Degree +/or Training Certificate	221 (8.6%)	11 (15.7%)	2 (13.3%)	1 (10.0%)	4 (26.7%)	4 (13.3%)
Unspecified/Blank	272 (10.6%)	4 (5.7%)		1 (10.0%)	1 (6.7%)	2 (6.7%)
Employment Status at ECE Application	All adults n=2,573					
Employed full time (35 hr or more)	875 (34.0%)	18 (25.7%)		2 (20.0%)	7 (46.7%)	9 (30.0%)
Employed part time (< than 35 hrs)	230 (8.4%)	10 (14.3%)	2 (13.3%)	1 (10.0%)	2 (13.3%)	5 (16.7%)
Employed full time + training	89 (3.2%)	2 (2.9%)	- Active Sectore			2 (6.7%)
Employed part time + training	41 (1.5%)	1 (1.4%)			1 (6.7%)	
Training or School Only	168 (6.1%)	1 (1.4%)				1 (3.3%)
Not employed/unemployed	941 (34.2%)	31 (44.3%)	11 (73.4%)	6 (60.0%)	4 (26.7%)	10 (33.3%)
Retired or Disabled	66 (2.4%)	3 (4.3%)	2 (13.3%)			1 (3.3%)
Unspecified/Blank	163 (6.3%)	4 (5.7%)		1 (10.0%)	1 (6.7%)	2 6.7%)
Family Income Range (\$ per yr)	n=1630					1
\$0-1,000	279 (17.1%)	14 (20.0%)	3 (20.0%)	1 (10.0%)	1 (6.7%)	9 (30.0%)
\$1,001-10,000	423 (26.0%)	21 (30.0%)	6 (40.0%)	3 (30/0%)	3 (20.0%)	8 (26.7%)
\$10,001-20,000	523 (32.1%)	15 (21.4%)	2 (13.3%)	3 (30.0%)	4 (26.7%)	6 (20.0%)
\$20,001-30,000	283 (17.4%)	8 (11.4%)	3 (20.0%)	1 (10.0%)	3 (20.0%)	2 (6.7%)
Over \$30,000	122 (7.5%)	12 (17.1%)	1 (6.7%)	2 (20.0%)	4 (26.7%)	5 (16.7%)
Mean Average	\$13,468	\$14,441	\$10,593	\$18,182	\$19,877	\$12,401

Table 6. Profile of CareerAdvance® Families: Cohorts 1-4 (continued)

Table 6. Profile of C	CareerAdvance®	Families: Cohorts	1-4 (continued)
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						Enr	olled i	n CareerAdva	nce®				
	All Adults in ECE Populat		All Cohorts in CareerAdvance®			Cohort 1		Cohort 2		Cohort 3		Cohort 4	
Poverty level/ Eligibility Status	n=1,607												
Eligible (0-100%)	1170 (72	.8%)	50	(71.3%)	12	(80.0%)	7	(70.0%)	9	(60.0%)	22	(73.3%)	
101-130%	98 (6.	1%)	4	(5.7%)	2	(13.3%)	1	(10.0%)	1	(6.7%)			
Over income (>130%)	127 (7.	9%)	7	(10.0%)					2	(13.3%)	5	(16.7%)	
Foster child	25 (1.	5%)	2	(2.9%)	1	(6.7%)	1	(10.0%)					
Homeless	25 (1.	5%)	2	(2.9%)					1	(6.7%)	1	(3.3%)	
Public Assistance	65 (3.	9%)	5	(7.1%)			1	(10.0%)	2	(13.3%)	2	(6.7%)	
# Times Moved During Year Prior to Application for ECE	n=1,947	,											
0	1,074 (55.2	2%)			7	(33.3%)	5	(50.0%)			27	(33.3%)	
1	594 (30.	5%)			6	(50.0%)	4	(40.0%)			12	(50.0%)	
2	158 (8.1	%)			1	(8.3%)	1	(10.0%)			1	(8.3%)	
3	35 (1.8	%)	Contraction of a state of a state of a state of the		1	(8.3%)							
4 or more	13 (0.7	%)			0	(0 %)							
No data	73 (3.8	%)							15	(100%)		0.000	
# Children per household	n=1668		175 c amon famili		am	children ong 15 nilies	an	children 10ng 10 milies	an	children nong 15 milies	am	children ong 30 nilies	
1	389 (23.3	%)	16	(22.9%)		1		2		3		10	
2	590 (41.2	%)	27	(38.6%)		8		4		5		10	
3	405 (24,3	%)	14	(20.0%)		4		1		4		5	
4	181 (10.9)	%)	6	(8.6%)		2						4	
5	76 (4.6%	6)	5	(7.1%)				1		3		1	
6	17 (10.2%	6)	E										
7	8 (0.5%		2	(2.9%)				2					
8	2 (0.1%	and a concernent of the second											
Mean Average # children	2.4			2.5		2.5		3.2		2.7		2.2	

			Enr	olled in CareerAdvar	nce®		
	All Adults in CAP ECE Population	All Cohorts in Career <i>Advance®</i>	Cohort 1	Cohort 2	Cohort 3	Cohort 4	
Ages of All Children	3,862 children	175 children among 70 families	37 children among 15 families	32 children among 10 families	40 children among 15 families	66 children among 30 families	
0-2	759 (19.7%)	35 (19.6%)	8 (21.6%)	2 (17.1%)	7 (17.5%)	14 (21.2%)	
3-4	1,447 (37.5%)	64 (35.8%)	12 (34.2%)	9 (25.7%)	15 (37.5%)	27 (40.9%)	
5-10	1,072 (27.8%)	54 (30.2%)	15 (40.5%)	12 (34.3%)	13 (32.5%)	14 (21.2%)	
10-15	407 (10.5%)	16 (8.9%)	1 (2.7%)	5 (12.3%)	5 (12.5%)	5 (7.6%)	
15-20	145 (3.8%)	8 (4.5%)	1 (2.7%)	4 (8.6%)		4 (6.1%)	
Over 20	7 (0.2%)						
No data/Error	25 (0.7%)	2 (1.1%)				2 (3.0 %)	
Mean Average Age of All Children	2.4	5.9	4.7	7.9	5.6	5.7	
Median Age of All Children	4.0	4.0	4.0	6.0	4.0	4.0	
Age of Children Enrolled in ECP with CAP	n=1947	91 children enrolled	17 children enrolled	15 children enrolled	19 children enrolled	40 children enrolled	
1		8 (8.8%)	1 (5.9%)	1 (6.7%)	1 (5.3%)	5 (12.5%)	
2	596 (30.6%)	14 (15.4%)	2 (11.8%)	1 (6.7%)	4 (21.1%)	7 (17.5%)	
3		18 (19.8%)	4 (23.5%)	3 (20.0%)	3 (15.8%)	8 (20.0%)	
4	1,309 (67.2%)	38 (41.8%)	6 (35.3%)	5 (33.3%)	9 (47.4%)	18 (45.0%)	
5	42 (2.2%)	13 (14.3%)	4 (23.5%)	5 (33.3%)	2 (10.5%)	2 (5.0%)	

Table 6. Profile of CareerAdvance® Families: Cohorts 1-4 (continued)

Source: Calculated from data on initial applications to Early Childhood Education Program, as captured in CAP's Child Plus data system for the 2010-2011 school year as of July 2011.

NOTES:

(1) Responses to questions could be as much as three years prior to enrollment in CareerAdvance®.

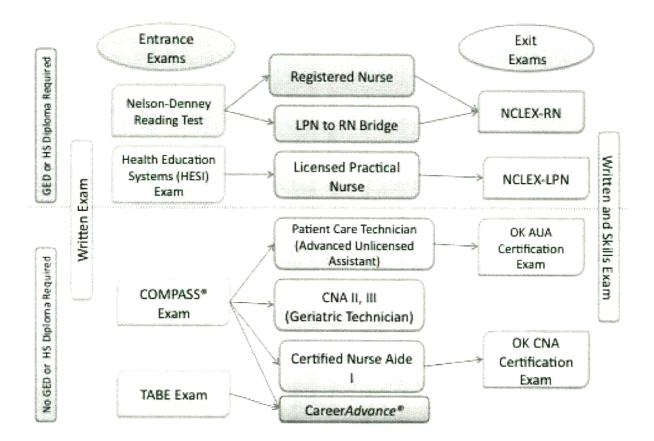
(2) CAP staff provided some missing data for enrollees.

PROGRESS OF CAREERADVANCE® PARTICIPANTS

THE NEED FOR BASIC SKILLS AND COLLEGE READINESS

It is clear from the numerous examinations facing the CareerAdvance[®] participant through the path from CareerAdvance[®] entrant to Registered Nurse that participants must have sufficient basic skills and test-taking skills to succeed (see Figure 4).





ACTIVITIES TO IMPROVE BASIC SKILLS AND COLLEGE READINESS

Finding that inadequate basic skills were preventing CareerAdvance[®] participants from scoring sufficiently well on LPN placement exams to be admitted to the LPN program, CAP undertook a series of steps to help assure that participants have the skills to successfully negotiate the educational side of the nursing career ladder. After the experience with the initial cohort, CareerAdvance[®] staff raised the standards for admission, limiting enrollment generally to individuals with a high school diploma or GED (with a few exceptions made for highly motivated individuals or applicants near passing the GED exam).

Since most applicants were 10 to 12 years out of school, many individuals with a GED or high school diploma did not test at or above high school-level skills. Thus, starting with Cohort 2, CareerAdvance[®] began a program entitled "Academic Nursing Skills" designed to boost the basic skills of any applicant who tested at below the 9th grade level on mathematics and/or reading. Since the teacher for this course is a former nursing student herself, it was reasoned that she could teach the needed skills in a healthcare context.

Cohort 3 instituted an additional initiative to promote academic preparation. Recognizing that even having sufficient basic skills did not prepare many individuals for success in college, Career*Advance*[®] staff worked with staff of the Tulsa Technology Center to develop a compressed version of the TCC course for freshmen entitled "Strategies for Academic Success." At Tulsa Community College, the course is a 3-hour, 16-week class covering such subjects as test taking, how to study, how to read a chapter, how to take notes, and time management. A specially developed compressed 2-to-3-week version of the course was added as a regular part of Career*Advance*[®] for all participants, beginning with Cohort 3.

Beginning with Cohort 4, CareerAdvance[®] provided time for applicants to review and refresh their skills in mathematics and English prior to taking the COMPASS[®] and TABE[®] tests, which by then were incorporated into the enrollment process. Applicants are directed to several websites that offer practice tests and instruction in these skills. Also, as the initial step in the new career HIT pathway, all participants are enrolled in the CORE program, a program similar to the Strategies for Academic Success for the Nursing program, but a little more extensive and robust. CORE is taught by Tulsa Tech 10 hours a week over a 4-week period before Medical Assisting starts. The topics include study skills, language skills, computer skills, and conflict resolution

The attention to improving academic preparation is paying off for participants in the nursing program. Three current participants in the LPN program lacked a high school diploma or GED prior to entering Career*Advance*[®]. Through the program, they prepared for and passed the GED tests while they were simultaneously studying in the CNA program; they are now all succeeding in the LPN program. However, three others without a GED or sufficient basic skills have been unable to score sufficiently well on the placement exam to enter the LPN program.

Cohort	Enrolled In Career <i>Advance</i> ®	Attended Academic Nursing Skills*	Completed Strategies for Academic Success**	In GED Studies	Obtained GED
Cohort 1	15		N/A	7	4
Cohort 2	10	6	N/A		
Cohort 3	15	12	15	1	1
Cohort 4 - Nursing	14	9	14	1	.1
Cohort 4 -HIT	15	12	15	2	
Totals	68	26	44	9	6

Table 7. Participation in CareerAdvance® Activities to Promote Basic Skills, by Cohort

* GED preparation in Cohort 1 evolved into the Academic Nursing Skills program in subsequent cohorts.

**The Strategies for Academic Success class became a regular feature of CareerAdvance[®] beginning with Cohort 3 NOTE: Data are as of September 1, 2011.

THE NEED FOR COMPUTER SKILLS

The need for CareerAdvance[®] participants to have computer skills has surfaced in several ways. Early in the program, it became apparent that many participants did not have a computer at home, nor did they have ready access to the Internet. The range of skill levels of participants varied greatly. Some even needed to learn to type and how to turn on a computer. Some needed to know how to use email and send attachments, such as their resumes. Other issues included using the Internet and Microsoft Office programs, such as MS Word to create their resumes.

Students entering the LPN program found themselves facing a considerable amount of computer-based instruction. Some students were not accustomed to this mode of instruction and were upset by the absence of lectures by faculty members. In 2011, the Tulsa Tech LPN program began requiring students to upload an electronic version of their vaccination records. This requirement further revealed that several Career*Advance*[®] participants lacked needed computer skills to undertake relatively simple tasks. In response, the career coach arranged for an *ad hoc* computer training session, at which their vaccination records were uploaded. The experience demonstrated again the need to incorporate more training in computer skills into the Career*Advance*[®] Program. Nurses simply must be able to work with computers, especially as the healthcare industry

transitions into electronic records. Computer skills are even more important for individuals working in Health Information Technology.

SUMMARY OF PARTICIPANT PROGRESS

Table 8 displays a summary of the progress made by Career*Advance*[®] participants in Cohorts 1-4 in the nursing career pathway through September 1, 2011. Among the first four cohorts, nearly all (50 of 54) enrollees took the CNA Exam, passed and obtained certification as a CNA. To date, half (12 of 24) obtained certification as a Geriatric Technician upon completing CNA Levels 1-3.

Altogether, ten students were accepted into the LPN program from the 28 students who had applied through September 1, 2011. Six students are currently enrolled in the LPN program and will soon graduate. Four others have been accepted to the LPN program; two will start in November 2011, one in February 2012, and one will re-start in January 2012 after stopping out for a semester. To date, no Career*Advance*[®] participant has dropped out of the LPN program, although two have stopped out temporarily to return at a later date. Through September 1, one participant had enrolled in the Patient Care Technician (PCT)/Advanced Unlicensed Assistant (AUA) as an alternative to the LPN program.

The most advanced student in Career*Advance*[®] has graduated from the LPN program at Tulsa Tech and is working toward satisfying her general education course requirements to qualify for admission to the Registered Nursing associate's degree program at Tulsa Community College.

PARTICIPANTS IN HEALTH INFORMATION TECHNOLOGY

The first cohort of participants in Health Information Technology started classes in August 2011 as part of cohort 4. They were enrolled in CORE training. The CORE program, offered by Tulsa Technology Center, is taught 10 hours a week for 4 weeks prior to the beginning of the Medical Assisting program. The CORE topics include study skills, language skills, and conflict resolution and a broad range of computer skills instruction. As of the end of September, all 15 participants remained enrolled in the program.

					CNA				PCT/AUA	
Cohort	Enrolled	CNA 1 Completed	CNA Exam Passed	CNA 2 Completed	CNA 3 Completed	Geriatric Tech Certificate Obtained	CNA Employment Obtained	Enrolled	Completed	AUA Exam
Cohort 1	14	14	13	13	7	7	9	1		
Cohort 2	10	8	8	5	5	5	3			
Cohort 3	15	14	14	15	In progress		4			
Cohort 4	15	In progress								
Totals	54	36	35	33	12	12	16	1		

Table 8. CareerAdvance[®] Participant Progress in Nursing Career Path as of September 1, 2011

		l	.PN Progr	am			RN Program						
Cohort	Med Term & A & P Courses Only Completed		Enrolled	Graduated	Passed LPN Exam	LPN Employment	Working Towards General Ed Requirement	Completed General Ed Requirement	LPN-to- RN Bridge Program	Enrolled	Graduated	Passed RN Exam	RN Employment
1	1	4	4	1	1		1						
2	3	3	3										
3		3		geperministration in second contrast application in									
4													
Totals	4	10	7	1	1		1	an a					

Table 9 provides an updated picture of the status of Career*Advance*[®] enrollees as of October 19, 2011. A total of 48 out of 70 remained active with the program whereas 8 others have temporarily stopped out and plan to rejoin Career*Advance*[®] at a later date. Thus, 80 percent of all enrollees remain associated with the program.

Participant Status	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Subtotals	Totals
Active in CareerAdvance®	5	4	10	29		48
Inactive						8
Working in healthcare to support family	3	1	1	-	5	
Inactive for personal reasons			1		1	
Inactive for legal reasons			2		2	
Exited from program						14
Working in healthcare	3				3	
Terminated from program by CAP & now working in healthcare		1			1	
Terminated from program by CAP	1				1	
Exited due to personal health issues		1	an an a' a' chuir tain tain an an anna ann an ann an ann an ann an a		1	
Exited for other personal reasons	2		1		3	
ESL Onlypursuing job in another field	1				1	
Exited to pursue bachelor's degree & career in social work		1			1	
Failed drug test		2		1	3	
Totals	15	10	15	30	70	70

Table 9. CareerAdvance® Nursing Participants: Status as of October 19, 2011

Source: CareerAdvance® staff

PARTICIPANT PERSPECTIVES

Researchers conducted a series of focus groups with Career*Advance*[®] participants on April 25-26, 2011. The primary objectives of the focus groups were (1) to obtain participants' perspectives on their experience with the program and their suggestions for improving it; and (2) to better understand how program participation positively and/or negatively influences family life.¹⁵

ON THE EARLY CHILDHOOD PROGRAM

Participants in focus groups were especially pleased with the care and education their children receive at the CAP early childhood education. As one parent summarized, "They give our children love."

ON THE CAREERADVANCE * PROGRAM

Many expressed their gratefulness for Career*Advance*[®] and admitted that they would not be back in school succeeding without the help of the program. Indeed, some had previously attempted to train for nursing, but had to drop out for one reason or another. At least four participants had accumulated student loans from previous attempts to become a nurse. Participants described the program as a "blessing," a "godsend" and "something special." They recommend the program to their friends and relatives. They are pleased with the help they receive from Career*Advance*[®] staff, noting, "[Our career coach] helps us to solve problems."

Participants did have suggestions for improving the program. CNA students in the Academic Nursing Skills program wanted instruction to be more directly related to their needs in nursing and in preparing them for the HESI test. Students in the LPN program wanted staff to organize monthly peer support meetings.

EFFECTS ON THE SELF-EFFICACY AND SELF-ESTEEM OF PARTICIPANTS

Participants expressed considerable pride in their accomplishment upon completing the CNA. "It makes me feel better about myself" was a typical statement.

STRESS LEVELS

The majority of participants reported experiencing higher levels of stress in the

¹⁵ Teresa Eckrich Sommer, who co-facilitated the focus groups with participants on April 25-26, 2011, also drew quotations from these focus groups in the paper Sommer et al., 2011.

program, but acknowledged the peer support they receive in the program helps them cope with it. All participants at the LPN level reported higher levels of stress. At the CNA level, six participants reported that their stress level had increased; six indicated that their stress had dropped; and for three, stress had remained about the same. Support from family members is also helpful in alleviating stress.

SUPPORT FROM PEERS

Regular partner meetings and organizing the initial education classes in cohort are key features of CareerAdvance[®]. One staff member described these meetings with peers as the "heart" of the program. The importance of support from peers clearly came through in every focus group conducted with participants.

"It all kind of clicked. It would have been stressful without the support of each other."

"I love my classmates; they are not just classmates, they're family."

Peer support was facilitated by the fact that all were going through the common experiences together, all had at least one child at the same age group, and their child was in the CAP Early Childhood program.

SUPPORT FROM FAMILY MEMBERS

Married participants felt that the support of their spouses, although not always provided at first, helped them manage the demands of the program and gave them confidence to pursue their education. As one participant related: "My husband thought it would take up time, but once he saw it could be done, he supported me. My husband motivates me a lot. He takes the kids so I can study."

Roles in some families have shifted: "My significant other now pays more attention to the kids. It turns around. You focus on other things [school] and they ask Dad for help. Mama's not the only name they know now." "They are connecting more with my husband, and it takes some stress off me."

Other family members can provide important help and motivation, too. For example, a single woman pointed out that relatives take care of her kids on weekends, so that she can work and support her family.

"I get more respect from family and friends from a career in nursing than in business."

"It makes my mom so happy that I want to do something with my life."

"The program has taken my family to a whole new level. They [my family] are proud of me. I'm seeking employment. He [my son] tells me I'm a super scholar!"

INFLUENCE ON THE CHILDREN IN CAREERADVANCE® FAMILIES

"I am doing this for myself and my children." (Focus group participant, April 25, 2011)

Indications of the effects that parent participation in CareerAdvance[®] is having on their children surfaced clearly in focus groups with participants (also, see Sommers et al, 2011). Children are studying with their mothers and interacting about education. As one mother reported: "My daughter wants to help me with my homework." Another described how she and her 7-year old daughter are now studying together:

> "...they are excited for me 'cause they know that whenever I was studying certain words, my daughter—not my oldest one, my middle one—she would get excited whenever I would say a word, and then she would go and repeat it. Now she's to the point that she even knows some of those medical words and what they mean, you know? Or she will quiz me herself, and I think it was just trying for me to spend time with her, and that was the way she was getting attention—by being involved with what mommy is doing."

Mothers realize that they are important positive role models for their children by returning to school and engaging in school-related activities. This surfaced at several points in the conversations:

"Even though my daughter is only three, she asks, 'Mommy, are you going to do your homework?' She is like 'Okay, I will do my homework too.' She is only three but she wants to do homework."

"My daughter is 8 years old now, and she's old enough to get the concept of why someone lives in this place, and somebody lives in this big mansion. And like all you have to do is go all the way, get your degree, work really hard....I'm getting ready to graduate [from the LPN program] so we're gonna buy this house with a backyard, and their eyes light up, and you just taught good work ethic. And they've seen you do it. I mean, come on."

"My kids will see that it's never too late to better your education. My kids will see that I am studying and that hopefully—monkey see, monkey do!"

"... a lot of our kids don't understand why we need to go to school and study, don't need this and that. Well, you're showing them this is why you need to learn this and in the future you're gonna need it. You're gonna need to go to college if you want to support yourself and your family. This is why we do it." The motivation flows both ways. The response of children can help motivate parents in their own learning in a synergistic relationship that promotes learning for both generations:

"My four-year-old will get so excited when she sees me dressed up in the scrubs. And when I came to pick him up, the teacher told me, "You know, he's been excited all day, and he told me "My mommy's gonna help sick people." So it's like knowing when they see you, what you're doing, they are so excited for you. They ask me, "Did you help anyone today? What did you do today? So that makes your day because they are happy for you."

In addition to the focus groups, partner researchers at Northwestern University are collaborating to examine the impacts of Career*Advance*[®] on families and children through a quasi-experimental evaluation design, comparing participating parents and children with matched comparisons from CAP's early childhood education population. The evaluation includes detailed interviews with parents, analysis of state administrative records on employment and receipt of public benefits, along with analysis of the cognitive and socio-emotional development of children using the Bracken test and several other measures. Information on the results from this research will be available in future reports.

CONCLUSION AND RECOMMENDATIONS

FAVORABLE EARLY SIGNS

Early signs indicate that CareerAdvance[®] is succeeding with high rates of completion. Among 54 participants enrolling in the CareerAdvance[®] nursing track in the first four cohorts, 50 completed CNA 1 and passed the CNA exam to become certified. No CareerAdvance[®] participants have dropped out of the LPN program, although two have stopped out to return later. This 100 percent persistence rate to date compares favorably with a 33 percent overall completion rate for Tulsa Tech's LPN program in the 2009-2010 school year, as published in a program description on the Internet.¹⁶

Employers have responded favorably to CareerAdvance[®] participants, with at least one employer offering to pay the tuition for continued nursing studies for a participant who needed to exit the CareerAdvance[®] at an intermediate level in order to work full time. The initial report with records of employment and earnings achieved by participants and former participants along with the industry in which they are employed, will be available from the Oklahoma Employment Security Commission in early 2012.

As regards GED completion, six of nine individuals in GED preparation associated with CareerAdvance[®] have passed all GED tests to date, which is an exceptionally high rate among adult education programs.

Overcoming several challenges, CareerAdvance[®] was successful in its first year of expansion under its HPOG grant. CareerAdvance[®] expanded eligibility to participate from parents in three pilot early childhood learning centers to parents across the entire CAP early childhood network as well as two Educare centers in Tulsa. The program met the enrollment goals projected in its proposal, admitting 45 new participants—30 in nursing and 15 in health information technology. The program became more efficient, moving up the career coach-to-participant ratio from 1:15 used in the pilot stage to a model of 1:30 under the expansion. Staff developed and implemented training for a new career path in health information technology, and refined the recruitment, selection and enrollment criteria and procedures. CareerAdvance[®] also strengthened its ties with partner institutions and made improvements in its approaches to supplement basic skills instruction and preparation for college.

During the past year, a lot has been learned, much of which has already been incorporated into the program's regular practices.

¹⁶ http://www.tulsatech.com/Programs/Content/PNS.PC.pdf

MAINTAIN AGILITY AND CONTINUOUS IMPROVEMENT

The multiple challenges that Career*Advance*[®] has faced over the past year have demonstrated that the program needs to stay agile and adapt to changes in the environment in which it operates, whether they be changes in employer practices or the labor market, developments at the educational institutions, requirements of funding sponsors, or program improvements recommended by its participants.

CONTINUE ATTENTION TO DEVELOPING BASIC SKILLS, COMPUTER SKILLS, AND COLLEGE READINESS

The enhancements to the CareerAdvance[®] program to foster improved basic skills, computer skills, and college readiness have been useful in helping to assure that students have the skills required to move up the career ladder. Continued efforts are needed in this arena, especially in finding ways to teach basic skills in healthcare context and in developing computer skills, and in increasing and improving offerings during summers. Coffey and Smith (2011) of the Ray Marshall Center recently completed a scan of best practices in adult education across the nation, which may be helpful.

PROVIDE ACCURATE AND SPECIFIC INFORMATION TO SHAPE THE EXPECTATIONS OF APPLICANTS AND **P**ARTICIPANTS

From the beginning, applicants to Career*Advance*[®] need to know what to expect from the program, such as how long the training will take, what the financial implications are for families entering the program, etc. Program staff has revised its presentations in orientations and modified the Shared Expectations Agreement co-signed by participants at program entry.

Sometimes developments occur outside the control of the program which have implications for CareerAdvance[®] participants. A notable example during this past year is the change occurring in the LPN program admission process and numbers, which reduced access for CareerAdvance[®] participants. It is important to avoid promising certainty when the environment is uncertain.

EMPHASIZE TO PARENTS THE EFFECTS THAT THEIR OWN EDUCATION HAS ON THEIR CHILDREN

Find ways to make explicit the effects that parents returning to school have on their children. Focus groups demonstrated that parent participants in CareerAdvance[®] understand that they serve as important role models for their children. Several mothers commonly report doing homework together with their children. Further emphasis is needed on instructing parents how to make the most of their positive influence on their children in this two-generation strategy.

INCREASE DIRECT ENGAGEMENT WITH EMPLOYERS

Alicia Plati, CAP's consultant on the healthcare industry, has compiled and conveyed considerable information about the health care labor market in Tulsa. She has also introduced CareerAdvance[®] to employers, helped to arrange partnerships between the program and individual employers, and guided participants to seek employment with the better health care employers in Tulsa. At this stage, CareerAdvance[®] program staff needs to establish more direct communications with employers to assist participants in securing employment during breaks in classwork and on leaving the program.

PLAN FOR THE FUTURE

Advancing from a GED or high school diploma through the Associate Degree Registered Nursing program at Tulsa Community College takes five or more years; yet several mothers enrolled in CareerAdvance[®] when their children were 4 years old and scheduled to graduate from Head Start and move into Kindergarten the following year. Indeed, 51 of 91 CareerAdvance[®] children (56%) in the CAP-ECE program are currently 4 or 5 years old and will age out of Head Start by the end of the 2011-2012 school year (see Table 6). Such a time horizon will work well if participants exit the program at the CNA level, but CNA certification alone generally will not be sufficient to qualify them for highpaying jobs to escape poverty. If participants choose to go on to the LPN and RN levels, CAP staff need to determine how to administer the program and maintain contact with these parents when their children are no longer enrolled in the CAP Early Childhood Education Program. One path toward resolving this challenge may involve working with the elementary schools to build a continuum for children from pre-K through third grade, as advocated by the Foundation for Child Development (Shore 2009). Continuing parent training while extending and aligning child development efforts from the pre-K through 3rd grade continuum could become mutually reinforcing.

LIMITATIONS OF THIS STUDY

This paper reports on the implementation, early operations and expansion of CareerAdvance[®]. It aims to document what was accomplished and how it was achieved. It also discusses the challenges faced by the program and its participants and the changes made in CareerAdvance[®] to make the program more effective. The present study does not consider the net impact of CareerAdvance[®] on participants or their children. Another part of the evaluation of CareerAdvance[®] is using a quasi-experimental evaluation design to compare CareerAdvance[®] participants and their families to a

matched comparison group within the CAP early childhood program. The study is also examining the impact of the program on family functioning. In conjunction with this study, arrangements have been made to access administrative records on employment and earnings and receipt of unemployment insurance from the Oklahoma Employment Security Commission. as well as administrative records on receipt of several public benefits programs from the Oklahoma Department of Human Services. The study will also track the impact of Career*Advance*[®] and companion early childhood program on the achievement of children over the longer term.

At this point in time, participants in the earliest cohorts are just completing the LPN program and preparing to enter the Registered Nurse Associates' degree program at Tulsa Community College. Since training and certification to become a Registered Nurse takes a high school graduate five years or more to attain, no one has yet completed the full nursing career ladder and entered the labor market. Participants in the Health Information Technology track are in the first step of their pathway, taking medical assisting. As Career*Advance*[®] becomes more widely known and grows, it should attract sufficient numbers of applicants to support a random assignment evaluation.

REFERENCES

- Becker, Gary (1993). Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. Chicago, IL: The University of Chicago Press, Third Edition.
- Coffey, Rheagan and Tara Carter Smith. (2011) "Challenges, Promising Programs and Effective Practices in Adult and Developmental Education." Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas at Austin, (February) Available at: http://www.utexas.edu/research/cshr/pubs/pdf/rvsd_Tulsa_Adult_Education_Re port Feb_16_2011.pdf
- Duncan, Greg J., Aletha C. Huston, and Thomas S. Weisner. (2007). Higher Ground: New Hope for the Working Poor and Their Children. New York, NY: Russell Sage Foundation.
- Duncan, Greg J. and Katherine Magnuson. (2011). "The Long Reach of Early Childhood Poverty." Pathways. Winter. Pp. 22-27.
- Gardner, Margo, Jeanne Brooks-Gunn, P. Lindsay Chase-Lansdale, Teresa E. Sommer, Diana M. Rauner, and Karen Freel (2011). "The barriers to postsecondary education among low-income mothers of young children and the promise of a two-generation intervention approach." Manuscript under review.
- Giloth, Robert P., editor. (2004). Workforce Intermediaries for the Twenty-first Century. Philadelphia, PA: Temple University Press.
- Glover, Robert W. and Christopher T. King. "The Promise of Sectoral Approaches to Workforce Development: Towards More Effective, Active Labor Market Policies in the United States," In Charles J. Whalen, Ed., Human Resource Economics: Essays in Honor of Vernon M. Briggs, Jr., Kalamazoo, Michigan: The W. E. Upjohn Institute for Employment Research, 2010, pp. 215-251.
- Glover, Robert W.; Tara Carter Smith; Christopher T. King, and Rheagan Coffey. "CareerAdvance[®]: A Dual-Generation Antipoverty Strategy." An Implementation Study of the Initial Pilot Cohort, July 2009 through June 2010. Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas at Austin, (August).
- Hsueh, JoAnn; Erin Jacobs; and Mary Farrell (2011). "A Two-Generation Child-Focused Program Enhanced with Employment Services: Eighteen-Month Impacts from the Kansas and Missouri Sites of the Enhanced Services for the Hard-to-Employ Demonstration and Evaluation Project." New York, NY: MDRC (March).
- Jenkins, Davis; Matthew Zeidenberg; and Gregory Kienzl (2009). Building Bridges to Postsecondary Training for Low-Skill Adults: Outcomes from Washington State's I-BEST Program, New York: Community College Research Center CCRC Policy Brief, Number 42, May.
- King, Christopher T.; Tara Carter Smith; and Robert W. Glover. (2011a) "Investing in

Children and Parents: Fostering Dual-Generation Strategies in the United States." Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas at Austin.

- King, Christopher T.; Tara Carter Smith; and Robert W. Glover. (2011b) "Opportunities and Challenges Confronting Dual-Generation Strategies: Achieving Larger, More Lasting Impacts from Declining Resources." Paper presented at the Annual Research Conference of Association of Public Policy Analysis and Management, Washington, D.C. December 5, 2011.
- King, Christopher T.; Robert W. Glover; Tara Carter Smith; Rheagan Coffey; Brian Levy; Hiro Yoshikawa; William Beardslee; and Micah Kordsmeier (2009) "The CareerAdvance Pilot Project: Recommended Jobs Strategy for Families Served by the Community Action Project of Tulsa County." Austin, TX: Ray Marshall Center for the Study of Human Resources, LBJ School of Public Affairs, The University of Texas at Austin, (August 17)
- Magnuson, Katherine. (2007). Investing in the Adult Workforce: An Opportunity to Improve Children's Life Chances. Baltimore, MD: Prepared for the Annie E. Casey Foundation Initiative on Investing in Workforce Development, March 20. http://www.aecf.org/news/fes/dec2008/pdf/Magnuson.pdf.
- Maguire, Sheila, Joshua Freely, Carol Clymer, Maureen Conway, and Deena Schwartz. (2010). Tuning into Local Labor Markets: Findings from the Sectoral Employment Impact Study. Philadelphia, PA: Public/Private Ventures. July.
- Shonkoff, Jack P.; and Deborah A. Phillips (editors). (2000) From Neurons to Neighborhood: The Science of Early Childhood Development. Washington, D.C.: National Academy Press.
- Shore, Rima. (2009). The Case for Investing in PreK-3rd Education: Challenging Myths about School Reform. Policy to Action Brief No. 1. New York, NY: Foundation for Child Development. January.
- Sommer, Teresa Eckrich, P.; Lindsay Chase-Lansdale; Jeanne Brooks-Gunn; Margo Gardner; Diana M. Rauner; and Karen Freel. (2012, in press). "Early Childhood Education Centers and Mothers' Postsecondary Attainment: A New Conceptual Framework for a Dual-Generation Education Intervention." Evanston, IL: Institute for Policy Research, Northwestern University. Forthcoming, Teachers College Record.
- Sommer, Teresa Eckrich; P. Lindsay Chase-Lansdale; and Jeanne Brooks-Gunn. (2011) "Promoting Dual-Generation Anti-Poverty Programs for Low-Income Families: Three Approaches and Their Implications for Practitioners." Paper presented at the Annual Research Conference of Association of Public Policy Analysis and Management, Washington, D.C. December 5, 2011.