

Two-Generation Anti-Poverty Programs in Tulsa, Oklahoma

Prepared for the George Kaiser Family Foundation

By

Robert W. Glover
Christopher T. King
Tara Carter Smith

January 2012



3001 Lake Austin Blvd., Suite 3.200
Austin, TX 78703 (512) 471-7891

This report was prepared with funds provided through a grant and cooperative agreement from the George Kaiser Family Foundation to the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin. This document was also supported by Grant # 90FX00100 from the Administration for Children and Families, U.S. Department of Health & Human Services (HHS). Its contents are solely the responsibility of the authors and do not necessarily represent the views of HHS, the George Kaiser Foundation, or the University of Texas at Austin.

TABLE OF CONTENTS

Acknowledgments.....	iv
Executive Summary.....	vi
Overview of this Report	vii
Introduction	1
Building on Early Head Start/Head Start in a Two-Generation Focus	1
The Community Action Project of Tulsa County (CAP)	2
Tulsa Educare, Inc.	3
Early Childhood Education Programs Operated by CAP of Tulsa County and by Tulsa Educare	4
Proposed Design for Parent Education and Training.....	6
Key Components of the Design for EduCareers and CareerAdvance®	8
The Career Pathways	11
Expanding CareerAdvance® beyond Nursing.....	13
What to Expect: Early Signs of a successful program	14
Year 2: The Expansion of CareerAdvance®	15
Challenges Met and Overcome.....	16
Personnel Changes.....	16
Participant Performance and Motivation	17
Obtaining funding to expand the program	17
Complying with federal restrictions on performance incentives	18
Working Effectively with Educational Partners	18
Data Sharing Arrangements with Schools	19
Scheduling Classes and Avoiding Gaps	19
Changes in the LPN Program Admissions Criteria	20
Bottlenecks in Admissions	20
Evolution of Recruiting, Screening and Selection of Participants	23
Recruiting	23
Applying to CareerAdvance®	23
Changes in Screening Criteria	24
The Selection Procedures and Criteria for Enrollment Used for Each Cohort	24
Summary Statistics on Recruiting, Selection and Enrollment	28
Profile of CareerAdvance® Participants and their Families	30
Progress of CareerAdvance® Participants.....	35
The Need for Basic Skills and College Readiness	35
Activities to Improve Basic Skills and College Readiness.....	35
The Need for Computer Skills	37
Summary of Participant Progress	38
Participants in Health Information Technology.....	38
EduCareers: Year One Implementation	40
The EduCareers Nursing Program.....	43
English as a Second Language (ESL) at EduCareers	44
EduCareers Family Literacy.....	45

EduCareers GED Preparation	45
EduCareers Individual Career Coaching.....	46
Discussion of EduCareers	48
Participant Perspectives	50
On the Early Childhood Programs.....	50
On the Career <i>Advance</i> ® and EduCareers Programs	50
Effects on the self-efficacy and self-esteem of participants	50
Stress Levels	51
Support from Peers.....	51
Support from Family Members.....	51
Influence on the Children in Dual Generation Programs	52
Conclusion.....	55
Career <i>Advance</i> ® and EduCareers: Comparisons and Contrasts.....	55
Lessons from the Experience	59
The Need to Maintain Agility and Continuous Improvement	59
Lessons on Recruiting, Selection and Enrollment.....	60
Managing Participant Expectations	60
Lessons on Encouraging Persistence and Completion.....	61
Lessons on Promotion of Basic Skills, Computer Skills and College Readiness	61
The Need for Systems Changes	62
Increase direct engagement between the programs and Tulsa-area employers—to help overcome participant difficulties in acquiring employment.....	63
Planning for the Future	63
Limitations of this Study	64
References	65

LIST OF TABLES

Table 1. CareerAdvance® Chronology of Implementation	15
Table 2. Expansion of Eligibility of Parents to Participate in CareerAdvance®	15
Table 3. Rubric for Rating Applicants to CareerAdvance® in Enrollment Interviews: Cohort 4	28
Table 4. CareerAdvance® Recruiting, Application, and Enrollment Statistics, by Cohort: July 2009—August 2011	29
Table 5. CareerAdvance® Parents by Early Childhood Center: Cohorts 1-4	29
Table 6. Profile of CareerAdvance® Families: Cohorts 1-4 Compared with all Families in the CAP Early Childhood Program (2010-2011)	31
Table 7. Participation in CareerAdvance® Activities to Promote Basic Skills, by Cohort.....	37
Table 8. CareerAdvance® Participant Progress in Nursing Career Path as of September 1, 2011	39
Table 9. Profile of EduCareers Families compared with All Families at Educare – Kendall-Whittier in Tulsa: 2010-2011 School Year	40
Table 10. EduCareers Programs	42

LIST OF FIGURES

Figure 1. The Initial Design for the Nursing Career Track in Tulsa.....	12
Figure 2. CareerAdvance® Plan for Health Information Technology (HIT) Track	13
Figure 3. CareerAdvance® Nursing Career Pathways with Revised Design to Include Alternate Patient Care Technician Pathway	22
Figure 4. Exams Required in the CareerAdvance® Nursing Career Path	35
Figure 5. The Tulsa Children’s Project.....	47

ACKNOWLEDGMENTS

This report was made possible with the help of many people who deserve mention and thanks. We thank the George Kaiser Family Foundation for funding this initiative. Annie Van Hanken took a special interest in this initiative and has been especially helpful in resolving issues and questions along the way. We also want to thank Jack Schonkoff, director of the Center on the Developing Child at Harvard University, who invited the Ray Marshall Center to Tulsa to design an effective workforce development program for low-income parents as part of the Tulsa Children's Project.

We appreciate the time and effort that the implementation staff for the Tulsa Children's Project at Educare spent with us, especially the University of Oklahoma at Tulsa staff, including Jennifer Hays-Grudo, Jerry Root, Ruth Slocum, and Tricia Pratt. Jerry Root's figures depicting the activities of EduCareers and the Tulsa Children's Project (which are included in this report) offer a thoughtful and concise overview. We thank him especially for them.

Steven Dow, executive director of the Community Action Project of Tulsa County (CAP), realized the potential early on and sustained the vision of CareerAdvance® from its inception to implementation. The staff of the CAP Innovation Lab, directed by Monica Barczak, translated the program design into reality. Micah Kordsmeier launched CareerAdvance® and managed it through its initial pilot year. Liz Eccleston, who took over as manager of CareerAdvance® in summer 2010 strengthened its administrative systems. 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 CareerAdvance®. She also became an exceptional mentor to the participants. Grace Nelson brought greater understanding of the plight of single parent families to the team. Elizabeth Harris and Cindy Decker helped keep track of program data and responded to our numerous requests for information.

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

Both EduCareers and CareerAdvance® have been collaborations involving several partners, who all have cooperated with the research staff from the beginning. These partners included Tulsa Community College, Tulsa Technology Center, Workforce Tulsa,

Family & Children's Services, Union Public Schools Community Education Program, the Educational Opportunities Center at Roger's State University, and the Northeast Oklahoma Area Health Education Center (AHEC). The staff of Capital IDEA in Austin also was very helpful in training staff for the two programs in Tulsa. We want to thank the leadership and staff members from all of these organizations for being helpful and collegial in this project.

We especially want to thank the program participants who agreed to share their perspectives in focus groups with us. They provided a vital and rich source of information for this research. We also thank Theresa Eckrich Sommer, who co-facilitated the focus groups conducted on April 25-26, 2011.

Finally, we are grateful to Susie Riley and Karen White of the Ray Marshall Center who provided crucial logistical and research support for this research.

EXECUTIVE SUMMARY

Research on dual-generation initiatives in Tulsa began in 2008 as a comprehensive strategy to end the cycle of poverty organized by Jack Shonkoff, director of the Center on the Developing Child at Harvard University, with funding from the George Kaiser Family Foundation (GKFF). The initial vision included a comprehensive array of components aimed at families with children enrolled in Early Head Start/Head Start. The overall objective was to produce a “step change” in the academic and behavioral outcomes for the children that could lift them out of poverty. The components included (1) enhanced opportunities for learning by young children by improving curriculum and instruction in the early childhood program; (2) staff development for teachers and family support staff; (3) mental health promotion for children, parents, and staff; (4) primary health care for all family members; (5) improved coordination and creative financing of services; (6) integrated data management; (7) a quality improvement system; and (8) education and training for parents to increase their earnings potential and improve family economic security. Initially, the education and training component was part of a larger package of economic measures that included asset development and financial education using techniques from behavioral economics. The overall comprehensive effort became known as the Tulsa Children’s Project.

Elements of the Tulsa Children’s Project were subcontracted to various individuals, universities, and organizations across the country in order to engage expertise from a variety of academic fields to contribute to this ambitious interdisciplinary endeavor. Design of the parent education and training component was the responsibility of the Ray Marshall Center for the Study of Human Resources at the University of Texas at Austin, directed by Christopher King, with assistance from Hiro Yoshikawa of the Harvard Graduate School of Education. This report focuses specifically on that component to improve the education and training of parents.

The Tulsa Children’s Project began working with the Community Action Project (CAP) of Tulsa County—the largest provider of Head Start in Tulsa with more than 2,000 children enrolled across eighteen early childhood education centers. After more than a year of planning and negotiation, the leadership of CAP and the Center on the Developing Child mutually decided not to implement the full comprehensive Tulsa Children’s Project at CAP. Instead, CAP leaders chose to focus their efforts on developing a workforce development component for parents. Working with the University of Texas researchers, CAP established a program for parents that came to be entitled CareerAdvance®, which provided education and training for employment in the health care industry, beginning with nursing

occupations. The program design followed recommendations developed by researchers at the Ray Marshall Center with colleagues at Harvard (King et al. 2009). CareerAdvance® began recruiting and enrolling parents in the summer of 2009 for Certified Nurses Aide (CNA) classes that began in August 2009.

Subsequently, staff of the Harvard Center on the Developing Child chose Tulsa Educare in the Kendall-Whittier neighborhood as the initial implementation site for the Tulsa Children’s Project. Tulsa Educare had recently become independent from CAP, which had previously administered Educare operations. With funding from GKFF, the Tulsa Children’s Project engaged staff at the School of Community Medicine at the University of Oklahoma at Tulsa under the direction of Professor Jennifer Hays-Grudo to implement the Tulsa Children’s Project with families and children enrolled in Educare. The OU-Tulsa School of Community Medicine began a parent education/training approach they named EduCareers. The effort was an expansion and adaptation of the program design developed by Ray Marshall Center researchers. EduCareers began recruiting participants for its programs in spring 2010—a little less than one year after the start of CareerAdvance® operations.

OVERVIEW OF THIS REPORT

This report documents the early pilot operations of two-generation programs in Tulsa — CareerAdvance® and EduCareers — from July 2010 to September 2011. It updates a previous publication (Glover et al, 2010), which reported on activities and accomplishments of CareerAdvance® in its first pilot year of operation. This report covers the second year of activity with CareerAdvance®, as well as the experience of the initial year of the EduCareers program.

Information for this study comes from site visits to Tulsa by Ray Marshall research staff, regular frequent conference calls with program staff, interviews with other key informants and program partners, program administrative records, and focus groups conducted with participants.

Both CareerAdvance® and EduCareers sprang from the same basic design for healthcare training, but EduCareers was augmented with additional parent training activities aimed at serving the needs of the Educare families. Moreover, EduCareers was part of a broader initiative, entitled The Tulsa Children’s Project, which included curricular changes for the children enrolled in Educare, staff development activities, promotion of health and good nutrition, and a mental health component.

This report first briefly describes the Tulsa labor market, research on workforce development, education and training institutions in the Tulsa area, and information compiled about CAP's Early Childhood Education parents. It summarizes the findings and recommendations of researchers at the Ray Marshall Center, including the proposed initial program design. The report focuses on *CareerAdvance*[®] and its evolution through a second year of operation. Subsequently, the report describes the first-year experience of EduCareers. The report's conclusion compares and contrasts EduCareers and *CareerAdvance*[®] and discusses lessons from the experiences of both programs.

INTRODUCTION

This report reviews the design and implementation of workforce education/training programs for parents of children enrolled in Early Head Start/Head Start and the Oklahoma Pilot Early Education program administered by the Community Action Project of Tulsa County and Tulsa Educare. The program design adds high-quality training for parents targeted at selected healthcare occupations that offer family-supporting income, benefits, and opportunities for career advancement. This parent training 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 rich learning environment. The driving theory of change behind the two-generation approach 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.

It is now widely accepted across the scientific community that ages 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 with parents who are improving their own educational levels (e.g., Magnuson, 2007; Sommer et al., 2012). Simultaneously increasing the human capital of the parent(s) helps protect the investments in their children made through high-quality early child development programs.

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 (Sommer et al., 2012).

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;). 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 already 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; and (3) increasing a mother's and father's education while their children are still young and in Head Start during weekdays 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 (Sommer 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 the programs in Tulsa created a two-generation educational approach 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 Services, local school districts, Tulsa Community College, and the Tulsa Technology Center.

CAP began the *CareerAdvance*[®] project with a demonstrated track record of successfully implementing innovative programs, testing their effectiveness, and building them to scale. CAP is an innovator in early childhood education, asset development, financial education and other areas. In their early childhood work, CAP increased the

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, or 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. Somers et al (2011) cites additional examples of dual-generation strategies used in community colleges and universities.

number of children enrolled in its program by 51% over three years, growing from 1,320 to 2,000. At the same time, CAP evolved into a system of eight large comprehensive, high-quality learning centers, in addition to seven smaller centers. 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 extensive experience working with low-income families, CAP staff had no prior experience in administering workforce development programs². Yet CAP has been able to take the *CareerAdvance*[®] model and implement it successfully, demonstrating high rates of attendance and persistence.

TULSA EDUCARE, INC.

Tulsa Educare, Inc. (TEI) is a not-for-profit organization created to provide high-quality early childhood education and care to low-income families living in Tulsa. TEI was

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.

created through a partnership with Tulsa Public Schools, George Kaiser Family Foundation, Family and Children’s Services, Tulsa Community Foundation, Community Action Project of Tulsa County, the University of Oklahoma, and the Bounce Learning Network. In 2011, Tulsa Educare, Inc. provided year-round, full-day education and care for more than 350 at-risk Tulsa children and their families in two state-of-the-art schools with a third school under construction.

Tulsa Educare is part of the national Bounce Learning Network — agencies that are attempting to make a difference in the lives of very young, vulnerable children and their families through strong public-private sector partnerships. Through a consortium of partners, Educare supporters create, provide, and promote the highest quality outcome-based learning environments for families and their children (ages prenatal to five years) who are at-risk for school failure. Educare principles and practices are based on continual research and implementation within the field of early childhood education. The success of the children who enter this program demonstrates the economic value of investing in the earliest years in order to prevent the need for costly interventions later.

The Tulsa Educare schools have been designed and constructed with children’s learning in mind. Ample physical space and light allow babies, toddlers and preschoolers to explore, learn and develop. Classrooms are safe, comfortable places that promote bonds between the teaching staff and young children. They also promote bonding between child and family by encouraging parents to spend time with their children in the classroom environment. Spaces encourage interactive learning so that teachers and children are together reading, acting out stories, creating artwork, counting, or conducting simple learning projects.

Inside Tulsa Educare schools, significant space is devoted to family-related activities, including one-on-one counseling and support groups for mothers, fathers, and grandparents. There are rooms with computers to facilitate parents’ efforts in job hunting or in researching family needs; and rooms are available for parent training and education sessions. One Educare school houses a University of Oklahoma on-site health clinic that provides health care services for Tulsa Educare students and their families. Each TEI school provides the children with breakfast, lunch, and afternoon snacks that have been planned by certified nutritionists.

EARLY CHILDHOOD EDUCATION PROGRAMS OPERATED BY CAP OF TULSA COUNTY AND BY TULSA EDUCARE

Both Educare and CAP administer exemplary early childhood education programs. The National Association for the Education of Young Children (NAEYC) has certified both

Tulsa Educare Centers and CAP's ECE centers. 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 early childhood centers operated by CAP and Educare are purposefully located adjacent to or on an elementary school campus in the Tulsa and Union public school districts 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).

At both CAP and Educare, each family with a child in Head Start, or Early Head Start, or the Oklahoma Pilot Early Childhood Program is assigned a family support worker from Family & Children 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 each 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 at CAP 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. Staff from CareerAdvance[®] and EduCareers collaborate with family support workers to resolve problems and overcome obstacles to success in school.

At both CAP and Educare, the progress of the children on social, emotional, physical, and cognitive scales is regularly measured. CAP has begun to use the Bracken School Readiness Assessment. To improve instruction, the GOLD assessments from Teaching Strategies, Inc. are regularly administered and CAP's classroom environments are annually assessed and analyzed using the Classroom Assessment Scoring System (CLASS[®]) program. Professional development for teachers and other actions based on results are taken to make improvements each year.

Tulsa Educare is a part of the national Bounce Network, which sponsors ongoing evaluation of their activities and outcomes. Professor Diane Horm, director of the Early Childhood Center at the University of Oklahoma-Tulsa serves as the local evaluator in Tulsa for Educare.

PROPOSED DESIGN FOR PARENT EDUCATION AND TRAINING

The initial design for a workforce development program for parents of children in high quality early childhood development and care 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, aerospace, and healthcare. The Tulsa Chamber of Commerce and the Oklahoma Governor's Council for Workforce and Economic Development 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 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 its two Tulsa Workforce Centers are primarily funded by federal dollars from the U.S. Department of Labor's Workforce Investment Act (WIA) programs. The Tulsa Chamber of Commerce played an important role in bridging economic and workforce development through the pursuit of sectoral approaches in recent years. Organizations providing postsecondary workforce training include Tulsa Technology Center (Tulsa Tech), Tulsa Community College (TCC), and Oklahoma State University at Okmulgee. Tulsa Public

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

Schools⁴, Union Public Schools, and the YMCA provide adult basic education and GED preparation.

Although Tulsa has strong technical education institutions, such as Tulsa Tech and TCC, workforce preparation is fragmented and the Tulsa Workforce Board has 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 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 research 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 THE DESIGN FOR EDUCAREERS AND CAREERADVANCE®

The proposed design for parent workforce development included the following elements:

- ❖ **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.
- ❖ **Targeted sectoral workforce program approach:** A sectoral workforce program 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, Maguire, et al., 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 prepare them to become the skilled and competent workers that employers seek.
- ❖ **Career paths:** Training is organized as a 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:** The career coach is a key staff member in both

CareerAdvance® and EduCareers. The career coach meets individually with each participant shortly after his/her admission to the program to ascertain goals and to discuss their 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, and the payment of tuition and other school expenses. The career coach also works with family support staff and participants to resolve problems that impede success in training.

- ❖ **Facilitated peer support:** CareerAdvance® and EduCareers build a community of peer support for participants by organizing instruction in cohorts and by 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:** CareerAdvance® and EduCareers also offer participants the possibility of earning \$200 per month in educational assistance for good attendance and performance, along with occasional bonuses of \$300 for achieving certain program milestones, totaling up to \$3,000.⁵ The amount of the incentive is based in part on research on the effects of the Earned Income Tax Credit (EITC) on children’s achievement and later confirmed Duncan and Magnuson (2011) who found that “an annual

⁵ CareerAdvance® offers this incentive in non-cash forms to comply with the requirements of their federal funding.

income increase of \$3,000 sustained for several years appears to boost children's achievement by roughly one-fifth of a standard deviation" or "about two months' advantage in school" (p. 27).

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

- ❖ **Instruction in basic skills and preparation for college:** The programs aim to help assure that participants are equipped with the reading and math skills to be successful in training and employment. As demonstrated in Washington State, Austin, and other communities, the I-BEST 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

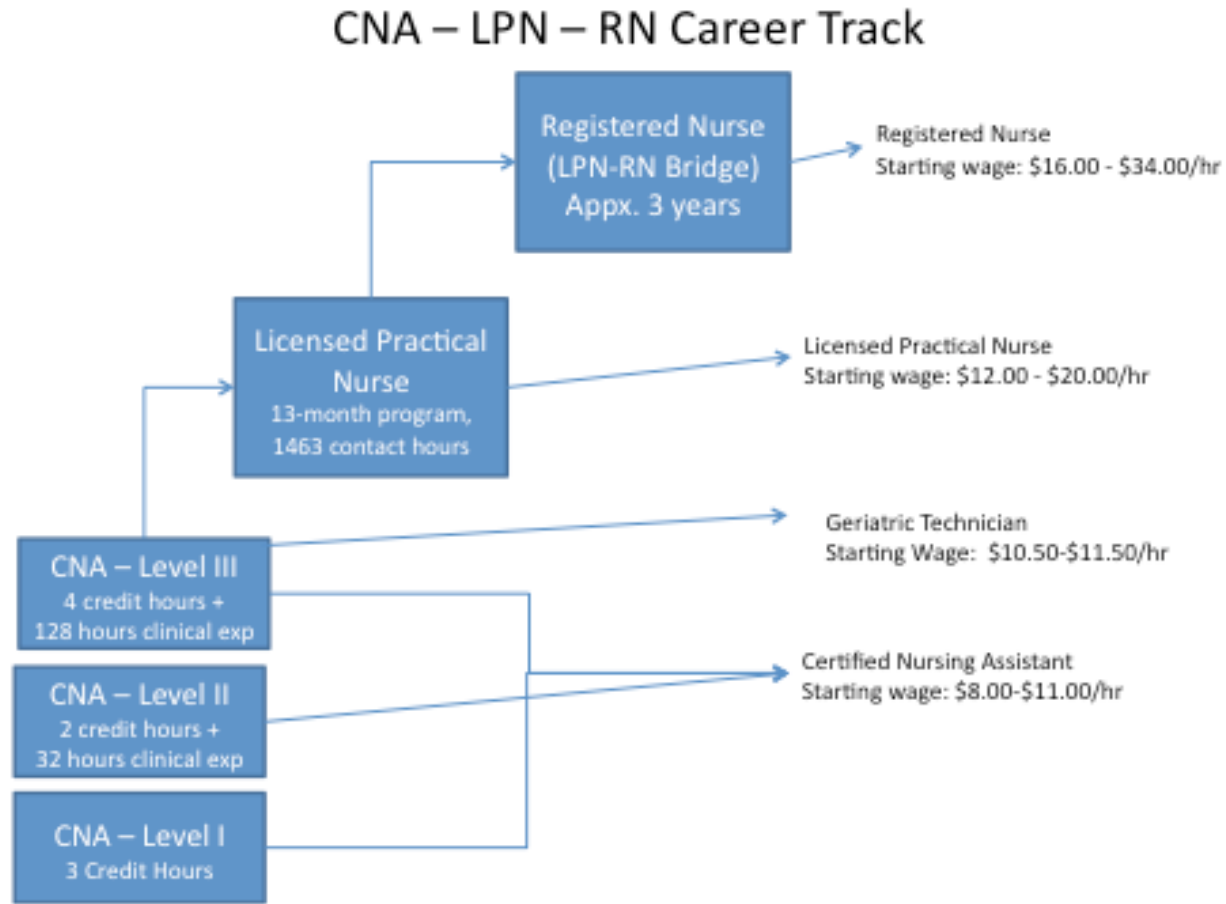
Figure 1 provides an overview of the design of the career pathway in nursing. The program begins with training as a Certified Nurses Aide (CNA) along with a course entitled “Strategies for Academic Success” at Tulsa Community College. This approach offers the advantage of making participants eligible to take the Oklahoma CNA assessment and receive a certification after the first eight weeks of training. 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) certificate program at Tulsa Technology Center provides 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 five blocks of learning in various basic aspects and specialties in practical nursing and concluding with a preceptorship. Upon graduating from the LPN program and passing the National Council Licensure Examination for Practical Nurses (NCLEX – PN), a *CareerAdvance*® participant becomes certified by the Oklahoma Board of Nursing as an LPN.

As indicated later in this report, an alternative pathway through the Patient Care Technician (PCT) program at TCC was developed in fall 2011 for individuals unable to gain admission to the LPN program. Upon completing this program, individuals are eligible to take the Oklahoma Advanced Unlicensed Assistant (AUA) certification exam. Participants taking this pathway remain eligible to move up to the Registered Nurse program.

The next 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.

Figure 1. The Initial Design for the Nursing Career Track in Tulsa⁶

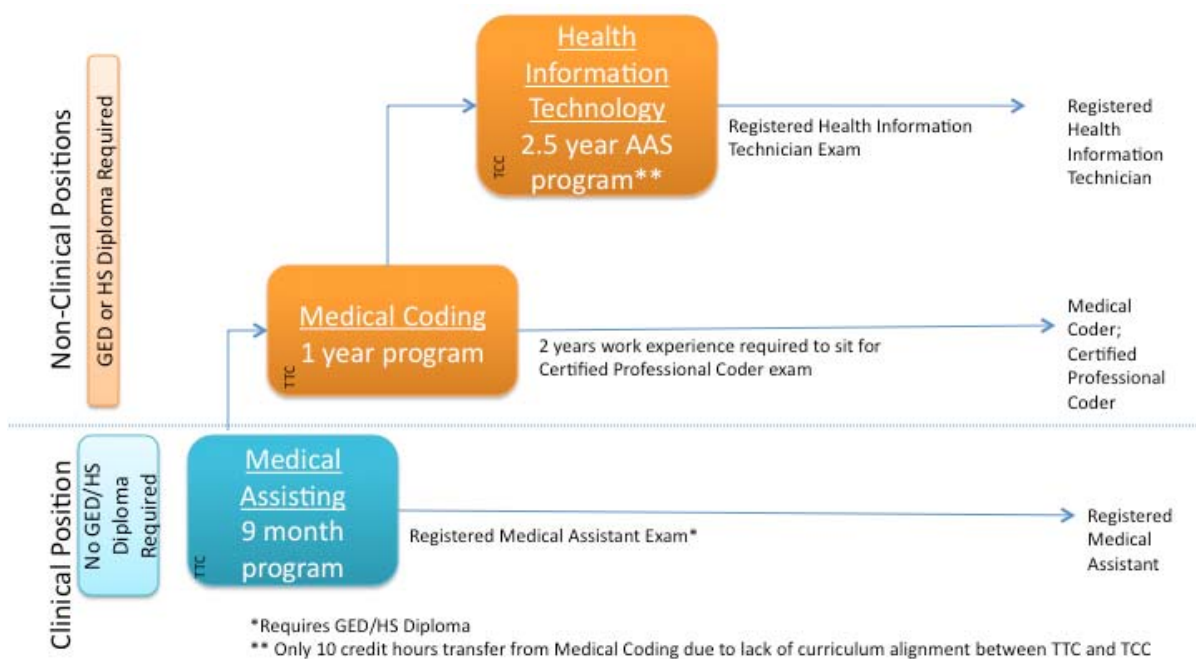


⁶ The time estimate for the Registered Nurse Program includes prerequisite courses. The 5-week CNA Level 1 course was extended to 8 weeks by CareerAdvance® after Cohort 2 to spread the material over a longer time period and to accommodate the addition of the “Strategies for Academic Success” course.

EXPANDING CAREERADVANCE® BEYOND NURSING

From its inception, CareerAdvance® 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 with 15 students enrolling as part of CareerAdvance® Cohort 4 in August 2011.

Figure 2. CareerAdvance® Plan for Health Information Technology (HIT) Track



WHAT TO EXPECT: EARLY 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 credentials at various points along the career path, effectively receiving a “lower dosage” of the program. Others will leave the program temporarily to go to work to earn income needed to support their family. They may rejoin the program later to continue their training along the career pathway.

Major impacts of two-generation programs will develop over several years and require comparisons with a carefully matched sample of individuals and families and/or an experimental evaluation involving random assignment.⁷ Likewise, examining and documenting the impacts on children will be a long-term endeavor. However, indications that *CareerAdvance*[®] and *EduCareers* are successful should become apparent sooner. Among these are the following:

- The completion rates for each training segment should be higher for participants in *CareerAdvance*[®] and *EduCareers* than completion rates typically achieved by others not in these two-generation programs.
- Employers will find that graduates and participants to 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*[®] and *EduCareers* 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.
- *CareerAdvance*[®] and *EduCareers* participants will be able to use their credentials to find jobs in health care.
- Students in GED preparation with the programs will be more likely to achieve GED certification than other adult education students.

⁷ A random assignment experiment will not be feasible until *CareerAdvance*[®] and/or *EduCareers* grows and becomes oversubscribed with a substantial waiting list.

YEAR 2: THE EXPANSION OF CAREERADVANCE®

CareerAdvance® began operations enrolling its first cohort of 15 parents 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: Skelly and Disney. By the end of summer 2011, CareerAdvance® had enrolled its 4th cohort and expanded to serve 70 parents across Tulsa in nursing and health information technology.

With the start of Cohort 2 in August 2010, parents of children in Reed Early Childhood Center also became eligible to participate in CareerAdvance®. With Cohort 3, parents from six centers were eligible to participate, adding Reed Early Childhood Development Center (a center near CAP's Reed Early Childhood Center), Eastgate, and Bryant. By Cohort 4, any parent from any center operated by CAP was eligible to enroll. Further, any Educare parent was welcomed to enroll in the HIT program.⁸ Thus, within a period of about two years, eligibility to participate in CareerAdvance® expanded to families from the entire networks of CAP and Educare centers across Tulsa.

Table 1. CareerAdvance® Chronology of Implementation

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 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	14 centers: All CAP centers plus 2 Educare centers

⁸ Educare is a separate network of early childhood centers in Tulsa, operating in partnership with the national Bounce 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/>

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.

PERSONNEL CHANGES

The first personnel change 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. Liz Eccleston, an experienced program manager at CAP, was assigned to take charge of *CareerAdvance*[®].

The transition to new leadership went smoothly with plenty of time for information transfer and training from the former to the new program manager. Kordsmeier's final two months were spent productively. On the basis of a year of pilot operations, he and career coach Tanya Glover revised all the key program documents, including the mutual expectations agreement, rules and regulations, enrollment interview questions, and the PowerPoint presentation used in orientations. Kordsmeier met with the incoming manager Eccleston 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 *CareerAdvance*[®]. 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 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 *CareerAdvance*[®] — subsequently resigned. 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.

⁹ However, the function does fit within the requirements of the Employment Service and the Workforce Investment Act as "business services," having come from the Tulsa Chamber's Sectoral Initiative.

PARTICIPANT PERFORMANCE AND MOTIVATION

Perhaps the most serious challenge faced, several Cohort 1 participants did not score sufficiently high on the ACUPLACER® 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, *CareerAdvance*® staff allowed those who were close to passing to stay in the program and re-take the ACUPLACER® exam a second time. The program paid for tutoring and urged participants to make use of the Success Center at Tulsa Tech. If participants put in sufficient time studying for the exam, they continue to qualify for a monthly incentive payment.

With little prospect of advancing in their nursing education, several participants from Cohort 1 were faced with leaving the program and entering employment. Some hesitated to become employed for a variety of reasons, including they were afraid of working, they did not pass the GED (which is required for nearly all healthcare jobs), could not work due to bad health, wanted to wait to finish school, did not want to leave their young children at home, or decided against going into healthcare. Most offered multiple reasons. *CareerAdvance*® staff counseled participants, talking through their fears about going to work, and assisted them with resume preparation and interview practice sessions, work readiness workshops, Staff also arranged introductions and interviews with partner employers. 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.

Based on experience with the first cohort, staff revised recruitment procedures and criteria for selecting future cohorts. Expectations that participants would enter employment were firmly clarified in orientations for *CareerAdvance*®. The performance incentives component of the program was de-emphasized 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.

OBTAINING FUNDING TO EXPAND THE PROGRAM

Acquiring funds to continue and to expand *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 Health Professional Opportunities Grant (HPOG) program at the U.S. Department of Health and Human Services (HHS) for a ten-fold expansion of *CareerAdvance*® over 5 years. 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 limited-denomination 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. A sticker was placed on each card indicating that it should be used at the pump only. 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.

WORKING EFFECTIVELY WITH EDUCATIONAL PARTNERS

To facilitate good bilateral communication and promote collaboration among the educational partner organizations in CareerAdvance®, CAP staff kept in touch with partner program staff through frequent meetings, phone calls, and emails. Beginning in January 2011, CAP 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.

Data Sharing Arrangements with Schools

Timely sharing of information on student performance, including attendance, grades and test scores, is needed for CareerAdvance® 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.

Scheduling Classes and Avoiding Gaps

Particularly for CNA students, CareerAdvance® 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. 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 CareerAdvance® model—especially at the beginning stages of the program. Accommodating cohorts was made somewhat easier by the fact that CareerAdvance® 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 semester-based schedules. At Tulsa Technology Center and Tulsa Community College, classes typically have not been held during July or over the Christmas holiday season, due to vacation and holiday schedules.¹¹ 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 reach the targeted occupation. As Steven Jackobs, executive director of

¹⁰ Over three-quarters of CareerAdvance® participants in Cohorts 1-4 have more than one child; most of the siblings are school-age children (See Table 6).

¹¹ In 2011, the LPN program revised its practice of closing down classes to let all staff take vacation during July. Instead, vacations are now scheduled individually throughout the year so that only a few individuals are on vacation at any time and classes can continue through July.

Capital IDEA in Austin notes: “Time is the enemy of completion.” During periods when classes are not in session, CareerAdvance® staff urge participants to work in healthcare to gain experience and advance their learning; however, not all parents do so.

Changes in the LPN Program Admissions Criteria

The LPN admission process has been ever changing over the life of CareerAdvance®. During the period from November 1, 2010 through April 30, 2011, the following elements were in place:

- Academic preparedness as measured by scores on the ACCUPLACER exam¹² (30 total points, 15 possible for reading, 15 possible for mathematics).
- 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).
- 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.¹³ As the total number of applicants to the 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, CareerAdvance® participants faced a highly competitive situation. During the period from November 1, 2010 through April 30, 2011, the LPN program received 620 applications 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 CareerAdvance® was expanding and at a time when participants would have to compete with an increasing number of applicants for

¹² In spring 2011, the Tulsa Technology Center began using the Health Education Systems, Inc. (HESI) test, in part because it includes a science component

¹³ Email communication from Jessica Busse-Jones, Admissions Consultant, Tulsa Tech Health Sciences, November 11, 2010.

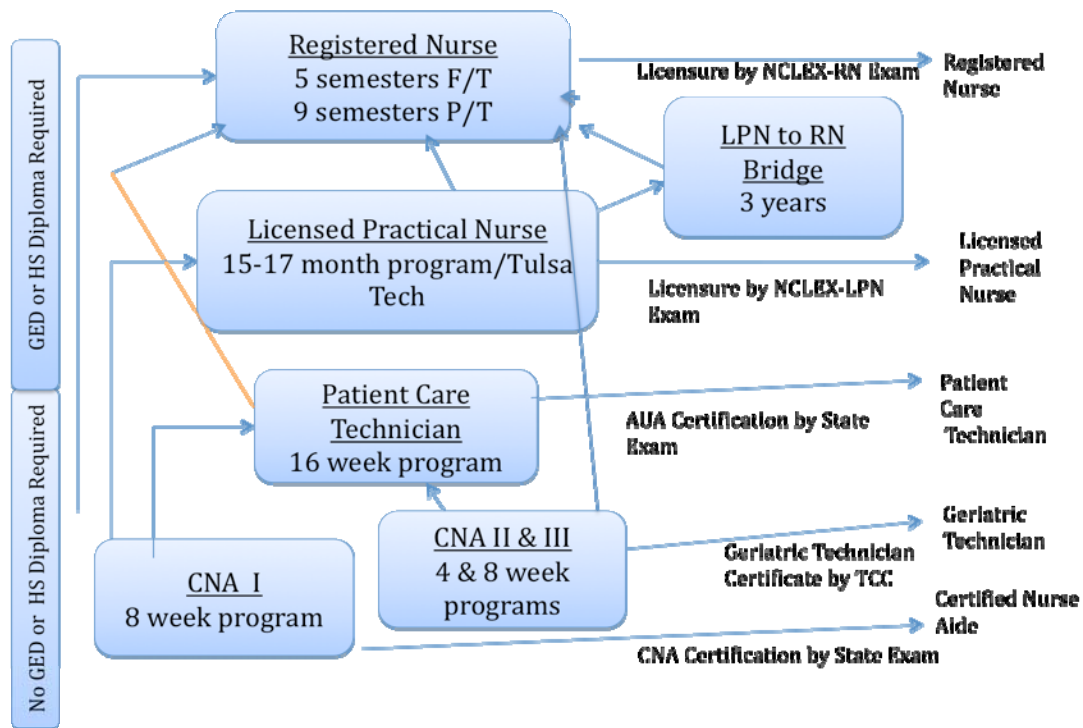
admission, this was especially alarming news.

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 Nursing program. 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 blood, and performing EKGs.

The PCT program does not have such restricted admission criteria nor such large applicant-to-acceptance ratios as the LPN program. The PCT program requires that candidates score at least 80 on the COMPASS[®] reading and writing tests and have at least a 2.0 grade point average on college courses previously taken. *CareerAdvance*[®] began using the PCT program as an alternative to LPN with first two students starting in August 2011. The PCT does not replace the LPN component in *CareerAdvance*[®]. Rather, it offers an alternative pathway for participants who encounter difficulties gaining entry to the LPN program. Figure 3 shows the current nursing pathways used in *CareerAdvance*[®].

Figure 3. CareerAdvance® Nursing Career Pathways with Revised Design to Include Alternate Patient Care Technician Pathway



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 regular 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 to alert them to upcoming orientation sessions.

APPLYING TO CAREERADVANCE®

From the beginning, entering the CareerAdvance® program has been a multi-step process. The initial step was to attend an orientation session, held in Early Childhood Centers at various locations across Tulsa. Orientation sessions have been held in the morning or afternoon or, to accommodate the schedules of working parents, in the evening.

At each orientation, CareerAdvance® staff explain 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 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 CareerAdvance® 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) CareerAdvance®¹⁴; (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

¹⁴ Enrollment in CareerAdvance® did not originally include any additional assessment exams.

(for admission the following year). By Cohort 3, *CareerAdvance*[®] 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 *CareerAdvance*[®].

CHANGES IN SCREENING CRITERIA

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

- Be at least 18 years old;
- Legally qualified to work in the US; and
- 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 *CareerAdvance*[®] 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.¹⁵

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 the reasons why they were made, and discusses the results as procedures improved and have become 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

¹⁵ 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*[®].

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.

Experience with the first cohort had a major influence on changes made in the selection procedures and criteria used for subsequent cohorts. For example, staff chose to avoid accepting midcareer applicants who already had CNA certification. They also decided to avoid accepting individuals who needed a significant amount of ESL instruction

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, 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.¹⁶ After this experience, only participants in healthcare training were accepted into *CareerAdvance*[®]; those needing ESL instruction were referred to other programs.

Fourteen students entered the three-part CNA courses at Tulsa Community College. Among these, 13 achieved CNA certification and 8 participants successfully completed the three-part CNA courses for Geriatric Technician certification. However, only 4 participants scored well enough on the ACCUPLACER[®] exam to enter the LPN program. Although by July 2011, 9 of the 14 nursing participants had entered employment as a CNA, either while they were in training or after leaving the program, a few resisted becoming employed.

- ❖ **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.

¹⁶ One of her chief considerations was that she viewed training in healthcare as too lengthy. She needed to find shorter-term training because her husband's employment had been disrupted.

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 ACCUPLACER exam to move on into the LPN program: no one with less than a high school diploma or a GED was admitted to Cohort 2.

- ❖ **Cohort 3.** *CareerAdvance*[®] 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 in order to help assure that participants would have the preparation and skills to be successful in the nursing educational pathway and would be more likely to work in nursing. 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 procedures consisted of a five-step process for applicants as follows:

1. Attend an orientation session, where enrollment packets are distributed to all interested individuals who attend. *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.
2. 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 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 also verified.

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

1. Good attitude
2. Desire to work

3. High desire for healthcare employment
4. Strong work history
5. Work experience in the healthcare industry
6. (If currently working) flexible work schedule to accommodate school
7. High motivation for school
8. 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 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 enrollment interviews 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 aggregated to produce a single rating ranging from 1 to 5 for each participant.

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

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		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

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, within 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.

Table 4. CareerAdvance® Recruiting, Application, and Enrollment Statistics, by Cohort: July 2009—August 2011

	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	119	
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

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.

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

Early Childhood Center	Number of Adult Participants enrolled in CareerAdvance®				
	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 – Kendall-Whittier				1	1
Educare – Hawthorne				1	1
TOTALS	15	10	15	30	70

Source: Compiled from CareerAdvance® administrative data.

Table 5 displays the distribution by early childhood center of parents in the first four cohorts of CareerAdvance®. In all, CareerAdvance® participating families came from thirteen early childhood centers.

PROFILE OF CAREERADVANCE® PARTICIPANTS AND THEIR FAMILIES

Table 6 profiles the 70 parents and families who enrolled in CareerAdvance® through August 2011, comparing them with the total population of parents and families with a child enrolled in CAP Early Head Start or Head Start during the 2011-2012 school year.

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 CareerAdvance® 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, CareerAdvance® 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 CareerAdvance® 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 enrolled in CareerAdvance®, 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 1-4
Compared with all Families in the CAP Early Childhood Program (2010-2011)**

	All Adults in CAP ECE Population	Enrolled in CareerAdvance®				
		All Cohorts in 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						
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

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

	All Adults in CAP ECE Population	Enrolled in CareerAdvance®				
		All Cohorts in CareerAdvance®	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Adult's Education Level	All adults n=2,578	Enrollees only n=70	Enrollees only n=15	Enrollees only n=10	Enrollees only n=15	Enrollees only n=30
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%)				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=1,630					
\$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)

	All Adults in CAP ECE Population	Enrolled in CareerAdvance®				
		All Cohorts in CareerAdvance®	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Poverty level/ Eligibility Status	n=1,607	n=70	n=15	n=10	n=15	n=30
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%)		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%)		1 (8.3%)			
4 or more	13 (0.7%)		0 (0%)			
No data	73 (3.8%)				15 (100%)	
# Children per household	n=1,668	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
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%)	5 (7.1%)		1	3	1
6	17 (10.2%)					
7	8 (0.5%)	2 (2.9%)		2		
8	2 (0.1%)					
Mean Average # children	2.4	2.5	2.5	3.2	2.7	2.2

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

	All Adults in CAP ECE Population	Enrolled in CareerAdvance®				
		All Cohorts in CareerAdvance®	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=1,947	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%)

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. Data from responses initial applications could be as much as three years old. CAP staff provided some missing data for participants and their families.

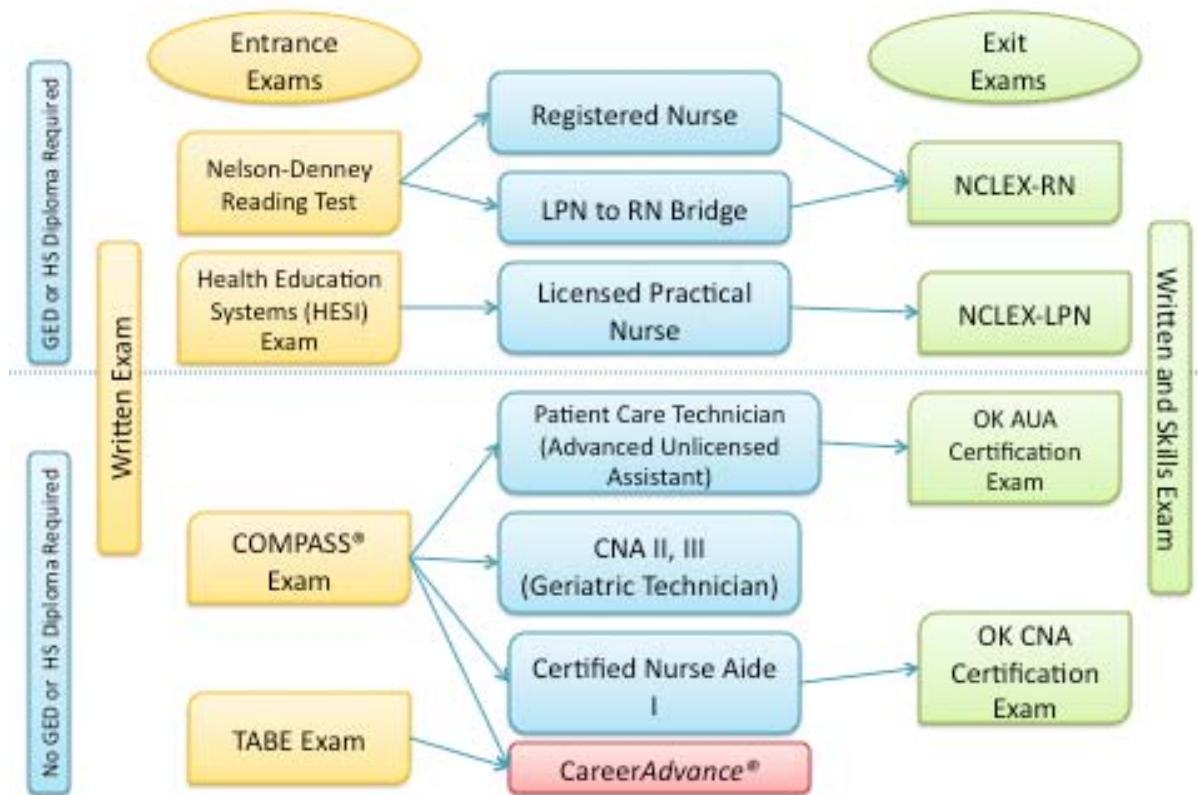
Note: Data are from the full complement of respondents unless otherwise noted with a specified “n.”

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).

Figure 4. Exams Required in the CareerAdvance® Nursing Career Path



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, *CareerAdvance*[®] 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 *CareerAdvance*[®] 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.

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 *CareerAdvance*[®]. Through the program, they prepared for and passed the GED tests while 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.

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

Cohort	Enrolled In CareerAdvance®	Attended Academic Nursing Skills*	Completed Strategies for Academic Success**	In GED Studies	Obtained GED
Cohort 1	15	N/A	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

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

**The Strategies for Academic Success class became a regular feature of CareerAdvance® beginning with Cohort 3. All HIT students were enrolled in the 4-week CORE program, a counterpart to Strategies for Academic Success.

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 their resumes as attachments. 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 CareerAdvance® 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 *CareerAdvance*[®] 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 employees in Health Information Technology.

SUMMARY OF PARTICIPANT PROGRESS

Table 8 displays a summary of the progress made by *CareerAdvance*[®] participants in Cohorts 1-4 in the nursing career pathway through September 1, 2011. Among the first three cohorts, 34 of 37 enrollees took the CNA Exam passed and obtained CNA certification. 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 *CareerAdvance*[®] 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 *CareerAdvance*[®] has graduated from the LPN program at Tulsa Tech and is working toward satisfying her course pre-requisites to qualify for admission to the Registered Nursing associate's degree program at Tulsa Community College.

PARTICIPANTS IN HEALTH INFORMATION TECHNOLOGY

The initial participants in Health Information Technology started classes in August 2011 as part of Cohort 4. All began by enrolling in the CORE program, a counterpart to the Strategies for Academic Success. The CORE program, offered by Tulsa Technology Center, was taught 10 hours a week for 4 weeks before Medical Assisting started. The topics included study skills, language skills, computer skills, and conflict resolution. As of the end of September, all 15 participants remained enrolled in the program.

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

Cohort	Enrolled	CNA						PCT/AUA		
		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	13	13	15	In progress		4			
Cohort 4	15	In progress								
Totals	54	35	34	33	12	12	16	1		

LPN Program							RN Program						
Cohort	Med Term & A & P Courses Only Completed	Accepted	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											
4													
Totals	4	10	7	1	1		1						

Source: CAP staff, obtained in September 2011.

EDUCAREERS: YEAR ONE IMPLEMENTATION

The School of Community Medicine hired staff to administer EduCareers for Educare parents in January 2010. By April 2010, EduCareers began recruiting with the ambitious goal to launch and operate an array of six education/training programs for parents of children in the Educare Center in the Kendall-Whittier neighborhood. In addition to establishing training in nursing for a cohort of parents, EduCareers proposed to offer training for a separate cohort of participants studying to become child development workers, but this plan was subsequently postponed. Three types of adult education programs were also envisioned as part of EduCareers: instruction in English as a Second Language (ESL), General Education Development for parents preparing to pass the GED tests, and Family Literacy, an ESL-integrated language learning program for children and parents. Finally, EduCareers planned to offer a program of Individual Career coaching for parents who needed counseling and guidance regarding education and employment. Many of these individuals were undecided about their careers.

The overall aim of these multiple education/training efforts was to reach and serve the needs of as many of the 280 adults in Educare households as possible —“virtually anyone who wanted to move up.” Goals for participation initially projected across the six training programs were quite ambitious. Altogether, as shown in Figure 3, 158 participants—or more than half of the adults in Educare households—were projected to participate.

Table 9. Profile of EduCareers Families compared with All Families at Educare – Kendall-Whittier in Tulsa: 2010-2011 School Year

	All Adults in Educare Center	Adults in Nursing program	Attending ESL	Attending GED
Total households	171	10	29	2
Adults in households	280	14	23	3
Primary and secondary adults	168	14	29	3
Females	121	10	23	
Race/Ethnicity				
Hispanic	114 (66%)	4	29	1
Black	21 (12%)	3	0	1
White	28 (16%)	3	0	0
Asian	3 (2%)	0	0	0
Native American	5 (3%)	0	0	0
English is Primary family Language	56 (33%)		0	
Average age of Mom	26	30	24	25
Mother’s Education	n=112	n= 10	n=24	n=2
Employed full time (35 hrs or more)	37	1 (10%)	3	0

Table 9. Profile of EduCareers Families compared with All Families at Educare – Kendall-Whittier in Tulsa: 2010-2011 School Year (continued)

	All Adults in Educare Center	Adults in Nursing program	Attending ESL	Attending GED
Less than HS or GED or 12th grade	55 (45%)	0 (0%)	22	2
High School Diploma or GED or 12th grade	29 (24%)	3 (30%)	2	0
Some college or advanced training	19 (16%)	7 (70%)	0	0
College degree+or training certificate	9 (7%)	0 (0%)	0	0
Mother's employment status	n=112	n=10	n=29	n=2
Employed part time (less than 35 hrs)	19	1 (10%)	12	1
Employed full time + training	6	0 (0%)	0	0
Employed part time + training	13	0 (0%)	0	0
Training or school only	14	0 (0%)	(29 in ESL)	0
Not employed/unemployed	21	8 (80%)	14	1
Retired or disabled	2	0 (0%)	0	0
Family Income range (\$ per Year)	171	10	29	2
\$ 0-1,000	27	0	0	1
\$1,001- 10,000	36	2	7	0
\$10,001- 20,000	79	6	22	1
\$20,001-30,000	29	2	0	0
Over \$30,000	0	0	0	0
Poverty Level/ Eligibility status	n=200	n=10	n=29	n=2
Eligible (0-100%)	198	10	29	2
101-130%	2	0	0	0
Over 130%	0	0	0	0
Foster Child	1	0	0	0
Homeless	6	0	2	0
Public Assistance	6	0	2	0
# Times moved during year prior to application for ECE	n=200	n=10	n=29	n=0
0	154 (77%)	6 (60%)	23 (79%)	0 (0%)
1	30 (15%)	4 (40%)	6 (21%)	0 (0%)
2	10 (5%)	0 (0%)	0 (0%)	0 (0%)
3	6 (3%)	0 (0%)	0 (0%)	0 (0%)
4 or more	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Children per household	n=171	n=10	n=29	n=2
1	16 (11%)	0	5	0
2	25 (15%)	3	7	1
3	36 (21%)	4	6	0
4	41 (24%)	3	5	1
5	26 (15%)	0	4	0
6	17 (10%)	0	1	0
7	6 (4%)	0	1	0
8	4 (2%)	0	0	0

Source: ChildPlus data system from Educare in Tulsa, obtained January 2011

Table 10. EduCareers Programs

<h1>EduCareers</h1>					
Cohort Education		Adult Basic Education			Individual Career Coaching
Team-based education and skills training in specific, high-demand Tulsa industries. Multiple local partnerships with education, workforce, placement and service providers.		Development options available to those unable to demonstrate US work eligibility. Programs funded by OK State DOE.			One-on-one or small group educational or placement coaching in which approved participants' career interests fall outside of Cohort and Adult Basic Education options.
Nursing	Child Development	GED	ESL	Other	ICC
17 week Certified Nursing Assistant (CNA) program through TCC offered in August (E1) and February (E2).	32 week Child Development Associate (CDA) program offered in August (E2) and February (E1).	General Education Development (GED) prep classes provided for adults no longer attending high school and need basic skills instruction in reading, writing, math & life skills. Requires completing the TABE test to assess knowledge prior to class start. Passing GED test qualifies adults to receive a high school diploma issued by the State of OK.	English as a Second Language (ESL) classes provide instruction to non-English speaking adults. Students learn communication and assimilation skills in order to be productive citizens.	Family Literacy offer ABE and ESL to parents along with parent/child interaction time. By learning together as a family, the program reinforces life skills that parents and children need to succeed. Workplace Literacy classes are designed specifically to teach ABE or ESL to employees in order to achieve high work performance. These classes can be focused on specific employers or industries.	Enhanced Employment Planning (EEP) program offered in August and September for E1 & E2 approved participants.
28	30	30	30	20	20
TCC for CNA; TTC for LPN; TCC for RN	TCC	Union Public Schools	Union Public Schools	Union Public Schools	Workforce Tulsa
Participant selection, Pre-program college prep course, weekly parent meetings hosted by workforce and mental health professionals.	Participant selection, weekly parent meetings hosted by workforce and mental health professionals.	Monthly individual or group status meetings while training.	Monthly individual or group status meetings while training.	Monthly individual or group status meetings while training.	Monthly individual or group status meetings while training.

Source: Jerry Root, Coordinator, The Tulsa Children's Project, March 2010

Staff of the University of Oklahoma School of Community Medicine implemented EduCareers with five training components:

- ❖ **EduCareers Nursing Career Ladder.** With minor modifications, EduCareers used the same pathway for its Nursing Career Ladder, as did CareerAdvance® in its first year of operation. The program began with Certified Nursing Assistant (CNA) training at Tulsa Community College, leading to certifications as Geriatric Technician and as Home Health Aide. The second stage in this ladder was training for Licensed Practical Nurse (LPN) certification at Tulsa Technology Center. Leading to entry into the LPN program, EduCareers placed participants into “jump start” courses at Tulsa Tech in medical terminology and anatomy and physiology. The third stage is the Registered Nurse program at Tulsa Community College, which also qualifies the student for an Associate of Science degree.
- ❖ **English-as-a Second-Language instruction** became an important element of EduCareers because two-thirds of the families at the Educare Center in the Kendall-Whittier neighborhood are Hispanic and many do not speak English well. A staff member of Union Public Schools Community Education Department taught ESL on site at the Educare Center. The same instructor stayed with the class throughout the year and established a good relationship with his students.
- ❖ **GED preparation classes** were offered by Union Public Schools Community Education Department at a Union Public Schools facility.
- ❖ **A Family Literacy program** provided a way to engage parents in the ESL program to help instruct their children in the Educare program. The Family Literacy program originated from collaboration arranged between teachers in the Educare Early Childhood Program and the ESL instructor.
- ❖ **Individual Career Coaching** was provided through *Workforce Tulsa*, the Tulsa Workforce Investment Board. Four parents participated in individual career coaching over the 2010-11 school year.

The EduCareers Nursing Program

EduCareers was more selective in choosing participants to enroll in its nursing program than was CareerAdvance® in its initial year of operation. From the beginning of

EduCareers, applicants must have completed a high school diploma or have a GED in order to qualify for entry into the nursing component. Nursing applicants also underwent several interviews conducted by staff members and by the Health Industry Coordinator at Workforce Tulsa, who brought an industry perspective to the selection process. The interviewers subsequently conferred and came to consensus on which applicants were to be accepted.

Selection interviews focused on topics such as educational background, ability, work history, motivation for change, interest in nursing, and family support. In contrast to CareerAdvance®, which conducts a one-on-one goal setting interview with participants after they have been selected into the program, EduCareers conducted goal-setting interviews as part of the selection process. Ultimately, ten (10) parents were accepted and enrolled in the nursing program. Nearly half were bilingual in English and Spanish.

Performance incentives were used in EduCareers, at a rate of \$200 per month with bonuses of \$300 for passing the CNA examination on the first try and maintaining at least a “B” average during the CNA Levels 1, 2 and 3.

English as a Second Language (ESL) at EduCareers

ESL instruction was held on site at the Kendall-Whittier Educare Center for a couple of hours four mornings per week. The site offered several advantages. It was a familiar environment and an easily accessible location for parents, facilitating transportation arrangements. ESL classes were conveniently scheduled to start shortly after children were dropped off at the Center for Early Head Start/Head Start, so parents could simply stay for the ESL class after bringing their child to school.

The instructor organized the class around themes and topics according to the expressed interests of the parents, such as health and safety, transportation, arranging child care, numbers and addresses, or giving directions to one’s home. The overall aim of the class was neither occupational training, nor even pre-occupational training. Rather students were to learn communication and assimilation skills in order to be productive residents?.

The class was multi-level with student performance ranging from low-level to GED-capable. The program used pre- and post-tests to assess students. Students were pre-tested during the first 12 hours of instruction and then re-tested after each 60 hours of class instruction. Trained testers individually assessed the progress of students, using an oral English proficiency test that is computer-based. The tester sat behind the computer and asked questions from the Best Plus software, developed and published by the Center for Applied Linguistics (<http://www.cal.org/aea/>). Based on the student’s response, the tester

inputs scores for each question asked. The Best Plus software randomly generates about 20 questions to ask each student, so questions are not usually repeated on pre- and post-tests. At the end of the test, the software generates a final that is used to place the student into one of seven levels: (1) ESL beginning literacy; (2) ESL low-beginning; (3) ESL high-beginning; (4) ESL low-intermediate; (5) ESL high-intermediate; (6) ESL advanced; and (7) Beyond. If the student's test score is very high and beyond this assessment, the testers use other tools to gauge performance, including the Best Literacy test and the TABE test. Very advanced students were encouraged to move into a GED class. Generally, the Adult Education Department at Union Public Schools aims for ESL students to advance one or two levels each year they are in the program.

The 25 parents who enrolled in ESL at the beginning of the program in August 2010 became eligible for an incentive of \$100 per month, based on attendance and performance. Over the year, the class became so popular that four additional students began attending regularly, even without the monthly incentive.

EduCareers Family Literacy

Through the Family Literacy program, which began in October 2010, the ESL instructor met regularly with the Early Childhood teachers to coordinate their curriculum in order to encourage parents and their children to engage in learning activities together. The aim was not to change the content of either the adult ESL instruction or the pre-school curriculum, but rather to find and build linkages between the programs. Children were brought into the ESL classroom once a month for a family learning activity. In preparation for the initial joint effort, both children and parents were introduced to the same set of children's books in English and Spanish. The monthly event featured parents using the books to read to their children.

EduCareers GED Preparation

GED Preparation in EduCareers operated as a stand-alone program rather than as a supplement to nursing training. At EduCareers, GED instruction was neither contextualized nor customized to nursing or any other specific occupational area. Rather, the GED test preparation offered was the regular generic approach used by the Community Education Department at Union Public Schools. GED preparation classes were offered to EduCareers participants either during daytime classes or in the evening. The daytime class was scheduled for twelve hours per week, whereas the evening class only met six hours per week.

In contrast to the ESL instruction offered at Educare, GED classes were held at a Union Public Schools facility located across town at a significant distance from the Educare Center. The distance caused transportation problems, which worsened when ESL classes were moved to an even more distant location. EduCareers provided subsidies to help pay for gasoline, but this proved insufficient to get parents to attend the classes—especially as the price of gasoline rose. Another issue was that EduCareers parents did not attend class together as a cohort but rather were mixed in with the 300 other people taking GED classes at the site. EduCareers staff did not have regular contact with participants, especially those in the evening classes. Participants in evening classes were asked to maintain their own attendance records and submit them to EduCareers staff in order to maintain their eligibility to collect the \$100 monthly incentives and gas cards. Maintaining contact with daytime participants was easier.

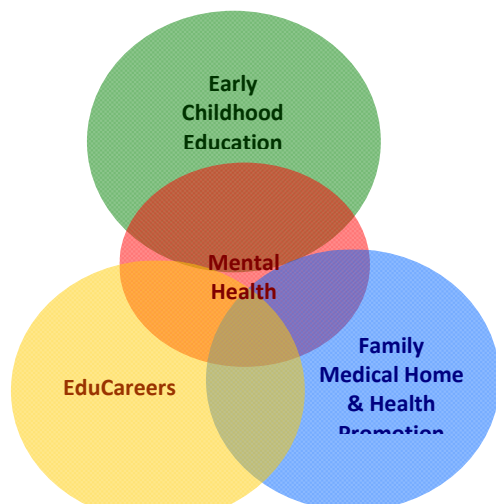
Thirteen (13) parents originally signed up for GED test preparation. Through attrition during the year, only four remained by May and just two students — both from the daytime class — passed the tests and achieved GED certification by the end of the 2010-2011 school year.

EduCareers Individual Career Coaching

This program was aimed at parents who needed one-on-one or small group coaching regarding education planning or job placement. Staff of the Arbor Corporation, which was the One-Stop Center contractor with Workforce Tulsa, conducted the sessions. The original plan was to conduct a session of this program in fall 2010 and one in spring 2011. Few parents signed up for the program, which began in August 2010 with only four participants. Staff layoffs and turnover at Arbor Corporation interfered with the effective operation of this program. However, one of the participants, an ex-offender, obtained a job working in a warehouse. Another received counseling, which helped her decide what major to study in returning to college.

Figure 5 on the next page provides a summary of the full Tulsa Children’s Project as it was implemented over its initial year of EduCareers operation.

Figure 5. The Tulsa Children’s Project



The Tulsa Children’s Project aims to increase the likelihood that children enrolled in Tulsa Educare will be successful in school and later in life.

The program offers:

- High-quality learning experiences in the classroom provided through an emotionally and socially enriching environment for children
- Career development and enhancement opportunities for parents
- Affordable and high-quality healthcare for families and teachers
- Opportunities to learn and practice healthy eating, shopping and physical activity
- Mental health oversight and intervention across all project components

The Tulsa Children’s Project is a community-based, collaborative effort with Tulsa Educare Inc., the University of Oklahoma-Tulsa and its School of Community Medicine, and Harvard University’s Center on the Developing Child.

Program Details

Early Childhood Education Component:

- Voices – Enhanced curriculum with emphasis on socio-emotional aspects
- Monthly staff training – High quality and relevant professional staff development
- Family Literacy – ESL-integrated language learning program for children and parents

EduCareers:

- Nursing Cohort – Concentrated sectoral workforce development program
- Adult Education
 - ESL – English as a second language program for non-English speaking parents
 - GED – General education program for parents seeking GED completion
 - Family Literacy – ESL-integrated language learning program for children and parents
- Individual Career Coaching – Job preparation/placement or educational path coaching program

Medical Home/Health Promotion:

- Clinic Utilization – Partnership efforts to increase utilization of onsite clinic resources
- Yoga – Classes for parents and Educare staff
- Zumba – Classes for parents
- Healthy Families (Take Control) – Family planning topics for parents
- Make & Take – Nutrition information and cooking demonstration with take-home groceries
- Cardio Kickboxing – Classes for parents
- Self Defense – Classes for parents
- RECESS – Training for staff on strategies to better manage behavioral disturbances with children
- ER Training – Training for parents by clinic staff on how to treat common health concerns at home
- Health Advisory Committee – Involvement in Educare’s quarterly health meetings

Mental Health:

Woven into the fabric of every program component is Ruth Slocum and mental health for children, parents and Educare staff.

Major support for the Tulsa Children’s Project is provided by The George Kaiser Family Foundation

Source: Jerry Root, manager, The Tulsa Children’s Project

DISCUSSION OF EDUCAREERS

Although EduCareers staff did not reach the ambitious goals for parent participation that they initially set for themselves, their efforts served at some level at least 43 parents (or 15 percent) of the parent population or nearly 24 percent of the 171 households associated with the Educare Kendall-Whittier Center—more than four times the number served through training in nursing alone.

Moreover, the initiatives to improve opportunities for learning by the children affected all households. The Tulsa Children’s Project activities promoting good nutrition, health, exercise, and mental health were not limited to families with parents participating in EduCareers education and training. Indeed, since the EduCareers mothers were busy balancing the demands of school, work and family, they had little time left to participate in “Make and Take” sessions or other Tulsa Children’s Project activities outside of EduCareers.

Participants in the nursing training program and in the ESL classes demonstrated remarkable persistence in staying with the program. After a year of operation, 8 of 10 nursing students remained in the program and nearly all ESL students continued to participate. The fact that partner meetings for the nursing cohort and the ESL training were conducted conveniently at the Educare Center facilitated the participation of parents.

In contrast to ESL and nursing classes, participation in GED preparation and in individual career coaching seriously lagged. GED preparation was conducted at a Union Public Schools facility at a significant distance from the Educare center. Also, EduCareers parents did not attend GED classes together in a cohort but rather were mixed in with other GED students. From its beginning, the individual career-coaching program attracted little parent interest. Problems with the program were compounded by sudden, unexpected layoffs and personnel changes in July 2010 at Arbor Education and Training, the organization operating the program.

The Tulsa Children’s Project had the advantage of being able to conveniently tap resources at the University of Oklahoma School of Community Medicine, which assisted EduCareers in several ways, including the following:

- Students from the Graduate School of Social Work helped to staff the EduCareers program
- Tulsa Children’s Project staff called on Oklahoma University staff trained in Parent-Child Interaction Therapy (PCIT) to assist individual families who exhibit serious negative behaviors in parent-child relationships. The therapy aims to replace the coercive downward cycle of overly harsh discipline and negative child

behavior with approving and consistent parent behaviors and positive child responses.

Tulsa Children's Project staff worked at integrating the various components of the project. A key example is the integration of mental health services with EduCareers activities. Ruth Slocum, Mental Health Coordinator for the Tulsa Children's Project, was heavily involved in the EduCareers component of the Tulsa Children's Project. Having worked in the Kendall Whittier Educare Center for the previous year, Ms. Slocum was known and trusted by the families and staff at the Center. At the beginning of the EduCareers program, she was helpful in introducing the newly hired EduCareers staff to the parents and staff of Educare. Thanks in part to Ms. Slocum's efforts, the OU staff enjoyed robust assistance from the family support workers, instructional staff, and families at Educare. Secondly, she effectively addressed problems that arose over the year in relationships between participants and teachers, between participants and staff, between participants and fellow participants, and between participants and their spouses and family. Thirdly, Ruth Slocum participated in EduCareers weekly partner support meetings, co-facilitating discussions and making presentations on mental health issues. Finally, she conducted individual counseling with EduCareers parents on an occasional basis.

In another example of program integration, through the Family Literacy initiative, teachers in the early childhood program met with the ESL instructor to coordinate the subjects covered in classes. Children and parents participated together in a monthly joint activity with books in English and Spanish and materials used in the children's classrooms to encourage parents to read to children. An end-of-school year event brought parents and children together for a special Family Literacy breakfast session. Families were provided disposable cameras and asked to take pictures and write about a family event, which they documented in a scrapbook. Together, the parent and child presented their family event (in English) to the full group in pictures and words.

As the initial year of EduCareers was ending, staff prepared for a second year of operation. They continued to work with the eight students in the initial nursing cohort, advocating for the admission of four students who scored the best of the cohort on the HESI test to the LPN program. Expanding EduCareers operations to both Educare Centers in the Kendall-Whitter and Hawthorne neighborhoods, they recruited and selected a second cohort of nursing students and sought students for a new program in child development. However, training in child development did not materialize due to insufficient parent interest. They also made plans to switch CNA training to Tulsa Technology Center, in accord with participant preferences favoring the Tulsa Technology Center over Tulsa Community College.

PARTICIPANT PERSPECTIVES

Researchers conducted a series of focus groups with participants from EduCareers and CareerAdvance® 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 functioning.¹⁷

ON THE EARLY CHILDHOOD PROGRAMS

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

ON THE CAREERADVANCE® AND EDUCAREERS PROGRAMS

Many expressed their gratefulness for Educareers and CareerAdvance® 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 very pleased with the help they receive from staff and both EduCareers and CareerAdvance®.

Participants did have suggestions for improving the program. In CareerAdvance®, 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. At EduCareers, participants recommended that future CNA classes be conducted at Tulsa Tech

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.

¹⁷ 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.

STRESS LEVELS

The majority of participants reported experiencing higher levels of stress in the program, but acknowledged that 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 was also noted as helpful in alleviating stress.

SUPPORT FROM PEERS

Regular partner meetings and organizing the initial education classes in cohorts are key features of both EduCareers and CareerAdvance®. One staff member described partner 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 common experiences together, all had at least one child in the same age group, and their child was in the Early Childhood Education program at CAP or Educare.

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 the 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.”

As one participant summarized:

“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 DUAL GENERATION PROGRAMS

“I am doing this for myself and my children.”

(Focus group participant, April 25, 2011)

Indications of the effects that parent participation in EduCareers or CareerAdvance® is having on their children surfaced clearly in focus groups with participants. 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 [my children] 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.”

These focus group findings provide an early indication of program success. As part of the continuing evaluation of CareerAdvance® with funding from the US Department of Health and Human Services, partner researchers at Northwestern University are collaborating to examine the impacts of CareerAdvance® on families and children through a quasi-experimental design, comparing participating parents and children with matched

comparison participants and families from CAP's early childhood education population. The evaluation includes a detailed series 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 of child performance. Information on the results from this research will be available in future reports.

CONCLUSION

CAREERADVANCE® AND EDUCAREERS: COMPARISONS AND CONTRASTS

1. EduCareers and CareerAdvance® began as similar programs with a few differences.

Similarities between the two programs stem from the common initial program design, including the following:

- ❖ **Career Coaching:** The career coach is a key staff function in the program design. The career coach meets individually with each participant 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.
- ❖ **Peer support meetings:** Both programs fostered peer support and mentoring through facilitated meetings and activities held outside of regular instructional classes. EduCareers continued with regular partner meetings as their participants advanced beyond CNA-level training. Due to complications in identifying a common time when all LPN students were available¹⁸, CareerAdvance® initially did not hold partner meetings for LPN students. CareerAdvance® staff maintained contact with their LPN students through individual phone calls and email messages. However, at the request of LPN CareerAdvance® students in focus groups, peer support meetings were re-instituted on a monthly basis.
- ❖ **Conducting instruction in cohorts:** Both programs enrolled participants to begin their initial nursing skills class as a cohort, which further promoted peer support.
- ❖ **Wrap-Around Services:** Both CareerAdvance® and EduCareers offer wrap-around services to their participants in education and training to help them overcome barriers to success. These services included payment of tuition; fees and books; other school-related expenses, such as inoculations and scrubs; childcare while parents are in class; transportation; and selective tutoring. Both

¹⁸ The LPN program consists of five blocks of study with each block operating on a different schedule.

programs employed career coaches to counsel participants, to help participants negotiate through their postsecondary schooling, to teach life skills and problem solving, and to facilitate peer support meetings.

- ❖ **Performance incentives:** Both nursing programs offered similar monthly financial incentives conditioned on participant performance. EduCareers offered a smaller incentive of \$100/month for students who met performance standards in the ESL and GED preparation programs.
- ❖ **Recognition of accomplishments:** Both programs have celebrated and recognized accomplishments with graduation ceremonies for participants and their families at various milestones, such as achieving certification as a CNA or Geriatric Technician, or completion of the LPN program.
- ❖ **Educational Providers:** Both CareerAdvance® and EduCareers relied upon the same educational providers — specifically Tulsa Community College, Tulsa Technology Center, and the Union Public Schools Community Education program. However, in the future, the two programs may differ in which provider they use for CNA instruction. CareerAdvance® is continuing its CNA program at Tulsa Community College. Students in the first cohort of EduCareers had an adverse reaction to their experiences at Tulsa Community College (which seemed to stem primarily from negative experiences with one of the TCC teachers). Thus EduCareers staff has planned to move CNA instruction from Tulsa Community College to Tulsa Technology Center.

2. Despite these similarities, there were key differences between the CareerAdvance® and EduCareers designs that should be noted when drawing conclusions about either effort.

These differences included the following:

- ❖ **Focus of activity:** CareerAdvance® is explicitly focused on education and training for healthcare occupations. Cohorts 1-3 were exclusively focused on training for nursing careers. Beginning with cohort 4, an additional option in Health Information Technology is offered. Separately from CareerAdvance®, CAP established an adult learning initiative in January 2011, which offers instruction in ESL and GED preparation, using Union Public Schools as a provider.

EduCareers offers training for nursing as well as a variety of other training efforts to reach as many Educare parents as possible. EduCareers includes separate program tracks in ESL/Family Literacy, GED, and individual career counseling. Further, EduCareers is part of the more comprehensive Tulsa Children's Project, which includes curriculum enhancement to improve opportunities for learning by the children, staff development for instructors and family support workers, along with activities to promote health, exercise, and nutrition, and mental health promotion for parents, children and staff.

- ❖ **Organizational sponsors and staffing:** The organizational sponsors and staffing of the two programs differed. The Community Action Project of Tulsa County (CAP), a community-based organization, sponsors and staffs CareerAdvance®, whereas EduCareers is part of the Tulsa Children's Project — a collaboration of the University of Oklahoma School of Community Medicine, Educare, and Harvard's Center on the Developing Child. The OU School of Community Medicine staffed EduCareers and the Tulsa Children's project. The staff included a mental health specialist, who was an important asset to EduCareers. She co-facilitated partner meetings, presented on mental health topics such as dealing with depression, promoted healthy relationships, and provided occasional counseling to participants.
- ❖ **Timing of start-up:** CareerAdvance® was launched nearly a year before EduCareers. By summer 2011, CareerAdvance® had recruited Cohort 4 and added a career path in Health Information Technology. By the end of summer 2011, EduCareers had recruited a second cohort of participants in nursing.
- ❖ **Industry focus:** Employment preparation in CareerAdvance® was concentrated on preparing parents for careers in healthcare, especially nursing occupations. EduCareers offered training in nursing as well as placing participants into jobs in other industries through its career-counseling component. Within nursing, both CareerAdvance® and EduCareers promised participants support through studies to become a registered nurse (RN).
- ❖ **Training Pathway:** CareerAdvance® and EduCareers initially planned slightly different training pathways, but actually used very similar training paths. Both programs began with enrollment in all three levels of the CNA program (comprising 18 weeks of training) offered at Tulsa Community College. Upon successful completion of CNA Levels 1, 2, and 3, a student qualified for award of

a Geriatric Technician Certificate issued by the college. EduCareers participants then were directly enrolled in medical terminology along with two classes in anatomy & physiology at Tulsa Technology Center (then commonly referred to as “jump-start classes”) to help prepare them for admission into the LPN program. The next planned step for CareerAdvance® students was to move into LPN program at Tulsa Technology Center. However, when several students did not score well enough on the placement exam to gain entry to the LPN program, they were enrolled in the jump-start classes at Tulsa Tech while they studied to re-take the HESI placement exam.

3. EduCareers and CareerAdvance® have become more alike over time

Although established as different models, CareerAdvance® and EduCareers have become more alike with time and experience. Specific examples of this convergence include the following:

- ❖ **Selection Standards:** EduCareers began with higher selection standards than did CareerAdvance®. Applicants without a high school diploma or GED were simply not eligible to participate in the EduCareers nursing program. Rather they were referred to the separate EduCareers GED preparation program. CareerAdvance® began with low selection standards and has raised them over time. Applicants for the first cohort were accepted even if they lacked a GED or high school diploma or had very low levels of basic skills. CareerAdvance® initially admitted anyone perceived to need the program. However, the criteria for enrollment were raised over time. All applicants in Cohort 2 had at least a GED or high school diploma; and motivation and interest in healthcare employment became more heavily weighted in selection of CareerAdvance® participants. Even then, many high school graduates were found to have inadequate levels of basic skills to successfully negotiate the nursing career ladder. Subsequently, applicants were tested as part of the enrollment process and if unable to score at the 9th grade level or better in both reading and math on the TABE test, they were placed into the Academic Nursing Skills Program to boost their basic skills.
- ❖ **Adult Basic Education and English as a Second Language:** EduCareers established programs for ESL and GED preparation within EduCareers. CareerAdvance® initially tried to integrate contextualized ESL and GED into

its nurse training component, but subsequently modified the approach, accepting into CareerAdvance® only individuals who were highly motivated and reasonably close to obtaining a GED and without need of substantial ESL. In January 2011, CAP established a separately organized “Adult Learning Initiative” offering instruction in ESL and GED preparation to all CAP Early Childhood Program parents. The CAP Adult Learning Initiative has adapted some features of CareerAdvance®, especially efforts to foster a peer supportive environment by organizing regular partner meetings in a “club,” which also sponsors social events to help keep participants attached to the program. In addition, the Adult Learning Initiative offers incentives, such as a \$1,000 scholarship, to encourage attendance.

- ❖ **Jump-Start Classes:** From the start, EduCareers staff planned to place participants into the “jump-start” sequence of classes in Medical Terminology and Anatomy & Physiology classes at Tulsa Technology Center after CNA certification. CareerAdvance® staff initially decided not to use this route into the LPN program. However, faced with the reality of students not scoring sufficiently well on the LPN placement exam, CAP staff decided to enroll participants into these “Jump-Start” classes while they studied to re-take the exam.
- ❖ **Career Counseling:** CareerAdvance® did not offer an individual career-counseling component for jobs outside of healthcare, but CAP’s Adult Learning Initiative, established in January 2011, now does offer limited career counseling. The individual career-counseling component at EduCareers was closed and put on “hold” because the EduCareers staff has been unable find a contractor who could operate the program effectively. Yet both CAP and EduCareers perceive a need for career counseling for some parents.

LESSONS FROM THE EXPERIENCE

The Need to Maintain Agility and Continuous Improvement

The multiple challenges that CareerAdvance® and EduCareers have faced over the past year have demonstrated that the programs need to stay agile and adapt to changes in the environment in which they operate, 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 participants.

As an example, both programs have had to adjust to the stiffer and more restrictive entrance procedures of the LPN program at Tulsa Tech. In another example, *CareerAdvance*® Cohort 3 was partially funded under the Health Professional Opportunities Grant (HPOG) program at the U.S. Department of Health and Human Services. With the funding came regulations restricting the types and form in which financial incentives were implemented. Regulations applying to this program expressly forbid the use of cash incentives but permit certain types of restricted-use gift cards, such as gasoline cards.

Lessons on Recruiting, Selection and Enrollment

Programs need to allow sufficient time for the process of recruitment, application, selection and enrollment. The first cohort of *CareerAdvance*® underwent this full process in only five weeks, which was found to be far too short a period to accomplish all this activity. The program now allots three months to accomplish this process—from initiating orientation sessions to sending out letters of acceptance.

Because recruiting, orientation, and selection occur only twice per year, it is especially important to maintain a list of the names and contact information for parents who have expressed interest in joining during the interim periods. It is also important to provide notice of orientation sessions to all parents well in advance.

Sufficient time is also needed between selection and the start of classes. Once the members of a new cohort are identified, *CareerAdvance*® staff organize a “meet and greet” luncheon to introduce the group to one another, obtain signed consent forms and other paperwork, enroll them in classes, schedule and obtain required vaccinations, order scrubs, other needed equipment and materials and textbooks, and meet with the new participants in an individual interview covering career planning. All of this takes place before classes begin.

Managing Participant Expectations

To avoid misunderstanding among participants and to provide them accurate information for career decision-making, program staff needs to convey clear and accurate information about program rules and procedures and what to expect in the program, including program length, testing requirements, and other matters. The shared expectations agreement, written rules and procedures, and orientation used by *CareerAdvance*® have been helpful, but not enough.

Lessons on Encouraging Persistence and Completion

Performance incentives are helpful but insufficient to assure persistence and completion of training. The contrast in attendance levels between ESL and the GED program at EduCareers is revealing. As the experience of both programs demonstrates, other elements are critical – including fostering a community of support (especially among peers) through arranging learning in cohorts and regular partner meetings, offering instruction at a convenient time and location, and providing instruction relevant to participants. Holding ESL instruction on site at the Educare early childhood center at a convenient time in the mornings shortly after the children are dropped off made it easy for parents (who were not employed) to participate. Teaching topics that were responsive to the learners’ needs helped motivate students. The same teacher stayed with the class over the year and developed rapport with his student-parents. The ESL class enjoyed high rates of attendance, with five additional participants regularly joining the class over the year even without a performance incentive.

In contrast, the GED program was held at a Union Public School facility which was distant to the Educare Center. EduCareers students were taught in classes mixed with other students, with no partner meetings to foster peer support. The curriculum used was a generic GED course, and the evening GED sessions were taught in a relatively low intensity program six hours per week. No one among the evening GED participants attained a GED during the year.

Lessons on Promotion of Basic Skills, Computer Skills and College Readiness

Success in training for nursing and health information technology requires a foundation of basic skills, especially in reading and mathematics. A program can either select only participants who have adequate skills, or provide instruction to boost skills, or both. On average, participants in both CareerAdvance® and EduCareers were 10 to 12 years out of school and most needed to review and refresh their basic academic skills. From its beginning, EduCareers restricted selection to applicants who had attained at least a high school diploma or a GED. Indeed, among the 10 enrollees in its initial cohort, 7 had some college training. By contrast, CareerAdvance® began without imposing standards for educational attainment in selection and found it necessary to increase their standards over time. CareerAdvance® staff introduced Academic Nursing Skills (ANS) to offer relevant basic skills instruction to those who needed it, without the pejorative connotations of adult basic education. Participation in ANS is required for parents without a GED, as well as anyone whose actual basic skill levels in reading and math were below 9th grade level (as measured on the TABE test). Twelve of the 15 participants in CareerAdvance® Cohort 3 were enrolled

in the ANS classes. Some participants have complained that the basic skills instruction offered in ANS has been geared to GED preparation and not sufficiently contextualized to the healthcare industry nor tailored to their needs to perform well on the HESI exam, or in college. Continued efforts are needed in this arena, especially in finding ways to teach basic skills in healthcare context, in developing computer skills, in accelerating learning, 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.

The Need for Systems Changes

One of the most pressing “systems issues” surfacing in program experience to date has been gaps in time between one class and the next, delaying participants from progressing along their chosen career path. These delays interrupt momentum, cause disruptive breaks in established routines for participants and their families, and raise concerns among participants who feel an urgent need to complete their training and get started on their careers. Similarly, the paucity of adult education classes offered during summers impedes students from improving their skills to advance.

A promising effort to eliminate or minimize gaps between classes is being made by the Tulsa Tech LPN program. Traditionally, the school had closed down for the month of July, providing staff an annual vacation period. Professional meetings for faculty during the first two weeks in August extended this break into a six-week period. A second extended break from classes occurred in December and January for the Christmas-New Year holidays and the intersession break between semesters. Recently, the school revised its vacation policy, allowing individual faculty to schedule vacations through the full year. Under this new arrangement, only a few faculty/staff members are on vacation at any time and classes do not have to be closed down during July.

To reduce the waiting period for applicants, the Tulsa Tech’s LPN program has also increased the number of program start times it offers. When *CareerAdvance*® began in 2009, LPN applicants were required to take the placement test in September, then wait for admission to the program the following September. Currently, the program aims to admit a new cohort for daytime classes every sixty (60) days and a new cohort for evening classes every ninety (90) days throughout the year. Assuming that the size of each cohort is 20 students, the program has a potential enrollment capacity of up to 200 students per year. If other schools and programs can be convinced to adopt such innovative practices, learning in cohorts could be facilitated and students could avoid delays and gaps in their education.

Another scheduling issue is the lack of alignment among schools for the start of fall classes, which can raise significant childcare problems for participants. For example, in August 2010, classes at Tulsa Community College began a week before CAP's early childhood education and Tulsa Public Schools started. This resulted in a scramble by parents and program coaches to get childcare arrangements in place for that week.

Increase direct engagement between the programs and Tulsa-area employers—to help overcome participant difficulties in acquiring employment

To date, the programs have had some direct contact with employers through arranging worksite visits, inviting employers to be guest speakers at partner meetings, incorporating employer input into the EduCareers participant selection process, and establishing “partner employers.” Despite the fact that the programs established partnerships with area healthcare employers, which promised participants a “guaranteed look” in employment interviews, few participants applying for work made it through the initial computer-screening in the hiring process. Personal intervention may be required to make certain that participants reach the firm's appropriate representative who made the promise of partnership. Program staff often needs to make personal referrals to employer contacts to arrange interviews, rather than leaving program participants to negotiate the regular hiring process.

Meaningful direct engagement with employers could help provide opportunities for programs to make advance arrangements for jobs during unavoidable breaks in classes, which would provide participants with opportunities for work-based learning, as well as to assist program leavers to obtain jobs that match the credentials they gained in the program.

Planning for the Future

Both CareerAdvance® and EduCareers have promised their participants support through training as a registered nurse. Advancing from a GED or high school diploma to completion of the Associate Degree Registered Nursing program at Tulsa Community College takes five or more years. Yet several mothers are enrolling in CareerAdvance® when their children are 4 years old and scheduled to graduate from Head Start and move into Kindergarten the following year. In fact, 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 fine if parents exit the program at the CNA level, but CNA certification alone generally will not be sufficient to qualify them for high-paying 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 on Child Development (Shore 2009). Continuing parent training and the pre-K through 3rd grade continuum could become mutually reinforcing.

LIMITATIONS OF THIS STUDY

This paper reports on the start-up of EduCareers and the early operations and expansion of *CareerAdvance*[®] through September 2011. It aims to document what was accomplished and how it was achieved. It also discusses the challenges faced by the programs and their participants, and changes made to improve the program and make them more effective. The present study does not consider the net impact of participation in either EduCareers or *CareerAdvance*[®] on such outcomes as employment, earnings, or the subsequent academic and behavioral performance of children.

The Ray Marshall Center and the Institute for Policy Analysis at Northwestern University are joining in a broader and more extensive evaluation of the *CareerAdvance*[®] as it expands to nearly 300 participants under a grant from the U.S. Department of Health and Human Services. This evaluation uses a quasi-experimental 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 and the performance of children. In conjunction with this study, arrangements have been made to obtain administrative records on employment and earnings and receipt of unemployment insurance from the Oklahoma Employment Security Commission. In addition, the Oklahoma Department of Human Services is providing information on receipt of several public benefits programs. The study will also track the impact of *CareerAdvance*[®] with the CAP early childhood program on the achievement of children over the longer term, using a variety of measures.

At this time, participants in the earliest cohorts are just completing the LPN school and taking pre-requisite classes 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. As *CareerAdvance*[®] becomes more widely known and expands, it should attract sufficient numbers of applicants to support a random assignment evaluation.

REFERENCES

- Bartik, Timothy J. (2011). *Investing in Kids: Early Childhood Programs and Local Economic Development*. Kalamazoo, Michigan: The W. E. Upjohn Institute for Employment Research.
- Becker, Gary. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago, IL: The University of Chicago Press, Third Edition.
- Boots, Shelley Waters. (2010). "Dual Generation: The Case for Linking CFES Strategies with Early Childhood Programs." Baltimore, MD: The Annie E. Casey Foundation (December 15)
- 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_Report_Feb_16_2011.pdf
- Duncan, Greg J.; and Katherine Magnuson. (2011). "The Long Reach of Early Childhood Poverty." *Pathways*. Winter. Pp. 22-27.
- Glover, Robert W.; and Christopher T. King. (2010). "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, pp. 215-251.
- Glover, Robert W.; Tara Carter Smith; Christopher T. King; and Rheagan Coffey. (2010). "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.
- 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.; 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).
- 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.
- 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.