# CAP Family Life Study

Year 2 Report: September 30,2011-September 29, 2012

ACF/HHS Award to the Community Action Project of Tulsa, Oklahoma (CAP) to Expand Career*Advance*<sup>®</sup> April 1, 2013

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#### **Executive Summary**

Career*Advance*<sup>®</sup>, launched by the Community Action Project of Tulsa County (CAP), is a healthcare workforce development program designed for low-income parents of young children enrolled in CAP's early childhood education programs. The two-generation approach of Career*Advance*<sup>®</sup> is one of the only sectoral workforce development programs with the explicit goal of improving outcomes simultaneously for *both* parents and children.

The design of Career*Advance*<sup>®</sup> is based on a market analysis of Tulsa, Oklahoma which revealed that credentials in healthcare would likely lead to familysupporting employment, job stability, and opportunities for career advancement and wage growth (King et al., 2009; Glover & King, 2010). Career*Advance*<sup>®</sup> provides education and training classes in two healthcare tracks, nursing and health information technology (HIT), along a career ladder that allows students to progress from one level of credentialing to the next. The program also provides a number of key supportive components—career coaches, financial incentives, and peer group meetings—to prepare parents for high-demand jobs in the healthcare sector.

The present evaluation of Career*Advance*<sup>®</sup> represents a strong collaboration between university research partners and CAP. The research partnership began in 2008 when nationally-recognized leaders in workforce program and policy development worked with CAP to design Career*Advance*<sup>®</sup>, which was launched in 2009. In early 2010, national experts in developmental science broadened the research scope of the study to focus on children's development and family functioning in addition to parents' education, training, and financial well-being.

CAP and its research partners then sought to expand the program and secure funding to examine the short-term synergistic effects of two-generation programs on parents and children. In September 2010, the Administration for Children and Families (ACF) at Health and Human Services (HHS) funded a 5-year scale-up of Career*Advance*<sup>®</sup> and a two-part evaluation study through the Health Profession Opportunity Grant (HPOG) Program. The research component of this first HPOG award included: (1) a short-term small-scale outcomes study; and (2) an implementation study. The initial short-term outcomes study has a one-year focus and examines several areas: program participation and advancement; career credentialing; job readiness; earnings; and a small set of child and family outcomes. The implementation study examines the systems-level influences on the structure and implementation of Career*Advance*<sup>®</sup>, focusing on the degree to which the various training pathways are successfully offered, coordinated, and integrated.

Recognizing the need to examine the longer-term influences of Career*Advance*<sup>®</sup>, the research team secured funding from Health and Human Services (HHS) Health Profession Opportunity Grant (HPOG) University Partnership in September 2011 to conduct a quasi-experimental, mixed-methods study of all Career*Advance*<sup>®</sup> participants and a matched comparison group. The goals of the second award are to examine: (1) possible long-term family, parent, and child outcomes as influenced by participation in Career*Advance*<sup>®</sup>; as well as (2) variations in program participation and their potential links to differential patterns of educational attainment, employment, and family health and well-being. The full research project is now referred to as the CAP Family Life Study.

A key goal of Year 2 was to build on and strengthen the organizational capacity to support the ambitious research agenda. During Year 2, the researchers have focused on (1) expanding the research team, developing partnerships, and facilitating team communication; (2) designing measures as informed by our theory of change; (3) collecting data from parents, children, teachers, and staff from both Career*Advance*<sup>®</sup> and CAP using quantitative and qualitative methods; and (4) processing data from multiple sources and preparing it for analysis.

In Year 2 we expanded the team and hired a Tulsa-based research manager who has been central for ensuring reliable and efficient data collection. In addition, we established a subcontract with Diane Horm at Oklahoma University (OU), to expand our child assessment protocol at CAP. The child assessments at CAP now include measures of language, executive functioning, and math skills. We also developed a subcontract with Amanda Morris at Oklahoma State University (OSU) to complete child assessments with families who have transitioned out of CAP into elementary school. The research team has worked closely with Amanda Morris both to develop a home visit protocol for use with these families and to train research assistants on its implementation.

We also expanded and refined our measurement in the CAP Family Life Study. In addition to the supplementary child assessments described above, the Northwestern team, in partnership with OSU, developed a child puppet interview to measure children's' internal representations of school. The research team also revised the Wave 1 parent survey to add new constructs, such as adult executive functioning, and revise questions on mobility, relationships, and parenting. The research team also developed the Wave 2 parent survey and conducted pilot interviews before administering the survey in fall 2012. In addition, the research team created and collected teacher questionnaires for Cohorts 4, 5, and 6. Lead teachers were asked to complete: (1) a short questionnaire of their own demographic and educational backgrounds and classroom characteristics, and (2) a questionnaire for each child in their classroom identified for participation in the study that year. Collectively, these surveys provide information on the role of schools in parent and child outcomes, as well as supplement the direct child assessments and the parent survey.

In Year 2, the qualitative study was also launched. Through consultation with experts, additional literature reviews, and pilot testing, the research team was able to further develop the qualitative instruments and finalize the study design. A team of adept researchers was assembled to conduct and analyze interviews and focus groups. In Year 2, the team has conducted interviews with Career*Advance*<sup>®</sup> participants and matched comparison parents, focus groups with Career*Advance*<sup>®</sup> participants, matched comparison parents, Career*Advance*<sup>®</sup> exiters, CAP staff, and Career*Advance*<sup>®</sup> coaches. This wealth of data has provided valuable insights into the ways in which Career*Advance*<sup>®</sup> and CAP participation influences families.

As a result of the organizational structure and measurement development, the CAP Family Life Study has seen tremendous growth in terms of the types of data collected and the number of participants in the study, which now includes 163 Career*Advance*<sup>®</sup> participants and matched comparison parents. Please see the Year 2 Timeline of Tasks and Work Products in Appendix Section 1 for a full list of the research team's activities in the past year.

Through the multitude of data collected, we have been able to gain valuable insight into the lives of CAP Family Life Study parents and children. When examining the balance between Career*Advance*<sup>®</sup> participants and the matched comparison group, we found that the groups are relatively well matched, which is central to the success of the study. We also found that study respondents represent a diverse group of parents. Respondents age from 19 to 56 and represent many different racial/ethnic groups. Parents vary in their baseline levels of education and almost all of the families in the CAP Family Life Study are living in or near poverty. Baseline descriptive analysis of study respondents also suggests a fair amount of variability in key measures of parents' psychosocial and executive functioning skills, parenting and home environment, and earnings and participation in public benefit programs. Through direct child assessments, we investigated children's functioning in many domains, including basic academic skills. We found that children in the CAP Family Life Study scored slightly higher in this domain than the rest of the CAP population, but lower than national norms.

Focus group and interview data expand these findings and provide a detailed initial picture of parents' lives and their experiences at CAP. Parents employ various strategies for managing the complexities of caring for young children, earning a family income, and advancing their own credentials and careers. CAP plays a vital role in these parents' lives by supporting their children both academically and socio-emotionally. Using a sample of both matched comparison parents and participants who have been accepted but have not yet begun Career*Advance*<sup>®</sup>, these data provide evidence of the need for an intensive workforce training program like Career*Advance*<sup>®</sup>, which provides both financial and social support to parents. Overall, findings from both quantitative and qualitative data support the importance of two-generation programs and their evaluation for an improved understanding of how parents and children influence the educational and career success of each other.

This report reflects the continued development and implementation of a twogeneration evaluation design and initial baseline characteristics of the first three cohorts under study. The report is organized in six sections: (1) building on design and organizational capacity; (2) theory of change and developing instruments; (3) describing participants in the CAP Family Life Study; (4) Career*Advance*<sup>®</sup> implementation findings through December 2012; (5) learning from participants' experiences: focus groups and interviews; and (6) learning from and disseminating to external audiences.

# Section 1: Building on Design and Organizational Capacity

#### Overview

The aim of the CAP Family Life Study is to provide systematic information on each of the expected outcomes of Career*Advance*<sup>®</sup> as described in the Logic Model to ACF/HHS (see Section 3) as well as additional outcomes identified through further research. These short-to-long-term outcomes are:

- (1) Career*Advance*<sup>®</sup> parents of young children will advance from having a "job" to having a "career" in a high-demand healthcare occupation with a family-supporting wage.
- (2) Career*Advance*<sup>®</sup> participants' families will improve their economic stability, leading to lower levels of stress and undesirable residential mobility.
- (3) Career*Advance*<sup>®</sup> parents will increase their self-confidence, self-efficacy and expectations for success.
- (4) Career*Advance*<sup>®</sup> parents will develop behaviors that are conducive to success in the academic and work worlds, which they model for their young children.
- (5) Children of CareerAdvance<sup>®</sup> participants will attend school more regularly.
- (6) Children of Career*Advance*<sup>®</sup> participants will show improved scores in cognitive and socioemotional assessments over time.
- (7) Career*Advance*<sup>®</sup> families will learn to better manage the combination of work, school, and raising children through effective time use patterns, household organization and other quality of family life indicators.
- (8) CareerAdvance<sup>®</sup> families will improve their parenting skills as a result of increased postsecondary education and income.

The following section provides a detailed description of the key processes, decisions, and outcomes in the continued development of the design and organizational capacity of the CAP Family Life Study.

#### **Organizational Capacity**

**Expanding the team.** Our research partnership with CAP dates back to 2008 when nationally-recognized leaders in workforce program and policy development, Drs.

King and Glover from The University of Texas and Dr. Yoshikawa from Harvard University, worked with CAP to design and launch Career*Advance*<sup>®</sup>. In 2010, national experts in developmental science, Drs. Chase-Lansdale from Northwestern University and Brooks-Gunn from Columbia University joined the team and enhanced the two-generation perspective of the project.

Chase-Lansdale and King have developed strong research teams at their institutions, and provide ongoing oversight to the research program. The daily implementation of the CAP Family Life Study is led by Senior Research Scientist Teresa Eckrich Sommer, Northwestern, and Research Associate Tara Smith, University of Texas. Dr. Sommer is the daily point person for communication with CAP, travels to Tulsa at key points in the study development, and oversees the hiring and daily workflow of research staff. Tara Smith oversees the collection of state administrative data, facilitates biweekly project calls, and supports reporting efforts at the University of Texas. Postdoctoral Fellow, Terri Sabol, Northwestern, oversees data management and quantitative analysis. The Northwestern staff also includes Allison Frost, Research Coordinator; Rayane Alamuddin, Doctoral student; Katie Dahlke, Doctoral Student; Emily Ross, Doctoral Student; Mumbe Kithakye, Tulsa-based Research Manager; and independent consultant and programmer Kate Samuels.

Dr. Mumbe Kithakye, Northwestern's Tulsa-based Research Manager, assists with all aspects of the growing data collection efforts, including managing local research assistants, coordinating child assessments, and conducting a portion of survey assessments, individual interviews, and focus groups. Four graduate research assistants from Oklahoma State University were hired as part of the Tulsa-based research team in August 2012: Cheryl Delk, Amy Treat, Antoinette London-Johnson, and Jordan Love (a returning research assistant). These researchers collect survey assessments with all parent participants, complete child and home-based assessments with families who have transitioned out of CAP and into elementary school, and track participants in between waves of data collection.

The Tulsa-based research team underwent extensive training in both parent surveys and child assessments. The survey training, conducted in August 2012, included an introduction to the Career*Advance*<sup>®</sup> program and the CAP Family Life Study, the secure storage and transfer of data to Northwestern, a review of CAP's protocol for suspected abuse or neglect, and an overview of the survey contents. Research assistants also practiced the survey with pilot participants at a local (non-CAP) early childhood education center as part of their training. Please see Appendix Section 1 for the complete training manual. The child assessment training, conducted in October 2012 by Amanda Morris, Terri Sabol and Mumbe Kithakye, focused on the

reliably administering and scoring the Peabody Picture Vocabulary Test (PPVT), Woodcock-Johnson Achievement Test (Applied Problems Subscale), Gift Wrap Task, Pencil Tap Task, and Child Puppet Interview. Please see Appendix Section 1 for the child assessment training materials.

**Team communication.** This multidisciplinary team has worked effectively throughout this study due to clear delineation of roles and frequent, transparent communication. Examples of the partnership are: (1) frequent individual and group phone calls with CAP and among the research team; (2) in-person research meetings in Tulsa; and (3) data collection and data management led by Northwestern and the University of Texas that is structured to avoid interfering with CAP's service delivery processes.

Research and program staff participates in monthly Northwestern-led research calls to address key design issues and solicit input on study implementation from program staff, as well as bi-monthly University of Texas-led program implementation calls to discuss Career*Advance*<sup>®</sup> program improvements and challenges. The Northwestern and University of Texas researchers, in addition to the project's consultants, Jeanne Brooks-Gunn, and Hiro Yoshikawa participate in monthly research partner calls to conduct in-depth discussions of data management and analysis. Beyond this monthly meeting, Northwestern and the University of Texas also maintain on-going communication to collaborate and further their research partnership. Northwestern researchers hold weekly phone meetings with OSU researchers to track data collection, discuss study participant recruitment, and review data collection concerns.

Additionally, Northwestern staff leads weekly quantitative and qualitative study subgroups to strategize about data collection, cleaning, and analysis. The quantitative team is led by Dr. Terri Sabol and includes doctoral candidate Katie Dahlke, doctoral candidate Emily Ross, Research Coordinator Allison Frost, and undergraduate research assistants Ummul Kathawalla and Tiffany Wu. University of Texas staff participates as needed. The qualitative team is led by Dr. Teresa Eckrich Sommer and includes Mumbe Kithakye, Research Data Manager, Northwestern doctoral candidate Rayane Alamuddin and Harvard University doctoral candidate Celia Gomez.

**Research Data Camp.** In February 2013, the researchers from Northwestern, University of Texas, Columbia, and Harvard universities convened in Austin for a "Research Data Camp," during which time we shared, reviewed, and discussed descriptive data from our various datasets. This meeting served not only as an opportunity to discuss initial findings and insights, but also as a platform from which to build our team, research agenda, and topics for publication. The topics discussed at the meeting are outlined below. Please see Appendix Section 1 for the Research Data Camp Agenda.

*Study design and sample.* Drs. Chase-Lansdale and King provided an overview of the Theory of Change behind Career*Advance*<sup>®</sup>, as well as an overview of the CAP Family Life study and its preliminary findings. Dr. Terri Sabol and Dr. Mumbe Kithakye described the sample of the study, including the number of Career*Advance*<sup>®</sup> participants and matched comparison parents in each cohort. Drs. Sabol and Kithakye also discussed subject attrition, recruitment challenges, and how these issues will affect future analyses. Furthermore, Dr. Sabol discussed the process of propensity score matching and how the matched comparison parents are balanced with Career*Advance*<sup>®</sup> participants in all cohorts.

Overview of quantitative measures and data. Rayane Alamuddin, a graduate student, began by presenting an overview of the parent survey, including its constructs and how it has changed since it was initially piloted. She also presented the means from several psychological measures, including psychological distress and applied cognition, and how they compared to similar samples in other studies. Dr. Terri Sabol presented a summary of the various measures used to assess school readiness, executive functioning, and internal representations in children as part of the CAP Family Life Study. Dr. Sabol presented descriptive data from these measures and how they compare with both national norms and the rest of the children enrolled in CAP. Katie Dahlke, a graduate student, presented the teacher survey and its constructs related to both teachers and students. She described the data we have collected so far, including teacher demographics and teachers' perceptions of the value of education.

*Overview of administrative and program data.* Dr. Chris King and Research Associate Tara Smith discussed the measures of Career*Advance*<sup>®</sup> enrollment and attendance, and how these can be used to define dosage and exiting in several different ways. Tara Smith presented an overview of the types of administrative data present in the study, including wages and employment status. They also emphasized the potential to compare this data with self-report measures of some of these constructs.

Overview of qualitative study design, measures, and data. Dr. Teresa Eckrich Sommer provided an overview of the qualitative study design and the focus group and interview data that has been collected so far. The qualitative team, including Dr. Sommer, Rayane Alamuddin, Celia Gomez, and Dr. Mumbe Kithakye, presented themes present in the parent interviews. These themes include work/life balance and strategies for success. The entire team discussed the potential for using the qualitative data in conjunction with the quantitative data for a mixed methods approach to answer the research questions. For instance, there is the possibility of using quantitative data to predict persistence in Career*Advance*<sup>®</sup> and then using qualitative data to clarify the mechanisms behind it.

*Program implementation.* Dr. Chris King and Research Associate Tara Smith discussed the various data sources used for the program implementation study, including participant focus groups, biweekly phone calls with program staff, and Career*Advance*<sup>®</sup> tracking data. They provided an overview of their findings, including how Career*Advance*<sup>®</sup> participants have progressed and how the program itself has changed over time. They also discussed the factors that support Career*Advance*<sup>®</sup> progress, such as financial support and support from peers, and the factors impeding progress, such as teacher quality and time management.

#### **Study Design**

In order to describe the possible implications of Career*Advance*<sup>®</sup> for parents and children, it has been essential to develop an enhanced dataset with systematic quantitative information on each of the eight outcomes above. We have built on CAP's existing data systems, including ChildPlus, child assessment and classroom quality data, and the progress tracking of Career*Advance*<sup>®</sup> participation. ChildPlus contains information compiled from enrollment applications to the Early Childhood program and attendance records. The child assessment data from CAP include performance of children on the Bracken School Readiness Assessment, as well as aggregate performance in each classroom. CAP measures the quality of teacher-child interactions through use of the Classroom Assessment Scoring System (CLASS; Pianta, La Paro, & Hamre, 2008). The Career*Advance*<sup>®</sup> data systems include information obtained from enrollment applications as well as progress tracking, including test scores and grades, attendance, employment and wages obtained, and other participant achievements.

The CAP Family Life Study, as funded by the HPOG award to CAP which expands the program and has a small research component, adds a baseline survey and one-year follow-up on participating individuals and their matched comparisons on every other cohort beginning with Career*Advance*<sup>®</sup> Cohort 4 and continuing with Cohorts 6, 8, and 10. The HPOG-University Partners (HPOG-UP) and W. K. Kellogg Foundation awards to Northwestern expand beyond this initial evaluation to conduct a 48-month, quasi-experimental, mixed-methods study of Career*Advance*<sup>®</sup>. The expanded study now allows data collection on all cohorts 4 through 10 up to *three* years beyond baseline and includes both quantitative (e.g., parent surveys and child assessments) and qualitative methods (e.g., individual interviews, focus groups).

**Sample Selection.** All Career*Advance*<sup>®</sup> participants from Cohorts 4 (n=29), 5 (n=22), and 6 (n=27) were invited to participate in the CAP Family Life Study. In order to select the matched comparison families, we employed propensity score matching. The goal was to identify a pair of families who were similar on all available observable characteristics and behaviors except for the fact that one parent was enrolled in Career*Advance*<sup>®</sup> and one was not.

**Selecting Matching Variables.** We used a wide range of variables to estimate the likelihood that a parent will participate in Career*Advance*<sup>®</sup>. The family-, parent-, and child-level variables originated with three sources: CAP's Head Start dataset (ChildPlus), the Career*Advance*<sup>®</sup> application, and an Education and Job Training Supplemental Survey (described in detail below).

*Family, parent, and child and characteristics:* When a parent first enrolls his or her child in CAP, program staff members collect data on parent and family characteristics. Parent demographic characteristics include age, race, gender, relationship to child, and number of children.<sup>1</sup> Additional data collected by staff members included: parents' education level, employment status, primary language, English proficiency, custody status of children, household size, whether the child resides with one or two parents, and household income. Child characteristics collected by CAP include: race, gender, and program type (i.e., Early Head Start or Head Start).

Adult motivation and applicant score. In order to participate in CareerAdvance<sup>®</sup>, parents filled out an application and were interviewed by staff members. Based on this interview, the staff members assigned a score to each applicant that was based on a parent's interest in the health care field, motivation for joining a training and workforce development program, and interest in starting a new career. The applicants with the highest application score were selected into the program. In order to match CareerAdvance<sup>®</sup> participants and nonparticipants on these motivational characteristics, we developed the Education and Job Training Supplemental Survey that jointly assesses parents' potential motivation and interest in applying to CareerAdvance<sup>®</sup> and the likelihood that they would be accepted. The survey was conducted by Family Support Service staff and was included in the Needs Based Assessment required for all Head Start families. Family Support Service staff members conducted the supplemental survey only with parents who are English proficient.

<sup>&</sup>lt;sup>1</sup> Although we refer to adults as parents, the primary adult for a child may be a foster/step parent or grandparent.

The Education and Job Training Supplemental Survey included seven questions that address similar factors assessed in the Career*Advance*<sup>®</sup> interview. In addition, the Family Support Services staff indicated whether they believed the parent would be a good candidate for Career*Advance*<sup>®</sup>. We used the survey to derive a score for families not in Career*Advance*<sup>®</sup> that would be comparable to the Career*Advance*<sup>®</sup> applicant score. Both the Career*Advance*<sup>®</sup> families and the pool of potential matched comparison families in CAP receive a score ranging from 1-5, with 5 indicating that the person would be a strong candidate for Career*Advance*<sup>®</sup>.

Neighborhood. Parents of children enrolled in one of 11 early childhood centers run by CAP were eligible to apply to CareerAdvance<sup>®</sup>. Past evidence suggests that matching techniques perform particularly well when individuals in the treatment and control group reside in the same local labor market (Heckman, Ichimura, & Todd, 1998; Smith & Todd, 2003). Thus, we identified groups of CAP early childhood education centers within a particular neighborhood. In order to determine the neighborhoods, we first calculated the distance between each center and grouped centers that are within a five-mile radius of one another. Next, we consulted with CAP staff in Tulsa to determine whether our clusters of centers for each neighborhood matched their conceptualization of neighborhoods. Additionally, we matched our neighborhoods to asset maps, which identify a number of different community resources (e.g., number of hospitals and clinics) across the county. The asset maps allowed us to better understand the degree to which centers in specific areas of the county had access to various resources. We also used census information to explore the characteristics of each neighborhood. Based on these multiple sources of information, we clustered the 11 centers across three distinct neighborhoods.

**Analytic Technique.** We selected the matched comparison group based on a number of steps. Figure 1 presents the process for selecting the matched comparison (MC) group, which is described in the analytic detail below.

# Figure 1. Process for selecting the matched comparison group for Career*Advance*<sup>®</sup> participants in the CAP Family Life Study



First, we created subgroups that have exact matches of race, gender, neighborhood, and adult-type (i.e., parent or grandparent). We used a complete matching technique because these four variables may play important roles in determining participation and outcomes. The complete matching technique has been employed in previous studies (e.g., Bryson, Dorsett, & Purdon, 2002; Gormley. Phillips, Newmark, Perper, Adelstein, 2011; Heckman, Ichimura, Smith, & Todd, 1998) and is an effective method when effects are likely to be heterogeneous between certain groups (Caliendo & Kopeinig, 2005).

Second, we estimated the propensity scores for each of the subgroups (e.g., African American mothers who live in Neighborhood 1). The propensity score was generated by first estimating a logit model in which the response variable was a binary variable indicating whether the parent participated in Career*Advance*<sup>®</sup>. Participation was predicted based on a set of family, parent, and child characteristics (listed above). The estimated logit equation was used to predict parents' propensity score, which indicates the probability of participating in Career*Advance*<sup>®</sup>.

We employed a one-to-one nearest-neighbor matching technique in order to select matched-comparison families. In nearest-neighbor matching, an individual from the comparison group is chosen as a matching partner for a treated individual that has the closest propensity score. This technique is most effective for settings where the goal is to select individuals for a comparison group (Stuart, 2010); however, the results are potentially biased if the matched comparison adults have a propensity score that is far from that of the Career*Advance*<sup>®</sup> adults.

Lastly, we have added additional families to the matched comparison groups in all cohorts to account for potential program attrition (i.e., a ~10% increase in matchedcomparison sample size). We included these participants based on the concern that restricting the size of the comparison groups to the same size as the program groups may be problematic because matched-comparison families may not be as invested in the study, and thus may be harder to track over time. The loss of participants would lead to a reduction of power to detect effects. Additionally, the loss of participants may lead to biased estimates if attrition is non-random. We randomly selected the additional matched comparison families from a list of the second closest nearest neighbor for each Career*Advance*<sup>®</sup> participant (in the event that the participant has another nearest neighbor). When we have been unable to recruit a matched comparison parent for a baseline parent survey, we select a replacement parent who is the second best match for that Career*Advance*<sup>®</sup> participant. We replaced 4 parents in Cohort 5, and 11 parents in Cohort 6.

Selecting the Sample for the Intensive Interviews and Focus Groups. A subset of Cohort 4-6 participants was selected to participate in individual interviews and focus groups. We piloted individual interviews with a subset of Cohort 4 parents; for the full study, our goal was to select ten to twelve Cohort 6 CareerAdvance<sup>®</sup> participants and matched comparison parents each to follow annually. We selected a stratified random sample by career path (Nursing and Health Information Technology) and purposefully sampled fathers and grandmothers when present in the sample. CareerAdvance<sup>®</sup> participants were selected pre-exposure to the program (after selection but before the first partner meeting). Of the 27 Cohort 6 Career Advance® participants, 13 were randomly selected, one withdrew from the CareerAdvance® program, and one refused to participate: 11 of the 12 eligible program participants (92%) were interviewed. Of the 28 Cohort 6 matched comparison parents, 17 were randomly selected, two refused to participate, and four did not show after repeated attempts to reschedule: 11 of 17 eligible matched comparison parents (65%) were interviewed. Future analyses will examine whether there are systematic differences in demographic characteristics between the selected matched comparison parents who were interviewed and those who were not.

Ten former CareerAdvance<sup>®</sup> participants from Cohorts 4-6 who exited the program voluntarily (n = 20) were selected randomly to participate in a December 2012 focus group. (Participants who were required to exit the program due to a failed drug screening or inadequate attendance were excluded from the selection process.) Our aim was to compose a focus group of six to eight parents who left CareerAdvance<sup>®</sup> and may or may not reenter the program at a later date. Selected parents were contacted by phone: nine were reached and one had a scheduling conflict. Eight agreed to attend and six ultimately participated (one parent could not leave work and another parent's two-year-old child misplaced her car keys). Seventeen parents from Cohorts 4-6 matched comparison parents who had not participated in an individual interview (n = 60) were selected randomly to participate. Again, the goal was to compose a focus group of six to eight parents. Selected parents were contacted by phone: seven agreed to participate; six did not respond to multiple phone calls and messages left on voice mail; three were reached but had scheduling conflicts; and one did not have a working phone. Nine ultimately participated, including the seven who had agreed to participate, one who arrived in response to a voice message, and one who became available unexpectedly.

**Process of Data collection.** Data collected by Northwestern and University of Texas in Year 2 include: (1) Wave 1 and Wave 2 survey interviews of Career*Advance*<sup>®</sup> participants and matched comparison parents in Cohorts 4 through 6; (2) child assessments for children in Cohorts 4 through 6; (3) teacher surveys for Cohorts 4

through 6; (4) in-home observations of the home environment; (5) intensive interviews with Cohort 6 Career*Advance*<sup>®</sup> participants and matched comparison parents; and (6) focus groups with Cohort 4-6 Career*Advance*<sup>®</sup> participants, parents who exited Career*Advance*<sup>®</sup>, and matched comparison parents, as well as staff from both CAP and the Career*Advance*<sup>®</sup> program.

Research staff met with Career*Advance*<sup>®</sup> and Family Support Services staff respectively to describe the study and choose a minimally intrusive method for recruiting families and conducting interviews. Program staff was provided a Summary of CAP Family Life Study, Recruitment Flyer, and Consent Form. Researchers and program staff collectively decided the following: (1) program staff would explain the study to parents and seek parental permission to participate; and (2) research assistants would schedule interview appointments and conduct survey interviews. Research assistants also attended Career*Advance*<sup>®</sup> participant partner meetings for each cohort to answer questions and schedule participant interviews. Research assistants also met Family Support workers individually at their respective early childhood centers to be introduced to matched comparison parents.

For parents whose children were still in CAP, the survey interviews took place at a CAP Early Childhood Center or at another convenient location of the parent's choosing. For parents whose children had transitioned into elementary school, the interviews took place as part of a home visit. In this visit, one researcher would conduct the interview with the parent while another would collect child assessments with the child. Before beginning the survey interview or child assessments, researchers obtained informed consent from each participant. For those in CAP, the parent consent form included information about child assessments. For those who transitioned out of CAP, a separate form was used to gain consent for child measures (see Appendix Section 1 for parent and child consent forms). During the survey interview, researchers entered participants' responses directly on a laptop using the Snap Survey program. This program allows for secure online data entry and is easily converted to Stata for data analysis. Each parent was given a \$40 gift card for participating in the interview and a \$10 gift card if the interview was rescheduled due to research constraints. Parents who participated in home visits were given an additional \$15 gift card for the child assessments.

Wave 1 teacher surveys for children still in CAP were distributed in June 2012 (for Cohort 5) and January 2013 (for Cohort 6). For children who had transitioned into elementary school at Wave 2, teacher names and e-mails were provided by the parents, and teachers were sent a link to complete a teacher survey online.

Researchers from Northwestern traveled to Tulsa, Oklahoma on two occasions to conduct in-depth interviews with Cohort 6 participants: in July 2013 with 11 Career*Advance*<sup>®</sup> participants and in September 2012 with 11 matched comparison parents. The interviews were conducted at a CAP Early Childhood Center or another convenient location of the parent's choosing. Focus groups with matched comparison and parents who exited the program were conducted by Dr. Teresa Eckrich Sommer at a CAP Early Childhood Education Center and Oklahoma State University respectively. Focus groups and interviews lasted 60-90 minutes, although some interviews took several hours. Interview and focus group participants (only those in the matched comparison group or who exited the program) received a \$40 gas card for their time. These parent focus group participants and their children were provided a meal, and children were supervised as needed in a separate space; no CAP or Career*Advance*<sup>®</sup>

To track study participant recruitment and scheduling, a secured tracking spreadsheet was updated daily during data collection by the Tulsa-based research assistants. This information was shared with the Northwestern research team. While conducting the survey interview, research assistants tracked survey-related issues on a document shared with the Northwestern research team.

### Data Collected to Date.

**Cohort 4.** Wave 2 assessments for Cohort 4 were conducted from October 2012 through January 2013. The initial Cohort 4 sample included 29 Career*Advance*<sup>®</sup> participants and 30 matched comparison parents (see Table 1.2). In Wave 2, we collected surveys from 26 Career*Advance*<sup>®</sup> participants and 20 matched comparison, for a retention rate of 78% the initial sample. 25 children completed child assessments in CAP, while 21 children had transitioned to elementary school and were assessed in the home by Northwestern researchers. In total, 46 children completed Wave 2 child assessments in Cohort 4. We also collected 20 Teacher Surveys: Teacher and 22 Teacher Surveys: Child from Cohort 4 in Wave 2 (see Table 1.1).

Table 1.1: Wave 2	2 Quantitative D	ata Collection -	Cohort 4
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Parent	Child	Home	Teacher Survey:	Teacher Survey:
Surveys	Assessments	Visits	Teacher	Child
46	46	21	20	22

**Cohort 5.** Wave 1 assessments for Cohort 5 were conducted from March to June, 2012. We collected surveys from 22 Career*Advance*<sup>®</sup> families and 26 matched comparison families. Four matched comparison parents declined to participate and

were replaced. Wave 1 Child assessments were collected from 45 children at CAP. Teacher questionnaires for Cohort 5 were collected in June 2012 from all lead CAP teachers who had one or more children in their classroom participating in the study. We collected and entered 29 Teacher Surveys: Teacher and 35 Teacher Surveys: Child (see Table 1.2).

**Cohort 6.** Baseline assessments for Cohort 6 were collected from September 2012 through January 2013. We collected surveys from 27 Career*Advance*<sup>®</sup> participants and 28 matched comparison parents. 11 matched comparison parents declined to participate and were replaced in the study. Of the 11 who replaced the matched comparison parents, eight were recruited. Forty-one children completed Wave 1 child assessments at CAP, while six children had transitioned into elementary school and were assessed in the home, for a total of 47 children completing Wave 1 child assessments. Teacher questionnaires for CAP teachers were distributed in December 2012. We collected and entered 22 Teacher Surveys: Teacher and 30 Teacher Surveys: Child (see Table 1.2). Elementary teachers were contacted by e-mail and sent an electronic version of the survey. Online data collection for teacher surveys is ongoing. Eleven participants and eleven matched comparison parents participated in intensive individual interviews.

	Parent Surveys	Child Assessments	Teacher Survey: Teacher	Teacher Survey: Child
Cohort 4	60	37 <sup>i</sup>	<sup>ii</sup>	
Cohort 5	48	45	29	35
Cohort 6	55	47	21	31
Total	163	129	50	66

Table 1.2: Wave 1 Quantitative data collection- Cohorts 4-6

Supplemental child assessments were not collected for Cohort 4 Wave 1- this figure reflects the number of Bracken assessments obtained.

<sup>ii</sup>Teacher surveys were not obtained for Cohort 4 Wave 1

CAP Family Life researchers conducted focus groups with Career*Advance*<sup>®</sup> participants, Career*Advance*<sup>®</sup> exiters, and matched comparison parents across all cohorts. Researchers also conducted focus groups with Family Support Staff and Career*Advance*<sup>®</sup> Coaches. Please see Table 1.3 for an overview of data collection for the qualitative study.

Table 1.3: Qualitative Data Collection in Year 2

Type of Data Collection	Number of Participants
Intensive interviews	
Cohort 6 Career Advance <sup>®</sup> participants	11
Cohort 6 Matched Comparison parents	11

Focus Groups	
CareerAdvance <sup>®</sup> participants	
Matched Comparison parents	9
CareerAdvance <sup>®</sup> Exiters	10
Family Support Staff	9
CareerAdvance <sup>®</sup> Coaches	3

**Data Preparation.** The data for the CAP Family Life Study is organized into seven different categories:

- (1) Baseline CAP data (including ChildPlus and the Education and Training Supplemental Survey)
- (2) Career*Advance*<sup>®</sup> data (including Orientation Data and Interview Score, Progress Data, Exit Interview, and Application Form to CA)
- (3) Parent data (including the Parent Survey Interview, HOME assessment, and Qualitative codes)
- (4) Child data (including Attendance, Bracken, OSU child assessment data, OU child assessment data, the Teacher Questionnaire: Child, and Puppet Interview)
- (5) School/Teacher data (including CLASS and Teacher Questionnaire: Teacher)
- (6) Administrative data
- (7) Data on families' participation in other CAP Programs (including Incredible Years).

Each category includes one dataset that encompasses all measures in that category. Please see the Data Organization Plan in Appendix Section 1 for an overview of each category of data.

All datasets can be linked using the participant's research ID number. Participant IDs are tracked using a separate ID spreadsheet. This spreadsheet is used to document each participant's placement in the study, including their cohort, whether or not they are participating in Career*Advance*<sup>®</sup>, and if they have refused to participate in the study. Another spreadsheet is used to link participant IDs with their names.

In order to simplify the process of tracking families across multiple data sources, the CAP Family Life Study research team has transitioned to a new participant ID system. In the old system, all IDs in the CAP Family Life Study had a one digit pre-fix (e.g., 1= family, 2= parent) followed by a randomly generated five-digit number. CAP generated the random number for family, parents, and children. In the new system, parent, child, and family IDs will retain the same pre-fix, but members of the same family will each have the same five-digit number. The family ID will stay the same from

the old system. In the case that there are multiple parents or children within a family, they will have a suffix (01, 02, 03 etc.) indicating their "number" within the family. The suffix is assigned randomly and does not indicate that the participant in the study. This new ID system will allow us to easily match parents and children with their families and with each other. In addition to editing the parent and child IDs, the research team has also changed the teacher IDs. Teachers will retain a prefix of 7, which will then be followed by the five-digit number of the school they are associated with. The suffix will indicate their "number" at that school. If a teacher changes schools during the study, she will retain her original ID. School IDs will remain the same.

In addition to developing datasets for each category, the Northwestern team is simultaneously creating a "data dictionary" that includes variable names, labels, and values for each item of each measure. Each file will also have a user's manual, or a Microsoft Word document that describes the survey interview, how we developed it, what it contains, and previous findings that are relevant to our study. It may also include information on composites or new variables created during data analysis, and any recoding that took place. This manual is designed to provide an outside researcher a sense of what we did and why, and the data our survey can provide. It also is intended to help document different aspects of the study and the survey for reports and publications.

For the in-depth individual interviews, post-interview notes are created by the interviewer immediately following the intensive interview, and include reflections on the interview environment: (where, how long, interruptions, comfort level of interviewer, and special circumstances); respondent description (appearance, personality, approach to interview/comfort level, and other noteworthy life circumstances); and the quality of the exchange (forthrightness, comfort level, openness, and likelihood of future participation). Interviews are transcribed professionally and compared again with audio files to check the accuracy of the transcription. Case summaries are then created, typically by the interviewer, for each parent participant, including post-interview notes, key textual evidence, and insights and reflections of the interviewer. Each case summary is organized with a summary of basic demographic data and a detailed analysis of the interview in twelve central topic areas, using textual evidence as relevant data (see Appendix Section 1 for Case Summary/Post-Interview Form). All audio files, transcripts, and case summaries are identified by participant ID number only. Participant names and any names used during the interview are deleted from the case summaries and replaced with pseudonyms. All interview files are kept on a secure online server and can only be accessed by authorized research personnel.

**Participant Retention.** The Northwestern research team and CAP staff have collaborated to track participants in the study and to update participants' contact information. On a bi-monthly basis during active data collection, CAP staff review a spreadsheet of contact information for every participant currently in the study and for those who have exited. This contact information is updated and monitored to track participant retention. On a monthly basis, CAP staff review the attendance records to identify children in the CAP Family Life Study who are at risk of leaving CAP's Early Childhood Center and may be potentially more difficult to reach in the future.

As families age out of CAP and transition into elementary school, the Tulsabased research assistants retain their information and keep continued contact with parents. As data collection approaches for each cohort, the research assistants will call participants to both remind them of the study and update their contact information. The Northwestern team also sends birthday cards and activities for the participants' children at the start of each month. On February 14, 2013, the Tulsa-based research staff held a CAP FLS Social for matched comparison parents in the study. Family Support Staff distributed a flyer for the social to parents while Tulsa-based research assistants contacted parents by phone. The social included food, door prizes, and activities for parents and children.

**Protection of sensitive and/or confidential information.** The study has maintained confidentiality of all data – including surveys, focus groups, administrative data, and child assessments – in strict compliance with the Northwestern Institutional Review Board (IRB) for Social and Behavioral Sciences, in addition to the IRBs from partner institutions. Study findings have not and will not use identifying information for any individual or household. We have labeled individuals by an ID number only and have stored these data separately from identifying information. Electronic data transfers between CAP and the research team occur only through a secure electronic drop-box known as Vault. Vault is password protected and secured behind the Northwestern firewall. Only IRB-approved research staff can access data stored on Vault. Any changes in study procedures or research personnel are submitted to the IRB in a revision. Please see Appendix Section 1 for a summary of the CAP Family Life Study revisions made in the past year.

## **Section 2: Theory of Change and Developing Instruments**

The theory of change describes the relationship between child and parent education and short-, mid- and long-term outcomes (see Figure 2.1 below). In illustrating the complexity of workforce pathways in Career*Advance*<sup>®</sup>, the theory of change also acknowledges that various pathways and associated exit points may produce better outcomes for certain subgroups than others.

Short-term outcomes for parents in Career*Advance*<sup>®</sup> could include increased credentialing, career development, and self-efficacy (Gardner et al., 2012; Schuller et al., 2002). Parents who observe their children thriving in an early childhood education program may be more motivated to succeed in their own educational program (Sommer et al., 2012). However, given the multiple demands of work, school, and childrearing, Career*Advance*<sup>®</sup> respondents may experience elevated levels of stress in the short-term.

Long-term parent outcomes could include significant improvements in educational attainment, increased earnings, and improved financial stability. These workforce outcomes and the associated financial and psychological resources could take up to four years to achieve and could eventually lead to decreased undesirable residential mobility, lower levels of stress, and more effective parenting practices.

In terms of child outcomes, increased financial resources in early childhood have been shown to improve children's development across a number of domains, including, academic achievement, executive functioning, approaches to learning, as well as socioemotional competence (Duncan, Ziol-Guest, & Kalil, 2010; Magnuson et al., 2007; Yoshikawa, Weisner, & Lowe, 2006). Additionally, parents' higher education levels may increase their own optimism and motivation, which may then heighten parental expectations for their children's academic success, and improve child attendance at early childhood education centers and at elementary schools. Parents with more education and training may also be better equipped to navigate children's educational systems and assist their children with academic activities (Kalil & Crosnoe, 2010). Lastly, more highly educated parents may serve as better academic role models, which may promote children's motivation and engagement in school.



# Figure 2.1: Updated CareerAdvance® Theory of Change

Informed by this theory of change, the CAP Family Life Study research team has developed several measures to address the dynamic relation among parents, children, and their environments. These measures are both quantitative (including the parent survey, child assessments, and the teacher survey) and qualitative (including the parent interview guide and focus group guides). Each measure is described in detail below.

#### **Parent Survey**

All Career*Advance*<sup>®</sup> participants in both career tracks, Nursing and Health Information Technology (HIT), are interviewed as well as the matched-comparison sample of parents. The structured 75-90 minute parent survey interview is conducted once at baseline, defined as within three months of initial enrollment, and then again each year for up to three years.

The table below presents the measures included in the Wave 1 baseline 75minute parent survey for each cohort. During the implementation of the survey for the first cohort in the fall of 2011 (Cohort 4), minor edits were made to the survey before its administration to Cohort 5 (resulting in "Version 2" of the baselines/Wave1 parent survey interview). After the implementation of the Wave 1 baseline survey for the first two cohorts in the study (Cohorts 4 and 5), the researchers made additional revisions to the survey, resulting in version 3. The researchers reviewed the interviewer notes in an effort to further improve the quality of the data collected and to respond to specific characteristics within the sample population. Some of the specific characteristics of the sample include non-parent respondents, respondents with serious health conditions, complex housing and mobility conditions, and respondents with complex relationships. The baseline survey was edited to better accommodate respondents who are not the parents of the focal child, and to gather additional information on their family situation and on the respondent's relationship to the child's biological parents.

Additional measures were also added to align with our updated theory of change. Measures assessing respondents' involvement in the focal child's education and schooling were added, as well as measures assessing respondents' own motivation and cognitive styles. The sections assessing respondents' housing conditions and current health were edited to capture more complexity. Finally, with longitudinal analyses in mind, some edits were made to the educational section to ensure equivalence between items designed for Career*Advance*<sup>®</sup> participants and those designed for respondents in the matched- comparison group. Table 2.1 below presents the final list of constructs included in the Wave 1 parent survey – constructs marked with "\*" were added anew to Version 3. Please see Appendix Section 2 for the full Wave 1 Version 3 survey.

Construct	Measure & Source
Demographic Characteristics	
Race, ethnicity, & language	Adapted from the Three-City Study
Relationship status & quality	Adapted from the Three-City Study and the Fragile Families Study
Education, Employment, & Income	
Education history, employment & earnings	Adapted from the NYU Birth Cohort Study
Household income	Adapted from the Fragile Families Study
Financial strain and worry	Adapted from the New Hope Study
Self-Confidence and Self-Efficacy	
Optimism	Life-Orientation Test- Revised (Scheier et al., 1994)
Self-esteem	Rosenberg Self-Esteem Scale (Rosenberg, 1989)
Motivation*	Panel Study of Income Dynamics 1972
Conscientiousness	Goldberg's AB5C 10-item scale (Goldberg, 1999)
Self-efficacy	State Hope Scale (SHS; Snyder et al., 1996)
Academic Expectations	

Table 2.1: Constructs and Measures for Wave 1 Parent Survey Interview

Academic expectations and goals for self and child	Items developed by Northwestern Research team for the present study
Parental Involvement in School	
Involvement in formal activities*	Items adapted from the Early Childhood Longitudinal Study - Birth, the Chicago Longitudinal Study, the Head Start Impact Study, the Family Involvement Questionnaire (Fantuzzo et al., 2000), or developed by the Northwestern Research team
Informal Communication with Teacher/Provider*	Items adapted from the Three-City Study, the Multistate National Center for Early Development & Learning Study, or developed by the Northwestern Research team
Parent expectations	Items adapted and modified from the Early Childhood Longitudinal Study – Birth
Mobility	
Housing & mobility	Adapted from Moving to Opportunity & Three-City Study
Parenting Attitudes & Practices	
Parenting stress	Aggravation in Parenting Scale - Adapted from the Panel Study of Income Dynamics (Abidin, 1983)
Parental attitudes toward education & discipline	Items from Parental Modernity Scale (Schaffer & Edgerton, 1985)
Parenting practices	Alabama Parenting Questionnaire (Frick, 1991)
Family routines Home environment	Adapted from the Fragile Families Study Items adapted from the Home Observation for Measurement of the Environment (HOME; Caldwell & Bradley, 1984)
Mental & Physical Health	
Perceived Stress	Perceived Stress Scale (Cohen et al., 1983)
Psychological Distress	Kessler 6 (Kessler et al., 2003)
General Health	Adapted from the Add Health Study and the Health Survey (Medical Outcomes Trust, Boston, MA)
Cognition/Executive Functioning	
Impulsivity*	Dickman (1990) Dysfunctional Impulsivity Scale
Applied Cognition*	Adapted from the Neuro-QOL (Cella et al., 2012)
Moving from Job to Career	
Attitudes towards work & career	Work Role Salience Questionnaire (Greenhaus & Sklarew, 1981)

This survey is also used to examine longer-term outcomes with CareerAdvance<sup>®</sup> participants and matched-comparison families. Table 2.2 presents additional items

collected in the Wave 2 survey, including school and kindergarten transition and neighborhood collective efficacy. We have omitted references to items that measure time-invariant characteristics, such as race and gender. Please see Appendix Section 2 for the full Wave 2 survey.

Construct	Measure & Source
School & Kindergarten Transition	
Information about school or care	Items adapted from the Head Start Impact Study, the Early Childhood Longitudinal Study, or developed by Northwestern Researchers.
Elementary school transition activities	Items adapted from the Early Childhood Longitudinal Study – Kindergarten Cohort
Parent/Family school transition activities	Items adapted from the National Center for Early Development & Learning – Multi-State Pre-K Study and the NCDEL Kindergarten Transition Project.
Neighborhood Collective Efficacy	
Perceived collective efficacy	Items derived from the Fragile Families Study, originally modified from the Project on Human Development in Chicago Neighborhoods (PHDCN)

Table 2.2: Additional Items included in Wave 2 Parent Survey

#### **Direct Child Assessments**

In order to assess the relation between program participation and children's development, the HPOG-UP award adds onto the minimal child assessments funded by HPOG. Children who attend CAP's preschool programs are directly assessed on their basic academic skills, executive functioning, language skills, and math skills. Children are also assessed in Spanish if they are not English proficient. The child assessments are completed once a year for one child per family whose parent is enrolled in Career*Advance*<sup>®</sup> and among children whose parents are in the matched-comparison group.

We have also added assessments of children after they transition from CAP to elementary school. This allows us to examine the longer-term effects of Career*Advance*<sup>®</sup> on children's direct functioning. We have obtained supplemental funding from the W.K. Kellogg Foundation to help fund the direct assessments of children once they transition into elementary school. The direct assessments include the same measures used to assess children when they are in preschool. Table 2.3 presents the direct child assessments that are used while children are attending CAP and once

they transition to elementary school. The direct child assessments take approximately 40 minutes.

Construct	Measure & Source	Time
Basic Academic Skills		
Literacy and numeracy	Bracken School Readiness Scale (Bracken, 1984)	15 min
Executive Functioning		
Inhibitory control- activates little emotion	Pencil Tap Task (Diamond & Taylor, 1996)	5 min
Inhibitory control- activates emotion	Gift task	
Language Skills		
Receptive language skills (in English and Spanish)	Peabody Picture Vocabulary Test, 3 <sup>rd</sup> Ed. (PPVT-III; Dunn & Dunn, 1997)	10 min
Math Skills		
Math reasoning and problem-solving	Woodcock Johnson Achievement Test- Applied Problems Subscale	10 min
Internal Representations		
Children's representations of school	Adapted Berkeley Puppet Interview (Measelle et al., 1998)	15 min

#### Table 2.3: Direct Child Assessments

**Bracken School Readiness Scale.** Children in CAP are assessed with the Bracken School Readiness Scale in the fall and spring of each year. Once children transition to elementary school, CAP Family Life Study research members assess children once a year. The Bracken assesses children's knowledge of color, letter identification, number/counting, comparisons, and shape recognition (Bracken, 1984). The Bracken consists of 85 items; raw scores can be converted to percentile rank scores and standard scores. The Bracken can be used with children as young as 2.6 years of age through second grade (about eight years of age).

**Pencil Tap Task.** Children are taught a pencil tapping game that tests the child's ability to resist a dominant response in favor of a non-dominant response in a situation activating little emotion. The assessor instructs the children to tap their pencil on the table once when the assessor taps her pencil twice and vice versa. Children are given three practice trials before engaging in the test. The total number incorrect of sixteen trials is recorded. Low scores reflect high inhibitory control. Inhibitory control with a non-emotional response has moderate correlations to social competence, behavior problems, and early academic skills (Smith-Donald, Raver Hayes, & Richardson, 2007).

**Gift Task.** This test is designed to assess inhibitory control in a situation activating emotions. The assessor tells the children that she had a present for them but she needs to find it first. The child is told not to touch a can of Play-Doh<sup>®</sup> while the interviewer looks for another can to give the child. Coders assess how well a child withheld from touching the can, as well as how long a child waited to touch the can and to open the can. A score of 60 seconds is assigned if the child did not touch the present. Higher scores reflect higher self-regulation. Prior research has demonstrated that inhibitory control is moderately stable, with some levels of improvement over time (Li-Grining, 2007). Inhibitory control within an emotional context has moderate correlations to social competence, behavior problems, and early academic skills (Smith-Donald, Raver Hayes, & Richardson, 2007).

**PPVT III- Receptive Language.** The Peabody Picture Vocabulary Test—Third Edition (PPVT–III; Dunn & Dunn, 1997) is currently the most commonly used instrument for assessing children's receptive language skills. The PPVT–III was standardized on a more nationally representative sample than the earlier versions and includes updated content and developmentally appropriate norms (Qi, Kaiser, Milan, & Hancock, 2006). Children view four illustrations and are asked to point to the picture that most closely represents the verbal stimulus presented. The PPVT-III demonstrates test–retest reliability based on different age samples of .91–.94, as well as strong internal consistency of .95 and .94 (Dunn & Dunn, 1997). The PPVT-III is a valid instrument for individuals age 2 to 90 years.

**Woodcock-Johnson Achievement Test- Applied Problems Subscale.** The Woodcock–Johnson Achievement Test is a nationally normed test that has been widely used in studies of early education. The Applied Problems subtest measures early math reasoning and problem-solving abilities. It requires the child to analyze and solve math problems, performing relatively simple calculations. It has been used in several largescale studies including NICHD (Duncan et al., 2007), Three City Study (Chase-Lansdale et al., 2003), and Tulsa Pre-kindergarten study (Gormley et al., 2005). Duncan et al. (2007) found that math skills, as measured by the Applied Problems subscale, were a strong predictor of later achievement. It is a valid instrument for children age 3 to 10.

**Child Puppet Interview.** The Child Puppet Interview (CPI) is used to assess children's: (1) school engagement and connectedness; (2) academic self-efficacy and motivation; (3) perceptions of educational support; (4) beliefs about parents' work and school; (5) family dynamics and stability; (6) role modeling; and (7) perceptions of parents' expectations for the child's success. The CPI uses two puppets to present opposing statements about each of the key topics. The child is then asked to identify the puppet that is most like them. For example, one puppet says, "I like school," and the other puppet says, "I do not like school." The child indicates which puppet is most like them by pointing at the puppet, saying the name of the puppet or repeating the statement that is most like them. The child's responses and interactions with the puppets are recorded for future coding. The CPI has been used previously to assess children's perceptions of the parent-child relationship, including parental responsiveness, hostility, structure and psychological control. Please see Appendix Section 2 for the puppet interview.

### **Home Environment Checklist**

Once children transition to elementary school, all parent interviews and child assessments for the CAP Family Life Study take place in the home when possible. The home environment checklist seeks to better understand the home environment from the interviewer's perspective. This checklist includes a question on home cleanliness and items from the Home Observation Measurement of the Environment (HOME; Caldwell & Bradley, 1984), which focus on cognitive stimulation in both the parent-child relationship and the home's physical environment. Please See Appendix Section 2 for the Home Environment Checklist.

#### **Teacher Questionnaires**

Lead teachers are asked to complete: (1) a short questionnaire of their own demographic and educational backgrounds and classroom characteristics, and (2) a questionnaire for each child in their classroom identified for participation in the study that year. The child questionnaire includes a detailed assessment of children's prosocial skills, problem behaviors, inhibitory control, and motivation for learning. It also includes a short assessment of parent/guardian involvement for those participating in the CAP Family Life Study.

The teacher questionnaires are completed once a year for all children in the CAP Family Life Study starting in preschool and following them into elementary school.

Similar to the direct child assessments, we have separate data collection procedures and funding sources for teacher questionnaires completed by (1) CAP teachers; and (2) elementary school teachers. The teacher questionnaires for CAP teachers are distributed and collected by site directors at CAP, while the elementary school teachers are e-mailed a link to an online version of the survey. Collectively, these surveys provide information on the role of schools in parent and child outcomes, as well as supplement the direct child assessments and the parent survey. The measures included in both the teacher and child questionnaire are presented in Tables 2.4 and 2.5. Please see Appendix Section 2 for the full Teacher Survey: Teacher and Teacher Survey: Child.

 Table 2.4: Teacher-Report of Their Own Demographics and Characteristics

 (Teacher Questionnaire: Teacher)

Construct		
Teacher Questionnaire: Teacher		
Basic and Professional Demographics*		
Race, ethnicity, level of education		
Education level, credentials and licensing, years of experience, enrollment in school		
Perceived value of formal education and training		
Classroom Characteristics*		
Number of children- Total and by gender, age, race/ethnicity, limited English proficiency, special needs		
Overall class behavior		
Number of other paid staff and education level of primary teacher assistant		
*All items were adapted from the National Center of Early Development and Learning Study (NCEDL) and the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B)		
Table 2.5: Teacher-Report of Child Functioning (Teacher Questionnaire: Child,		

Teacher Questionnaire – Child         Social Skills and Problem Behaviors		

Problem Behaviors subscales	Social Skills Improvement System	
(i.e., Internalizing, Externalizing)	(SSIS-RS; Gresham & Elliott, 2008)	
Approaches to Learning		
Motivation in school	Preschool Learning Behaviors Scale (ages 2-4 (McDermott et al., 2001); Learning Behaviors Scale (ages 5-17; McDermott et al., 2000)	
Executive Functioning and Temperament		
Effortful control	<i>Child Behavior Questionnaire</i> (Putnam & Rothbart, 2006)	
Quality of Student-Teacher Relationship		
Closeness and conflict	<i>The Student-Teacher Relationship Scale</i> (STRS; Pianta, 2001)	
Quality of Parent-Teacher Relationship		
Quality of the home-school connection	Adapted from the <i>Parent-Teacher Involvement</i> <i>Questionnaire</i> (PTIQ-T; Conduct Problems Prevention Research Group, 1995; age 3- 10)	
Parent Involvement/Expectations		
Parent Involvement	Adapted from the ECLS-K and NCEDL	
Parent's Education Expectations	Teacher's Perception of Parent's Value of Education Subscale from the <i>Parent-Teacher Involvement</i> <i>Questionnaire</i> (PTIQ-T; Conduct Problems Prevention Research Group, 1995; age 3- 10	
Special Services		
Referrals, Individualized Education Plans IEP), special needs, time for special services		

**Social Skills Improvement System-Rating Scale.** The Social Skills Improvement System- Rating System (SSIS-RS; Gresham & Elliot, 1990) is a teacher-report measure on the occurrence and importance of specific social skills and problem behaviors on a four point scale (SSIS-RS; Gresham & Elliott, 2008). The SSIS-RS is a revised version of the Social Skill Rating Scale (SSRS; Gresham & Elliot, 1990). The revised SSIS-RS includes updated national norms, additional subscales (Communication, Engagement, Bullying, and Autism Spectrum), greater overlap across forms, improved psychometric properties, validity scales, and a direct link to interventions. The SSIS-RS was normed on a nationwide sample totaling 4,700 children and adolescents aged 3 through 17 years and demonstrates strong psychometric properties. The SSIS-RS measures the

following social skills: Cooperation (6 items); Assertion (7 items); Responsibility (6 items); Self-control (7 items); Communication (7 items) Empathy (6 items) Engagement (7 items). The scale also measures problem behaviors, including: Externalizing (12 items); Internalizing (7 items); Hyperactivity (7 items); Bullying (5 items); Autism Spectrum (15 items).

**Preschool Learning Behaviors Scale.** The Preschool Learning Behaviors Scale (PLBS) has 29 items, each presenting a specific learning-related behavior (e.g., "Shows a lively interest in the activities," "Has enterprising ideas which often don't work out," "Follows peculiar and inflexible procedures in tackling activities," and "Carries out activities according to own ideas rather than in the accepted way"). The teacher is required to indicate whether the behavior *Most often applies*, *Sometimes applies*, or *Doesn't apply* to describe the child's typical preschool behavior over the past two months. The three subscales are: Motivation, Attention/Persistence, and Attitude Toward Learning. The PLBS was normed among a sample of children age 2 to 17.

**The Child Behavior Questionnaire.** The Child Behavior Questionnaire (CBQ) is an assessment of temperament used among children in early-to-middle childhood. Temperament refers to individual differences in self-regulation and emotional reactivity (Myer & Morris, 2008). The full CBQ includes 195 items with three empirically-derived factors: Negative Affectivity, Surgency Extraversion, and Effortful Control. Scoring is done using a 7-point Likert scale ranging from "extremely untrue of our child" to "extremely true of your child" (Rothbart et al., 2001). Putnam & Rothbart (2006) developed short (94 items) and very short versions (36 items) of the instrument. The three- factor model was confirmed with the short and the very short version of the CBQ. The CBQ was designed for parents; however, some items can be dropped or modified slightly to make them appropriate for teachers. The measure is valid for children age 2 to 10.

**The Student-Teacher Relationship Scale.** The Student-Teacher Relationship Scale (STRS; Pianta, 2001) is one of the most frequently used and empirically-validated measures of teachers' perceived relationship quality with individual children. The STRS identifies three distinct dimensions of teacher-child relationships: closeness, conflict, and dependency. Closeness refers to the degree of warmth and positive affect between the teacher and the child, as well as how comfortable the child is approaching the teacher. Conflict refers to the negativity or lack of rapport between the teacher and child and appears to be the factor most strongly related to child outcomes when teachers' views of the relationship are assessed (Ladd & Burgess, 2001). Lastly, dependency refers to the extent in which the child displays clinginess or possessiveness with the teacher (Mashburn & Pianta, 2006). These constructs conceptually map onto parent-child attachment relationships by focusing on the relation between children's sense of

security with a teacher and their ability to explore the environment (Hamre & Pianta, 2001; Pianta & Nimetz, 1991). The measure has been validated among children age 2 to 10.

**The Parent-Teacher Involvement Questionnaire (PTIQ-T).** The teacher report is a 21-item measure assessing (a) the amount, type, and initiator of contact that occurs between parents and teachers; (b) the quality of the relationship between parent and teacher; (c) the parent's involvement in the child's school; and (d) the teacher's perception of the parent's value of education. The responses are coded on a 5-point scale ranging from 0 (not at all) and 4 (a great deal). The items are valid for children age 3 to 10.

#### Parent Interview Guide: Wave 1

Semi-structured parent interviews supplement the parent surveys by providing insight into why certain Career*Advance*<sup>®</sup> pathways and their various associated exit points may produce better outcomes for some families and children and not others. The individual interview guide was developed to allow for a deeper exploration of the personal narrative of parental survival strategies; reveal the tensions in managing work, school, and family; and (for workforce training and education participants, including Career*Advance*<sup>®</sup> participants) address the program mechanisms in conjunction with family and child dynamics that influence career advancement in the health professions over time.

Major topics covered in the individual interview guide include: (1) the well-being of both parent and child; (2) experiences at CAP; (3) work experiences; (4) educational and training experiences; (5) influences of current or recent educational and training experiences on family roles and parenting; (6) hopes and worries for parent and for child; (7) sources of financial and emotional and social support; and (8) strategies for success and for managing crises. Questions are framed such that they apply to both Career*Advance*<sup>®</sup> participants and the matched-comparison group.

The guide has been updated since its piloting with 13 Cohort 4 parents (6 Career*Advance*<sup>®</sup> participants and seven matched comparison parents) in May 2012 to include the following significant content changes. We added a separate section dedicated to social supports, categorized by types of social supports including emotional, financial, and instrumental, and included specific probes for each type and for individuals or groups of interest. We restructured the current education and training sections to account for the fact that Wave 1 interviews now take place before the beginning of program participation rather than after. These include questions about parents' expectations for the program, their performance, and its possible influence on family roles and dynamics. We also added more specific questions about parents' past
educational experiences and life circumstances at that time in order to better understand their preparation for and orientation toward additional schooling. We included questions about how they felt about the interview experience as well. Other changes involve additional probes for questions that did not yield sufficiently rich data, and the rewording of some questions to encourage more open conversation rather than short answers (for example, "What do you earn at your job?" to add "How do you feel about your earnings at your job?"). We moved some sections to improve interview flow as well (for example, the questions about hopes and worries to later once rapport had been established). Please see Appendix Section 2 for the final Wave 1 interview guide.

#### Focus Group Guides

Focus groups with Family Support staff were conducted to examine their role in selecting and supporting CareerAdvance<sup>®</sup> participation and their view of family strategies. The focus group guide for Family Support staff includes the following topics: (1) the role of Family Support in aiding CAP families; (2) the ways in which Family Support's encourage CareerAdvance<sup>®</sup> participation; and (3) the influence of education and training participation on families. Please see Appendix Section 2 for the Family support focus group guide. We conducted focus groups with current Career Advance® participants to gain a better understanding of the challenges they face in the program and how they are overcome, and to seek participants' suggestions for how to improve the program. Please see Appendix Section 2 for the full Career Advance<sup>®</sup> participant focus group guide. For the first time in December 2012, we conducted a focus group with randomly selected parents in Cohorts 4-6 who had exited the program and a focus group of randomly selected Cohort 4-6 matched comparison parents. Both focus groups explore: (1) CAP experiences; (2) current employment and training; (3) views on balancing family with work and school; and (4) views on how to get ahead economically and in careers. Discussions with CareerAdvance® participants who exit the program also include: (1) reasons for exiting CareerAdvance<sup>®</sup> and how they decided; (2) influence of CareerAdvance® participation on family and community life; and (3) the impact of leaving on the their present and future choices (see Appendix Section 2).

# Section 3: Describing Participants in the CAP Family Life Study

The main goal of the CAP Family Life Study is to inform the Career*Advance*<sup>®</sup> theory of change (described in Section 2) and address the complex and synergistic implications of Career*Advance*<sup>®</sup> for the well-being of children and parents. To answer these questions, the CAP Family Life Study collects data from multiple sources including (1) parent surveys; (2) direct child assessments; (3) teacher surveys; (4) inhome observations; and (5) administrative data. In addition, we draw upon data collected by CAP, including (1) ChildPlus; (2) child assessments (Bracken); (3) observational measures of classroom quality; (4) Career*Advance*<sup>®</sup> progress data; (5) child attendance reports; and (6) participation in other CAP programs (e.g., Incredible Years). Collectively, these data provide a rich dataset to inform our theory of change and address the effect of Career*Advance*<sup>®</sup> on parents and children.

In Year 1, the CAP Family Life Study collected data on Wave 1 Cohort 4. In Year 2, the CAP Family Life Study increased the sample and collected data on Wave 1 Cohort 5 and 6, as well as Wave 2 Cohort 4. The current CAP Family Life Study includes sample of 163 parents and their children in Career*Advance*<sup>®</sup> and the matched comparison group in Cohorts 4-6. By Year 4, the expected sample will be 400-420 parents (Cohort 4-10).

Before answering the main research questions of the CAP Family Life Study with the full sample (Cohort 4-10), it is imperative to better understand the characteristics of the parents and children in the sample. In this section we explore two key areas regarding the sample. First, we check the balance of Career*Advance*<sup>®</sup> and matched comparison families in Cohorts 4-6 to ensure that the matched comparison group closely resembles Career*Advance*<sup>®</sup> participants based on observable characteristics. Achieving balance on these baseline characteristics between Career*Advance*<sup>®</sup> participants and the matched-comparison group is essential in order to make valid inferences on the effects of Career*Advance*<sup>®</sup>.

Second, we present baseline characteristics of Cohort 4-6 participants. Baseline characteristics are categorized in seven key domains: (1) individual and family context; (2) parents' psychosocial and executive functioning skills; (3) parenting and home environment; (4) children's characteristics and development; (5) early childhood education and care experiences; (6) education and career development; and (7) earnings and participation in public benefit programs. Baseline characteristics for Cohorts 4-6 are presented to contextualize the study. Understanding baseline characteristics for each cohort also is essential for future aggregate analysis across all cohorts.

Researchers at Northwestern analyzed the baseline characteristics for the first six domains and researchers at the University of Texas analyzed employment, earnings, and benefit receipt to address the seventh domain.

# Checking Balance between Career*Advance®* Participants and the Matched Comparison Group

In the following section, we check the balance on baseline characteristics from CAP's data set (ChildPlus) that were used to generate the matched comparison group. We then check the balance against survey data directly collected from the parents themselves. We selected the matched comparison group for Career*Advance*<sup>®</sup> participants from a pool of CAP Families. CAP families were eligible for the matched comparison group based on the following criteria:

- 1. Child was enrolled in CAP's early childhood education programs
- 2. Parent was not in Career Advance® in previous cohorts
- 3. Parent filled out an Education Supplemental Survey as part of CAP's Family Needs Assessment
- 4. Parent had key demographic data in ChildPlus (e.g., race, education level, and income)

Table 3.1 presents the demographic and background information on all CAP families who were eligible to be selected for the matched comparison group (n=839) and Cohort 4-6 Career*Advance*<sup>®</sup> participants (n=79). The main reason parents were not eligible for matched comparison selection was due to parents not having an Education Supplemental Survey. Results are based on data from the ChildPlus data system maintained by CAP. The data in ChildPlus are collected when the parent first enrolls his or her child in CAP and are only updated when the parent needs to re-qualify for the program, for example when moving form Early Head Start to Head Start. Table 3.1 presents the means, standard deviations, standardized differences and variances between the two groups. The standardized difference is the mean difference as a percentage of the average standard deviation. A score that is less than 0.3 is considered excellent. The variance is ratio of the variance between the two groups for each item and should range from 0.5-2.0.

As presented in Table 3.1, paired t-tests and standardized difference scores suggest that there are differences between CAP families and Career*Advance*<sup>®</sup> families for several characteristics, including parent age, household income, neighborhood, and child age. For instance, Career*Advance*<sup>®</sup> parents appear to have higher levels of education compared to all CAP parents who were eligible to be selected for the matched comparison group, based on the criteria presented above. Perhaps most importantly, eligible CAP parents as a whole have significantly lower motivation to improve their education and training and join the health care field. A failure to identify a

comparison group that does not account for the differences between Career*Advance*<sup>®</sup> participants and eligible families in CAP would likely result in upwardly biased estimates of the effects of Career*Advance*<sup>®</sup>.

CAP Families diff	lance
N 839 79	
Parent	
Female (%) 92 96 -0.10	0.69
Age 29.42 (7.28) 30.33 (7.16) 0.34	0.98
Motivation and interest in	
education and training	
(range 1-5) 2.93 (1.35)*** 4.11 (0.42) 1.26	0.31
Race/Ethnicity (%)	
White 32 32 0.00	1.01
African American 41 41 0.00	1.01
Hispanic 10 14 0.06	1.14
Other 17 14 -0.06	0.92
Education (%)	
Less than high school 19 16 -0.04	0.95
12 <sup>th</sup> grade/	
High School/GED 57 54 -0.03	1.01
Adv. Training 13 14 0.02	1.05
Adv. Degree 10 10 .00	1.02
Relationship (%)	
Natural/Step 97 96 -0.02	1.13
Foster/Legal guardian 1 0.01	1.24
Grandparent 2 3 0.03	1.28
Custodv~ (%)	
No Custody 0 -0.02	0
Shared 3 0 -0.10	0
Yes 97 1 0.11	0
English Primary 90 91 0.02	0.95
English Proficiency ~ (%)	
None 4 3 -0.03	0.82
Little 3 1 -0.05	1.09
Some 12 16 -0.08	0
Proficient 81 80 0.02	1.03

Table 3.1: Comparisons of Baseline Characteristics between All Eligible CAPFamilies (n=839) and Cohort 4-6 CareerAdvance<sup>®</sup> Families (n=79)

Employed~ (%)				
Full-time & Training	0	1	0.05	0
Full-time	31	31	-0.01	1.00
Training or School	13	14	0.02	1.05
Part-time	14	12	-0.03	0.94
Family				
Incomo	13404.73	13978.02		
Income	(12502.55)	(13135.44)	5.12	1.05
No. in household	3.90	4.11	0.16	1.04
No. immediate family	3.80	3.87	0.06	0.88
No. children	2.31	2.28	-0.03	1.07
Child~				
Boy (%)	53	57	0.07	1.00
Age	7.41*	8.73	0.57	1.30
CAP ECP Neighborhood ~ (%)				
1	48	44	-0.05	1.00
2	41	35	-0.09	0.98
3	10	18	0.12	1.25
4	0*	3	0.07	3.24

Data Source=ChildPlus

~ Variable had missing data in the matched comparison group

\**p*<.05 \*\* *p*<.01 \*\*\**p*<.005

In order to account for the potentially non-random selection of participants in Career*Advance*<sup>®</sup>, we employed propensity score matching to identify pairs of families who are statistically indistinguishable on all characteristics and behaviors except for the fact that one parent is enrolled in Career*Advance*<sup>®</sup> and one is not. We used data from ChildPlus to conduct the matching. In Table 3.2, we check the balance between the Career*Advance*<sup>®</sup> participants in Cohorts 4-6 (n=84) and the matched comparison group (n=79).

Overall, the Career*Advance*<sup>®</sup> and matched comparison groups appear to be relatively well-balanced in terms of their observable characteristics in the ChildPlus dataset. For nearly all matching characteristics, the standardized difference for each of the covariates after matching is smaller than before matching. The only exception is respondent age which has a slightly larger standardized difference after matching (0.75) compared to before matching (0.34). The standardized difference substantially dropped for income after matching from 5.12 before matching (which indicates a large difference between the two groups) to 0.40 after matching.

All other mean-level differences between Career*Advance*<sup>®</sup> and matched comparison families are within the acceptable range, meaning they are not significant. Perhaps most importantly, the variable that captures motivation to participate in an

education and training program is similar among Career*Advance*<sup>®</sup> participants and the matched comparison group, and the standardized difference is within the acceptable range (0.15) and is no longer statistically significant between the matched comparison and Career*Advance*<sup>®</sup> groups. The motivation score represents an innovation in the CAP Family Life Study, as most quasi-experimental studies do not observe this characteristic, and therefore can't control for it in the matched comparison group. By making motivation an observable characteristic, we are able to select matched comparison group that resembles the participant group even more closely, thus increasing the quality of our evaluation.

		Matched Comparison	CareerAdvance <sup>®</sup>	Stand diff	Variance
		n=84	n=79		
Parent					
	Female	98	96	0.03	1.25
	(%)				
	Age	28.40 (6.12)	30.33 (7.16)	0.75	1.17
	Motivation and interest in	4.00 (0.78)	4.11 (0.42)	0.15	0.53
	education and training <i>Race/Ethnicity (%)</i>				
	White	32	32	-0.01	1.00
	African American	44	41	-0.05	0.99
	Hispanic	12	14	0.03	1.06
	Other	12	14	0.03	1.06
	Education (%)				
	Less than high school	18	16	-0.02	0.97
	12th grade/High School/GED	64	54	-0.14	1.04
	Adv. Training	12	14	0.03	1.07
	Adv. Degree	6	10	0.08	1.28
	Relationship (%)				
	Natural/Step	96	96	-0.01	1.03
	Foster/Legal guardian	0	1	0.05	0
	Grandparent	2	3	0.00	1.02
	Custody~ (%)				
	No Custody	0	0	0	0
	Shared	3	0	-0.12	0
	Yes	96	1	0.12	0

Table 3.2: Comparisons of Baseline Characteristics between MatchedComparison Families (n=84) and Cohort 4-6 Career Advance<sup>®</sup> Families (n=79)

	English Primary (%) English Proficiency (%)	92	91	-0.01	1.03
	None	1	3	0.04	1.45
	Little	4	1	-0.06	0.60
	Some	6*	16	0.19	1.57
	Proficient	89	79	-0.15	1.29
	Employed~ (%)				
	Full-time & Training	0	1	0.05	0
	Full-time	30	29	0.00	1.00
	Training or School	12	15	0.06	1.11
	Part-time	13	12	-0.03	0.95
Family					
,	Income	14022.45	13978.02	-0.40	1.13
		(11658.24)	(13135.44)		
	No. in household~	3.88	4.12	0.18	1.09
	No. immediate family~	3.80	3.87	0.06	0.97
	No. children	2.30	2.28	-0.02	1.17
Child~					
	Boy	54	57	0.04	0.99
	(%)				
	Age	6.90*	8.73	0.80	1.31
CAP EC	P Neighborhood ~ (%)				
	1	46	44	-0.03	0.99
	2	37	35	-0.02	0.99
	3	17	18	0.02	1.03
	4	0	3	0.09	0

Data Source=ChildPlus

~ Variable had missing data in the matched comparison group

\**p*<.05 \*\* *p*<.01 \*\*\**p*<.005

We then checked the balance between the matched comparison and Career*Advance*<sup>®</sup> families using data from the Wave 1 CAP Family Life Study Survey. This is important because it allows us to cross-check the balance in the ChildPlus data with an independently collected data source. Table 3.3 presents the similar baseline characteristics that were used to conduct the matching with ChildPlus data. The variables are constructed in a similar way as they were in ChildPlus.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> The only exception is household income and education. The CAP Family Life Study survey did not collect household income in exact dollar amounts. Instead, categories of income, including earnings, public assistance, and child support, were collected and used to create income-to-needs ratios, which are presented in Table 3. For education, we collected information on Technical Certificates, which was not collected in ChildPlus.

		Matched		Stand	Variance
		Comparison	<i>CareerAdvance</i> <sup>®</sup>	diff	
Ν		84	79		
Parent					
Female					0.84
(%)		97	97	-0.03	
Age		28.52 (6.03)	30.48 (7.14)	0.76	1.18
Race/Et	hnicity (%)				
	White	31	28	-0.05	0.97
	African American	40	41	0.00	1.00
	Latino	14	23	0.14	1.20
	American Indian	7	8	0.01	1.03
	Other	10	10	0.01	1.03
Educatio	on (%)				
	Less than high school	16	6	-0.15	0.70
	High School/GED	46	59	0.19	0.98
	Tech. cert or AA	36	32	-0.06	0.97
	BA	2	3	0.00	1.03
Relation	ship (%)				
	Natural/Step	96	0.90	-0.13	1.62
	Foster/Legal guardian	0	0.01	0.05	
	Grandparent	2	0.03	0.00	1.03
English	Primary	0.92	0.90	-0.03	1.09
English	Proficiency				
	None	0.00	0.00	0	
	Little	0.01	0.00	-0.05	0
	Some	0.04	0.05	0.03	1.18
	Proficient	0.95	0.95	-0.01	1.03
Employe	ed				
	Full-time	0.48**	0.26	-0.32	.88
	Part-time	0.06	0.09	0.06	1.22
	Not employed	0.46*	0.65	0.26	0.96
Family					
Income-	to-needs ratio	0.97 (0.55)	1.22(0.70)	0.31	1.28
No. in ho	ousehold	4.37	4.25	-0.10	1.09
No. chilo	dren in house <18	2.38	2.28	-0.09	1.04
Child					

# Table 3.3: Comparisons of Baseline Characteristics between MatchedComparison Families (n=84) and Cohort 4-6 Career Advance<sup>®</sup> Families (n=79)

Воу	0.51	0.54	0.05	1.00
Age	3.76 (1.09)	4.03 (1.12)	0.25	1.02
<b>D</b> ( <b>D</b>				

Data Source= CAP Family Life Study Parent Survey

Results suggest that the Career*Advance*<sup>®</sup> and matched-comparison families are relatively well-balanced in terms of their observable characteristics in the Wave 1 parent survey. Comparisons between Table 3.2 and Table 3.3 suggest a few discrepancies between results from ChildPlus and the Wave 1 CAP Family Life Study Survey, particularly in terms of variables that may change over time. For instance, Career*Advance*<sup>®</sup> families appear to have lower rates of full-time employment compared to the matched comparison group in the parent survey data, but not in ChildPlus. The difference between ChildPlus and Career*Advance*<sup>®</sup> estimates of employment may occur because employment varies over time, and the ChildPlus and the CAP Family Life Study were collected at different points. There is also the potential that Career*Advance*<sup>®</sup> participants changed their employment status right around the time they entered the program, which is the same time the Wave 1 parent surveys were collected. More complete employment information is presented later in this section.

Overall, results from ChildPlus and the survey data indicate that the matched comparison group is relatively well matched to Cohort 4-6 Career*Advance*<sup>®</sup> participants. All standardized difference percentages are within the acceptable range, with the exception of income-to-needs, parent age, and full-time employment. This is noteworthy and central to the success of the CAP Family Life Study.

# Baseline Characteristics of Career*Advance*<sup>®</sup> Cohort 4-6 and Matched Comparison Families

The following section presents baseline characteristics of Cohort 4-6 respondents— including 79 Career*Advance*<sup>®</sup> and 84 matched comparison families— for a total sample of 163. The CAP Family Life Study aims to inform the theory of change and to address the dynamic relationship among seven domains for children and parents:

- 1. *Individual and family context:* Parent age, gender, race/ethnicity, relationship status, number of children, number in household, household income, income-to-needs ratio, and relationship status (*source=parent survey*)
- Parents' psychosocial and executive functioning skills: Impulsivity, applied cognition, optimism, perceived stress, conscientiousness, self-esteem, psychological distress, and goal efficacy (source=parent survey)
- 3. *Parenting and home environment*: Parenting skills, beliefs and stress, participation in parenting classes offered by CAP, parent engagement in child's

school/classroom, and the home environment (*source=parent survey, CAP, teacher survey, in-home observations*)

- 4. Children's characteristics and development: Child age, gender, race/ethnicity, relationship between adult respondent and child, who child lives with, children's basic numeracy and literacy skills, math skills, language skills, executive functioning and effortful control, and children's internal representations and appraisals (source= parent survey and direct child assessments)
- 5. *Early childhood education and care experiences:* Dosage of CAP, attendance, classroom quality, and preschool teacher characteristics (*source=teacher survey and CAP*)
- 6. *Parents' education and career development:* Level of education, employment status, number of jobs, and hours worked per week (*source=parent survey*)
- 7. *Earnings and participation in public benefit programs:* Employment, earnings, and benefit receipt patterns (*source=administrative data*)

In the following section, we present baseline characteristics for parents and children across these seven domains. These domains are distinct from the eight outcome questions presented in Section 1.

# 1. Individual characteristics and family context

All study respondents answered the individual and family context questions (n=163) unless otherwise noted. Table 3.4 presents basic demographic characteristics of adult respondents. Overall, respondents in the CAP Family Life Study are approximately 30 years-old (range 19 to 56). The average age of CAP Family Life Study parents is slightly older than the average age of the eligible CAP parent population eligible for selection to the matched comparison group (see Table 1).

There are two males in Career*Advance*<sup>®</sup> (and two in the matched comparison group), indicating that men are underrepresented in Career*Advance*<sup>®</sup>. The race/ethnicity of respondents is fairly mixed, with the largest percentages of respondents African American (40%; n=66) and White (29%; n=66). The remainder of the respondents are American Indian, Eskimo, or Aleut (7%; n=12), other race/ethnicity (12%; n=20), or Latino (10%; n=16). Almost all of the respondents reported being born in the United States (94%; n=154).

		Cohort 4	Cohort 5	Cohort 6	Total
		n=60	n=48	n=55	n=163
Adult ag	e	29.70(7.20)	29.96(7.01)	28.80(5.67)	29.47(6.64)
Male (%)	)	3	4	2	3
Hispanic	or Latino origin (%)	15	21	20	18
Adult rad	ce/ethnicity (%)				
	White	37	21	29	29
	Black/African	37	41	44	40
	American				
	American Indian	10	6	5	7
	Latino	7	6	16	10
	Other/Two or more	10 <sup>b</sup>	25	5	13
	races/ethnicities				
Country	of origin (%)				
-	United States	95	92	97	94
	Mexico	3	8	4	5
	European Country	2	0	0	1

Table 3.4: Adult Respondents' Characteristics at Wave 1, Cohorts 4-6 (N=163)

Note: Standard Deviation is presented in parentheses

Household characteristics at Wave 1 are used to understand the family context of Cohorts 4-6 as well as to determine financial well-being (see Table 3.5). On average, there are four people per household with two children under age 18 living in the home. We use poverty thresholds in the U.S. Census to create a categorical measure for the household's income-to-poverty ratio. We divide the total household income by the poverty line, which is determined by the number of people living in the household, and number of children under age 18. The average income-to-poverty ratio is 1.13 for families, meaning that the average family in the CAP Family Life Study sample is living at or near the poverty line. Notably, eligibility for Early Head Start/Head Start includes foster child status regardless of family income. Families above the poverty line may have qualified for the Oklahoma Early Childhood Program<sup>3</sup>, which sets eligibility at less than 185% of the poverty level.

We also categorize the income-to-poverty ratio based on the following classifications: (1) poor or below the poverty line (income-to-poverty ratio is less than one); (2) near-poor/low-income; 101-199 percent above the poverty line (income-to-needs ratio is between one and two); and (3) above poverty; family's income is more than twice the poverty line (income-to-needs is greater than two). Over half of the respondents in the CAP Family Life Study are considered poor (n=84), followed by 38%

<sup>&</sup>lt;sup>3</sup> CAP provides services through the Oklahoma Early Childhood Program in addition to Head Start and Early Head Start

who are near/poor low income (n=62), and 10% (n=17) who are above the poverty line. This indicates that almost all respondents are living in or near poverty.

	Cohort 4	Cohort 5	Cohort 6	Total
	n=60	n=48	n=55	n=163
Household size	4.20(1.20)	4.54(1.36)	4.23(1.36)	4.31(1.40)
Children who live in the home (under 18)	2.23(1.06)	2.56(1.35)	2.24(1.20)	2.27(1.06)
Income-to-needs	1.17(0.74)	1.04(0.54)	1.04(0.59)	1.13(0.73)
Poverty status (%)				
Poor	50	52	53	52
Near poor/ low-income	35	42	38	38
Above poverty line	15	6	9	10

Table 3.5: Household Characteristics at Wave 1, Cohorts 4-6 (n=163) (withStandard Deviations in Parentheses)

Note: No significant mean differences among cohorts.

Standard Deviations are presented in parentheses.

The Wave 1 CAP Family Life Study Survey also asked a series of questions related to respondents' relationship status and their partners' characteristics (see Table 3.6). Sixty-five percent of the respondents in the CAP Family Life Study are either married or in a steady romantic relationship (n=106). The remainder are single (n=44), or in an on-again/off-again relationship (n=13). It appears that respondents' education level is somewhat higher than their spouses. For instance, 75% of partners have a highest level of education of a high school degree or less compared to 53% of respondents.

Table 3.6: Respondents'	Relationship Status and Education Level of Partners at
Wave 1, Cohorts 4-6	

	Cohort 4	Cohort 5	Cohort 6	Total
	%	%	%	%
Relationship Status (n=163)				
Married	35	35	33	34
Steady romantic relationship	36	25	29	31
On-again/ off-again relationship	7	8	9	8
Single and not in a relationship	22	31	29	27

Highest level of education of					
spouse/partner (n=95)					
Less than high school	3	0	3	2	
GED	14	20	24	19	
High school	58	56	52	56	
Tech certificate/AA	22	20	18	20	
BA or above	3	4	3	3	

Note: No significant mean differences among cohorts.

#### 2. Parents' psychosocial and executive functioning skills

A total of nine psychological measures were administered to respondents in the parent survey. For future analysis, psychological measures may be considered outcomes or help to explain processes by which participation in Career*Advance*<sup>®</sup> may or may not relate to other parent and child outcomes. Descriptive statistics for Cohorts 4-6 are provided in Table 3.7 for each measure. Averages within each cohort for each measure are presented in Table 3.8 followed by a description of each measure.

	Cohorts 4-6					
Measure	Measure Range	Mean	SD	Min	Max	n
Impulsivity	1 - 4	1.93	0.28	1.08	2.58	55*
Applied Cognition	4 - 32	27.49	3.58	16.00	32.00	55*
Optimism	0 - 24	16.22	3.67	3.00	24.00	159
Perceived Stress	0 - 40	15.81	6.60	2.00	37.00	161
Conscientiousness	0 - 50	41.22	5.56	25.00	50.00	162
Self Esteem	0 - 30	22.63	3.79	7.00	29.00	158
Psychological Distress	0 - 24	6.54	3.68	0.00	20.00	160
Goal Efficacy	1 - 4	3.15	0.44	2.00	4.00	161

Table 3.7: Descriptives for Psychosocial and Executive Functioning Measures(Cohorts 4-6)

Note: The Impulsivity and Applied Cognition measures of parents' executive functioning skills were added to the survey instrument after it had been administered to Cohorts 4 and 5, and thus was administered to fewer respondents.

	Coh (n=	ort 4 =60)	Coho (n=4	rt 5 8)	Coho (n=6	rt 6 0)
Measure	Mean	SD	Mean	SD	Mean	SD
Impulsivity	N/A		N/A		1.93	0.28
Applied Cognition	N/A		N/A		27.49	3.58
Optimism	8.80	2.23	8.83	1.93	8.77	2.41
Perceived Stress	15.87	6.44	14.91	6.91	16.54	6.48
Conscientiousness	40.83	5.00	41.41	6.20	41.47	5.59
Self Esteem	22.70	4.20	22.76	3.46	22.40	3.64
Psychological Distress	6.51	4.00	6.76	3.47	6.43	3.56
Goal Efficacy	3.18	0.40	3.13	0.42	3.13	0.48

Table 3.8: Descriptives for All Psychological Measures by Cohort (4-6)

Note: Some scales are missing cases.

On average, respondents scored above the midpoint for all measures that assess positive outcomes, and below the midpoint for all scales that assess negative outcomes. Each measure that was selected has demonstrated strong psychometric properties and has been shown to be related to parent and/or child outcomes. We describe each of the measures and its relevance below. Future work will compare these results to national samples.

<u>Impulsivity</u>: Impulsivity was measured using 12 items from Dickman's (1990) 23item impulsivity scale. Higher scores represent higher levels of dysfunctional impulsivity. These items assess dysfunctional impulsivity in specific, which is associated with a dislike of jobs requiring careful work and of planning ahead. Zilanawala and Pilkauskas (2012) found that maternal impulsivity was strongly associated with lower positive behavior among their five year-old children and higher aggressive, withdrawn, and anxious/depressed scores. Woldoff and Cina (2007) found that fathers with impulsive personalities were less engaged with their 12-18month-old children.

<u>Applied Cognition:</u> The applied cognition measure assesses respondents' perceived difficulties in applying mental function related to planning, organizing, calculating, and working with memory and learning. Higher scores indicate higher functioning in the realm of applied cognition. We used a modified version of the 8-item Applied Cognition – Executive Functioning short-form (Cella et al., 2012) derived from the Neuro-QOL. Difficulties in applied cognition have been associated with poor academic outcomes in children.

<u>Optimism:</u> Optimism was measured using the 10-item Revised Life Orientation Test (LOT-R; Scheier, Carver, & Bridges, 1994). Higher scores indicate higher

levels of optimism. The LOT-R was designed to assess individual differences in generalized optimism versus pessimism. Optimism is positively associated with career planning and exploration, confidence about career decisions, and making career-related goals in high school students (Creed et al., 2002).

<u>Perceived Stress:</u> Participants' perceived stress was measured using the 10-item Perceived Stress Scale (PSS; Cohen & Williamson, 1988). The PSS measures the degree to which situations in the participants' lives are appraised as stressful. Higher scores indicate higher levels of perceived stress. We included this scale in order to measure potential increases or decreases in participants' stress levels, as a result of program participation and resultant family, work, and life changes. Flores et al. (2008) found that perceived stress predicted depression and poorer general health in Mexican-origin parents.

<u>Conscientiousness</u>: We measured conscientiousness using Goldberg's AB5C 10item scale (Goldberg, 1999). This scale taps mainly into the structures of industriousness and orderliness, which we consider the most relevant to our study as they address the propensity to work hard and to be organized - two features that may play a role in successful program completion and job success, and balancing of school/work and family responsibilities. Higher scores represent higher levels of conscientiousness. Conscientiousness in middle-income adults has been found to predict later job satisfaction and income (Judge et al., 1999).

<u>Self-Esteem:</u> Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1989). The scale measures both positive and negative self-concepts. The RSE is associated with higher psychological wellbeing and lower depression in all age groups (Rosenberg et al., 1995), and is thus a good predictor of adjustment. Chase-Lansdale et al. (2010) found employment-related effects on the self-esteem levels of low-income mothers.

<u>Psychological Distress:</u> Psychological distress (non-specific) was measured using the Kessler 6 scale (K6; Kessler et al., 2002). We included this measure of less severe psychological disorder because it is more common in community respondents, such as those in our sample, but are often undetected by measures of severe disorders. Higher scores indicate higher levels of psychological distress. Yoshikawa et al. (2008) found that psychological distress in low-income mothers was negatively associated with several measures of cognitive development in their 24-month-old infants. In our sample, 7.4% of respondents scored above the midpoint of the scale, denoting severe psychological distress, compared with 3% in a large representative sample from the 2003 National Health Interview Surveys (NHIS). <u>Goal Efficacy:</u> Goal Efficacy was measured using the State Hope Scale (Snyder et al., 1996), which assesses hope about achieving goals. Huston et al. (2001) found that low-income adults who participated in the employment demonstration program "New Hope" showed significantly higher levels of goal efficacy than did control group participants two years after the intervention.

# 3. Parenting and home environment

We assessed parenting skills and beliefs, parent involvement, and the quality of the home environment through the parent survey, CAP data, teacher surveys, and inhome observations. In the parent survey, three constructs of parenting skills and beliefs were assessed:

<u>Parenting Skills and Beliefs.</u> Respondents' parenting styles and behaviors were assessed using a shortened 25-item version of the Alabama Parenting Questionnaire (APQ; Frick, 1991) developed by Cowan et al. (2009). The APQ assesses six parenting constructs: Parent Involvement, Positive Parenting, Poor Monitoring/Supervision, Inconsistent Discipline, Corporal Punishment, and Other Discipline. Following the work of Cowan et al. (2009), we supplemented this measure with seven items from the Adult-Adolescent Parenting Inventory (AAPI; Bavolek, 1984) to assess parents' belief in harsh punishment with children. A shorter version of the APQ demonstrated validity in differentiating parents of children with disruptive behavioral disorders and parents of children without such disorders (Elgar et al., 2007).

<u>Parenting Stress.</u> Parenting stress was assessed using four items from the Aggravation in Parenting Questionnaire used in studies of low-income families. Parenting stress generally refers "to a condition or feeling experienced when a parent perceives that the demands associated with parenting exceed the personal and social resources available to meet those demands" (Cooper et al., 2009, p. 559). A number of studies have found that mothers who experience high levels of parenting-related stress report greater psychological distress and lower life satisfaction. Parenting stress is also associated with less optimal parenting, lower levels of developmental competence in children, and disrupted family systems.

	Cohorts 4-6							
Measure	Measure Range	Mean	SD	Min	Max	n		
Positive parenting skills <sup>i</sup>	1 - 5	3.58	0.28	2.80	4.44	159		
Harsh punishment beliefs <sup>ii</sup>	1 - 5	3.24	0.70	1.57	4.86	161		
Parenting Stress <sup>iii</sup>	0 - 12	4.85	2.32	0.00	12.00	160		

# Table 3.9: Descriptives for Parenting Skills, Beliefs and Stress (Cohorts 4-6)

<sup>i</sup> higher scores indicate more positive parenting

<sup>ii</sup> higher scores indicate less harsh beliefs about punishment (more positive parenting)

<sup>iii</sup> hiaher scores indicate hiaher levels of parentina stress

· · ·	Cabor	± 4	Cohort E		Cohort 6	
	Conor	τ4	Conort 5		Conort 6	
Measure	Mean	SD	Mean	SD	Mean	SD
Positive parenting skills	3.55	0.28	3.60	0.25	3.60	0.31
Harsh punishment beliefs	3.18	0.70	3.25	0.59	3.30	0.70
Parenting Stress	4.68	2.15	4.80	2.41	5.07	2.43

 Table 3.10: Descriptives for Parenting Skills, Beliefs and Stress by Individual (Cohorts 4-6)

Results suggest that respondents have relatively positive beliefs and skills. For instance, a three or four on the positive parenting scale indicates that the parent participates in positive parenting activities fairly or very often. Parents also appear to have some degree of perceived parenting stress. For example, almost 70% of the parents felt that being a parent was harder than they expected it to be and over 50% feel tired or exhausted from raising a family (items in the parenting stress scale). Future work will compare these results to national samples to better understand participants' responses.

We also examined the extent to which CAP Family Life Study respondents participated in parenting programs, either Incredible Years or Abriendo Puertas, offered by CAP. These parenting programs focus on strengthening parenting skills and fostering parents' involvement in children's development. To date, 19 parents in the CAP Family Life Study have completed Incredible Years and Abriendo Puerta (Cohort 4=8; Cohort 5=2; Cohort 6=6). This participation has important implications for data analysis when considering the effect of Career*Advance*<sup>®</sup> and on parenting practices and child outcomes in the context of participating in these parenting programs.

Teachers reported on parents' practices and involvement in children's classrooms and schools in a teacher survey that was administered for Cohort 5 (Spring 2012) and Cohort 6 (Fall 2012). Parent specific constructs included parent engagement (adapted from the ECLS-K and Multistate NCEDL study questionnaires), the quality of the parent-teacher relationship (adapted from the ECLS-K and Multistate NCEDL study questionnaires), and parent's educational expectations for their child (Adapted from the Parent-Teacher Involvement Questionnaire PTIQ-T; Conduct Problems Prevention Research Group, 1995; age 3- 10).

Table 3.11 presents information on parents' level of engagement in their child's center. A list of 10 activities was provided on the survey and CAP teachers were asked to indicate whether and how often parents/guardians participated. Results indicate that there was variation across types of activities in the percentage of parents participating. According to teachers, nearly all study parents participated in a regularly scheduled

parent-teacher conference. However, few parents were involved in leadership, planning, or fundraising activities for the classroom.

Table 3.11: Percentage of Parents/Guardians	Who Engaged in Various Center
Activities	

	Wave 2 Cohort 4
Parent Involvement Activity	%
Went to a regularly scheduled parent-teacher conference or meeting (scheduled by center)?	98.1
Supported their child at home with curriculum-related activities?	90.4
On a weekly basis	40.0
On a daily basis	25.0
Attended an open house or back-to-school night at the classroom?	78.8
Attended classroom events (e.g., family nights, a play, or concert)?	65.4
Acted as a volunteer in the classroom or served on a committee?	46.2
Attended or helped supervise a field trip organized by the classroom?	25.0
Scheduled a parent-teacher conference or meeting with you ( <i>initiated by parent</i> )?	17.3
Assumed a leadership role in the classroom?	11.5
Participated in <i>planning</i> classroom activities and/or field trips with you?	11.5

Note. The percentages who did <u>not</u> participate include cases where the activity was not offered.

There was also variation across parents in the frequency with which they engage in these activities. While 90% of parents (according to teachers) supported their child at home with curriculum-related activities, only 25% of parents did so on a daily basis and only 40% of parents did so at least weekly.

In Wave 2, we collected data on the home environment through in-home observations conducted by interviewers. The home observation used items from the Home Observation for Measurement of the Environment (HOME; Caldwell & Bradley, 1984), a frequently used measure to assess the physical safety and the environment of the home. In addition, the in-home observation included a question on home cleanliness. The cleanliness item was added due to the past evidence that suggests a strong relation between the cleanliness rating of parents home and short- and long-term outcomes for children (Dunifon, Duncan, & Brooks-Gunn, 2001).

Table 3.12 presents Wave 2 data for Cohort 4. Results indicate that 25% of homes were unsafe and almost 40% of the homes were dark or monotonous based on the interviewers' opinion. Over 40% of the homes were uncluttered and very clean. Future reports will use items from the Wave 2 parent survey and the HOME checklist to create a cognitive stimulation subscale, which focuses on cognitive stimulation in both the parent-child relationship and the home's physical environment.

	Cohort 4 (n=21)
Measure	%
Home is safe? (% yes)	76
Home is dark or perpetually monotonous? ( <i>% yes)</i>	38
How cluttered is home? (%) <sup>i</sup>	
Cluttered	28
Somewhat/minimally cluttered	29
Uncluttered	43
How clean is home? (%) <sup>i</sup>	
Dirty	24
So-so/clean	23
Very clean	43

Table 3.12: Observation of HOME Environment, Wave 2 Cohort 4 (n=21)

<sup>1</sup>Categories collapsed due to small sample size

#### 4. Children's characteristics and development

Children's characteristics and development are key components in the theory of change for both parents in Career*Advance*<sup>®</sup> and their children. In terms of children's characteristics, the Wave 1 Family Life Study Survey asked parents a series of questions about their oldest child who attended CAP. In the case that a family had twins, respondents determined the child who was born first. Basic characteristics of the

target child are presented in Table 3.13. Although CAP serves infants, toddlers and preschoolers, almost all target children are in preschool. The average age of the target child in the Family Life Study is 3.89 years, with a range from 27 months to six years. The race/ethnicity of the children closely matches that of the adults.

		- ,		-1
	Cohort 4	Cohort 5	Cohort 6	Total
	n=60	n=48	n=55	n=163
Child age	3.68(1.23)	3.92(1.11)	4.09(0.94)	3.89(1.11)
Boy (%)	63	42	51	53
Hispanic or Latino origin (%)	12	29	34	25
Child race/ethnicity (%)				
White	30	15	20	22
Black/African	33	46	38	38
American				
Latino	7 <sup>c</sup>	7	20	11
American Indian	10	4	4	6
Other/ Two or more races/ethnicities	20	29	18	22

 Table 3.13: Children's Characteristics at Wave 1, Cohorts 4-6 (n=163)

Table 3.14 presents the relationship between respondents and the target child. Almost all of the adults are the biological mothers, and almost all children live with biological mother during the week (88%; n=52). The remaining adults are grandparents, biological fathers, or legal guardians. Results indicate that the CAP Family Study respondents are typically the primary caregivers of the target child.

Table 3.14. Relationship between Respondents and Target Onita, Conorts 4.0					
	Cohort 4	Cohort	Cohort		
		5	6	Total	
	n=60	n=48	n=55	n=163	
Adult relationship to child (%)					
Mother	87	94	100	93	
biological/adoptive/step)					
Father	2	0	0	1	
(biological/adoptive/step)					
Foster parent or Legal	3	4	0	2	
Guardian					
Grandparent	8	2	0	4	

Table 3.14: Relationship between Respondents and Target Child, Cohorts 4-6

Who child lives with for most of the					
week (%)					
Mother	87	96	100	94	
(biological/adoptive/step)					
Father (biological/adoptive/step)	3	2	0	2	
Foster parent or Legal Guardian	2	0	0	4	
Grandparent	8	2	0 <sup>a</sup>	1	

Direct child assessments were used to capture children's development and functioning across multiple domains. Figure 3.1 presents the five main constructs assessed in the CAP Family Life Study: (1) basic academic skills; (2) math skills; (3) language skills; (4) executive functioning and effortful control; and (5) children's internal representations. We present preliminary data for each of these constructs below.

Figure 3.1: Direct Child Assessments in the CAP Family Life Study: Main Constructs



The administration of direct child assessments varied based on age of child, cohort, and wave. In this report, we present baseline, Wave 1 data on children's basic academic skills (Bracken) for Cohorts 4-5<sup>4</sup>; Math (WJ-III), Language,( PPVT-IV), and Executive Functioning (Pencil Tap) skills for Cohort 5 and 6 (not administered to Cohort 4 at baseline). In addition, we present Wave 2 data on children's effortful control (gift task) and internal representations (puppet interview) for Cohort 4 because these measures were not administered at Wave 1.

<sup>&</sup>lt;sup>4</sup> Bracken assessments are not yet available for Cohort 6

# **Basic Academic Skills**

All children in CAP were assessed with the Bracken School Readiness Scale in the fall of 2011. The Bracken assesses children's knowledge of color, letter identification, number/counting, comparisons, and shape recognition. We present findings on Cohort 4 and 5<sup>5</sup>. In Cohort 4, 36 children were administered the Bracken and in Cohort 5, 35 children have Bracken scores. Children's Bracken scores may be missing for a number of reasons including: (1) the child no longer attends CAP because he/she is too old; (2) the child is in the infant/toddler program at CAP and is too young for the Bracken; (3) the child had multiple absences, including absences during the testing session or make-up attempt; or (4) the child attends an Educare program.<sup>6</sup>

Table 3.15 presents the average Bracken score among children in the CAP Family Life Study, all children in CAP's Head Start programs, and national norms. The average national Bracken score is 100 with a standard deviation of 15. CAP's Bracken scores are standardized in order to make them comparable to national norms. In fall 2011, children in the CAP Family Life Study have an average score of 97.16. In spring 2011, children had an average score of 98.4, which is close to the national mean average of 100.

Table 3.15: Children in the CAP Family Life Study and All CAP Children's BrackenScore, Wave 1 (Cohort 4 & 5)

	Cohort 4-5 Fall 2011	Cohort 4-5 Spring 2012	Total CAP* Fall 2011	Total CAP Spring 2012	National Average
	n=70	n=71	n=965	n=965	
Individual child Bracken score	92.95 (16.25)	98.42 (16.04)	87.0	94.55	100 (15)

\*Total CAP= Average Bracken score for all three- and four-year old children in CAP's early childhood education programs

There is a relatively large range of Bracken scores in the Family Life Study, ranging from 55 to 125. Figure 3.2 demonstrates the distribution of Bracken scores among children in the Family Life Study. The distribution has a slight skew to the left, meaning that the majority of the scores are concentrated in the lower end of the distribution, and there are relatively few high scores.

<sup>&</sup>lt;sup>5</sup> Data collection for the 2012-13 school year for Wave 1 Cohort 6 will be available in summer 2013.

<sup>&</sup>lt;sup>6</sup> Educare is not operated by CAP

Figure 3.2: Distribution of Bracken Scores Among Children in the CAP Family Life Study, Fall 2011 Cohort 4-5 (n=70)



Dashed black line= National average of Bracken scores Solid red line= Average Fall Bracken scores in the CAP Family Life Study Dashed blue line= Average Fall Bracken scores in CAP

There are differences between children in the CAP Family Life Study and the average for all three- and four-year-old children enrolled in CAP's Head Start programs. Children in the study have Bracken scores that were five points or a third of a standard deviation higher than total CAP population of preschool-aged children. Thus, children in the CAP Family Life Study are higher achieving, suggesting that they are potentially not a random sample of CAP children.

#### Math and Language Skills

We assessed children's math skills using the Woodcock Johnson Achievement Battery- Applied Problems subscale and children's receptive language skills with the Peabody Picture Vocabulary Test (PPVT-III)<sup>7</sup>.

Table 3.16 presents descriptive statistics for math and receptive language skills. Applied problems assesses children's math reasoning ability, including counting objects,

<sup>&</sup>lt;sup>7</sup> The math and language assessments were a part of the supplementary child assessments, and as such, we only have data for Cohort 5-6 (Wave 1 Cohort 4 was not included in supplementary child assessment data collection). In addition, data are still being collected for Cohort 6 and the sample is not complete. Therefore, we do not present data by cohort.

and adding or subtracting small numbers. Raw scores, age equivalent, and grade equivalent scores are presented. Grade equivalent scores compare children's raw scores to the individuals in a standardized sample of children that are the same grade. A grade equivalent of 0 means a child scored the same as the average raw score of all kindergarten students in a national sample of children. Age equivalents are similar to the grade equivalent scores except that raw scores are compared to the individuals in the standard sample that are the same age. Future reports will include standard score and w-scores, which take into account the difficulty of the item and age of the child. This will be useful for longitudinal data analysis. On average, children in the sample are performing at a level that is expected for their age.

Eanguage enine		
	Cohort 5-6	Baseline Scores <sup>i</sup>
	Mean	SD
Math skills (n=73)		
Raw score	52	40
Age equivalent	3.82	1.19
Grade equivalent	0.11	0.27
Language skills (n=75)		
Standard score	95.80	14.52
Percentile rank	42.97	28.64

Table 3.16: Children in the CAP Family Life Study Wave 1 (Cohort 5 & 6) Math andLanguage Skills

<sup>1</sup>Data were collected in Spring 2012 for Cohort 5 and Fall 2012 for Cohort 6

Children's receptive language skills were assessed with the Peabody Picture Vocabulary Test (PPVT-III). The PPVT assesses children's ability to identify a picture using their vocabulary skills. Scores in the table above are standardized so that higher scores reflect higher receptive language skills. Results in Table 3.16 suggest that children in the CAP Family Life Study are performing at slightly below average levels compared to a normed sample.

#### **Executive Functioning and Effortful Control**

We assessed two dimensions of children's self-regulation skills: (1) executive functioning and (2) effortful control. Executive functioning can be defined as children's skills in working memory and remembering complex instructions, controlling their dominant response, and focusing their attention. We assess executive functioning with the Pencil Tap task, in which a child is asked to tap a pencil once when an interviewer taps twice and tap a pencil twice when an interviewer taps once. The pencil tap was conducted at baseline for Cohort 5 and 6. Higher scores indicate higher executive functioning skills. Table 3.17 demonstrates that there is a fair amount of variability in children's executive functioning skills in the CAP Family Life Study. The non-normal distribution presented in Figure 3.3 suggests that children's skills at baseline may be

grouped in three categories (low, medium and high). Future work will compare these scores to national samples.

Table 3.17: Children's Executive Functioning Skills (Pencil Tap), Cohort 5 & 6 (n=75)

Cohort 5-6 Baseline Scores <sup>i</sup>						
	Mean	SD	Min	Max		
Pencil Tap Sum Score	6.64	5.08	0	16		

<sup>1</sup>Wave 1 data were collected in spring 2012 for Cohort 5 and fall 2012 for Cohort 6

*Figure 3.3: Distribution of Children's Executive Functioning Skills (Pencil Tap), Cohort 5 & 6 (n=75)* 



Effortful control assesses children's ability to withhold a dominant response in an emotional context and shift attention away from a desirable context or object. We assessed effortful control with the gift task, in which children were told not to touch a can of Play-Doh<sup>®</sup> while an interviewer left the room to look for another can to give to the child. We then assessed how well a child withheld from touching the can (on a scale of 0 to 10, with zero indicating child opened the can and 10 indicating child did not touch or open the can) as well as how long a child waited to touch and open the can (see Table 18). The gift task was conducted in Wave 2 Cohort 4. Future work will compare these scores to national samples.

	Wave 2 Cohort 4					
	Mean	SD	Min	Max		
Gift Task						
Effort control behavior (scale 0-10)	8.87	2.97	0	10		
Latency to touch (in seconds)	49.57	22.14	0	60		
Latency to open (in seconds)	54.95	15.97	4	60		

Table 3.18: Children's Executive Functioning Skills (Gift Task), Cohort 5 & 6 (n=21)

Table 3.18 indicates that most children in the CAP Family Life Study were able to inhibit their actions and withheld from touching or opening the can of Play-Doh<sup>®</sup>.

#### **Children's Internal Representations**

Children whose parents increase their education may develop a more substantive understanding of what it means to go to school and advance their learning. This internal representation, in turn, could lead to children's increases in their own motivation and performance in school. We assessed children's internal representations and appraisals in Wave 2 using an adapted version of the Berkeley Puppet Interview. The original Berkeley puppet interview measured children's perceptions of their parents' marital/partner relationship. Northwestern, along with partners at Oklahoma State University, adapted the measure to assess eight main constructs, presented in Table 3.19.

Table 3.19: Puppet Interview Child Assessment, Subsample of Wave 2, Cohort 4	ļ
(n=10)	

	Subsample of Wave 2 Cohort 4					
Subscale	n <sup>a</sup>	Mean	S.D.	Min	Max	Alpha
(1) School Engagement & Connectedness (1-12) <sup>b</sup>	10	10.96	1.91	6	12	0.77
(2) Academic Self-Efficacy & Motivation (0-10)	10	8.3	1.64	6	10	0.65
(3) Educational Support (parent, teacher, peer scales) (0-20)	10	15.58	2.78	12	20	0.65
(4) Family Dynamics & Stability	9	7.56	1.33	6	10	0.63

(0	-1	4)
· -		• /

<b>Total score</b> (0-108)	9	82.17	11.13	62.64	98	
<ul><li>(8) Beliefs about Parent's Employment and School (0- 20)</li></ul>	6	16.91	2.88	13.33	20	0.66
(7) Role Modeling (0-14)	9	9.15	3.18	4	14	0.68
(6) Expectations for Child's Success (0-12)	9	10	3	4	12	0.77
(5) Beliefs about Parent's Academic Skills (0-6)	9	5.56	1.33	2	6	<sup>c</sup>

<sup>a</sup>We selected a random sample of ten puppet interviews for Wave 2 Cohort 4 to examine the psychometric properties of the instrument. Sum scores are weighted to account for missing responses.

<sup>b</sup>Numbers in parentheses represent the measure range for each subscale

<sup>°</sup>Not applicable because only two items were included for this calculation of Cronbach's alpha

Preliminary findings from a subsample of Cohort 4 suggest that, on average, children's responses are mostly positive (higher scores indicate a positive response), with a fair amount of variability. Cronbach alphas suggest that items are mostly within the acceptable range for internal consistency, indicating an adequate level of intercorrelation among items within each scale.

# 5. Early childhood education experiences

The dynamics of early childhood care may relate to children's development as well as parental outcomes and success in Career*Advance*<sup>®</sup> overtime. Attendance data and classroom quality from CAP and teacher surveys provide information on the early childhood care experiences of children in the CAP Family Life Study at baseline.

We created two main composites from the monthly attendance reports generated by CAP: (1) children's dosage of CAP (Figure 3.4); and (2) attendance (Figure 3.5). Children's dosage scores are calculated by summing the total days present from fall 2011through summer 2012. Children's attendance scores are calculated by dividing the number of days a child is present (dosage) by the number of days they were enrolled in CAP. We present data for Cohort 4 (n=60) and Cohort 5 (n=53) for children in the CAP Family Life Study who attended CAP in 2011-2012 (see Table 3.20Seven of the parents in the study have two children in the CAP and both of their children's attendance data are presented.



Figure 3.4: Average Dosage of CAP 2011-2012, Cohort 4-5 (n=113)

Figure 3.5: Average Dosage of CAP 2011-2012, Cohort 4-5 (n=113)



		Total		
				Total possible
	N	M or %	S.D.	days
Dosage				
Fall 2011 <i>(Aug-Oct)</i>	113	51.01	13.43	62
Winter 2012 (Nov-Jan)	113	47.04	6.91	58
Spring 2012 (Feb-April)	113	46.40	14.13	58
Summer 2012 <i>(May-</i> <i>July)</i>	113	37.05	16.94	62
TOTAL	113	181.48	38.07	238
Attendance (%) <sup>i</sup>				
Fall 2011 <i>(Aug-Oct)</i>	103	90.1		
Winter 2012 (Nov-Jan)	112	83.2		
Spring 2012 (Feb-April)	104	88.1		
Summer 2012 <i>(May-</i> <i>July)</i>	79	83.7		
TOTAL	104	85.1		

Table 3.20: Average Dosage and Attendance at CAP 2011-2012, Cohort 4-5(n=113)

<sup>1</sup>Attendance is only calculated if the child is enrolled in CAP for at least 50% of the days in the quarter. As such, the sample size varies across quarters.

Results suggest that children received a high degree of exposure to CAP (mean=181 days per year) and have high rates of attendance (85%). Data on children's dosage of CAP and attendance will be imperative as we examine the effects of Career*Advance*<sup>®</sup> on children.

Additionally, we are interested in the *quality* of early childhood education and the extent to which it may strengthen or weaken the effects of participation in Career*Advance*<sup>®</sup>. CAP assesses the quality of teacher-child interactions through use of the Classroom Assessment Scoring System Pre-Kindergarten (CLASS; Pianta, La Paro, & Hamre, 2008).The CLASS Pre-K organizes teacher-child interactions into three broad domains: Emotional Support, Classroom Organization and Instructional Support. Figure 3.6 shows the average scores in the CAP Family Life Study for each domain compared to the national average. This figure is based on over 4,000 early childhood and elementary classroom observed throughout the country.

On average, children tended to experience moderate-to-high levels of effective interactions for emotional support and classroom organization. In addition, most children attend Pre-K-3rd classrooms characterized by very low levels of instructional support (Hamre, Pianta, Mashburn, & Downer, 2007). For children in the CAP Family Life Study, the average score for Emotional Support is 6.02 (SD=0.77; Range 3.00-7.00), which CLASS Pre-K considers high quality. This score is well above the national average (see Figure 3.6).

Figure 3.6: Comparison between Family Life Study CLASS Domain Scores and National Averages in Pre-K to Third Grade Classrooms



# = Average CLASS Domain Score in CAP Family Life Study

The average Classroom Organization score for the CAP Family Life Study sample is 5.40 (SD=0.87; Range 3.00-6.92), which is considered high quality and is on the higher end of the national average of CLASS scores. The average Instructional Support score for the Family Life Study sample was 3.65 (SD=1.07, Range 1.67-6.17) which is in the moderate range. Figure 6 demonstrates that, on average, CAP programs appear to have higher scores than the national average.

We also examined the characteristics of preschool teachers. A teacher survey was administered for Cohort 5 (spring 2012) and Cohort 6 (fall 2012) to measure teachers' basic demographic characteristics and professional information (Teacher Survey-Teacher). The teacher survey also gathered overall classroom characteristics including the number of children in the classroom and their demographic characteristics

as well as the behavior of the children in the classroom overall. To date, a total of 46 teachers completed the Teacher Survey-Teacher, including four teachers who completed the survey at both time points. For these four teachers, their most recent survey was included in the analyses.

We compared our findings to those from a nationally representative sample of Head Start programs that were included in the Head Start Impact Study. The Head Start Impact Study collected information on teachers in Head Start programs in 2002-2003 as part of a larger randomized control trial on the effectiveness of Head Start. As shown in Figure 3.7, most teachers had fewer than 10 years of teaching experience (including experience at all grade levels and preschool). With a mean of 5.24 years of experience, this sample of teachers had almost eight years less experience on average than teachers in the Head Start Impact Study.



Figure 3.7: Years of Teaching Experience of Teachers Serving CAP FLS Children

Although less experienced, this sample of teachers had higher levels of educational attainment than the teachers in the Head Start Impact Study. As shown in Figure 3.8, almost all teachers had at least a bachelor's degree and no teachers had less than an associate's degree. In addition, five teachers were currently pursuing a graduate degree and three teachers are enrolled in a teaching certificate program and/or were participating in Teach for America. Only 2 out of 45 teachers who responded to this question had a Child Development Associate credential (CDA). The higher credentials in CAP teachers is likely a direct results of CAP's hiring policies, in which they connect their requirements with those of the Tulsa school system.





The majority of the teachers in the sample were white, as shown in Figure 9. Comparing these teachers with teachers who participated in the Head Start Impact Study, they were slightly less diverse. In addition, although the average percentage of Hispanic children in a classroom was nearly 40%, no teachers in this sample were Hispanic/Latino.

Figure 3.9: Race/Ethnicity of Teachers Serving Children of Study Participants Compared with Head Start Impact Study Teachers (n=45)



# 6. Education and career development

In the Wave 1 parent survey, respondents are also asked a series of questions about their education levels, employment, and career development. For Career*Advance*<sup>®</sup> respondents, the Wave 1 parent survey occurred within six weeks of

beginning the program. Results from the interview reflect any initial changes respondents may have made after applying and enrolling in Career*Advance*<sup>®</sup>, but not any changes that result from participation in the program. The longitudinal design of the study will allow us to examine how education and employment may change after participating in Career*Advance*<sup>®</sup>, All parents responded to the education and workforce development questions (n=163) unless otherwise noted.

Table 3.21 presents the education level of CAP respondents at baseline. Results indicate that 9% (n=14) have less than a high school degree, 44% have a high school degree or GED (n=72), 32% have a career tech certificate (n=52), 12% have an associate degree (n=12), and 3% have a bachelor's degree or higher (n=4).

	Cohort 4	Cohort 5	Cohort 6	Total
	n=60	n=48	n=55	n=163
Highest level of education (%)				
Less than high school	5	10	12	9
GED	3	10	9	7
High school	37	33	40	37
Career tech certificate	37	31	27	32
Associate degree	17	8	9	12
Bachelor's degree or above	2	6	2	3

#### Table 3.21: Respondents' Education Level, Cohorts 4-6

Results regarding employment suggest that the majority of the CAP Family Life Study respondents were not employed at baseline. More specifically, over half of the respondents in the Family Life Study were not employed (55%, n=91), 37% were employed full-time (n=60) and 7% were employed part-time (n=12). The parent survey is administered right after parents join Career*Advance*<sup>®</sup>. Therefore, baseline employment status could reflect Career*Advance*<sup>®</sup> participants exiting the workforce as a result of joining Career*Advance*<sup>®</sup>. The variability in the baseline employment of CAP Family Study respondents is important to consider as we seek to understand the experiences of families in the study.

Table 3.22 presents the employment characteristics of the respondents who were employed at Wave 1. Of the respondents who were employed (72 out of 163), most were working in one job (range one to three jobs). There was a fairly large variation in the amount of hours respondents work per week, ranging from three to 72 hours.

	Cohort 4	Cohort 5	Cohort 6	Total
Employment Status				
Not working	57	62	48	55
Part-time	5	11	7	7
Full-time	38	28	44	37
Total number of jobs (n=74)	1.23(0.51)	1.21(0.53)	1.07(0.26)	1.16 (0.44)
	( )	( )		
Total number of hours per week: primary job (n=74)	30.27(12.7 2)	27.56(13.9 3)	33.57(11.89 )	30.87 (12.76)
Total number of hours per week: all jobs (n=74)	34.65(13.9 2)	29.00(16.2 6)	34.17(12.84 )	33.05 (14.14)
How related this job is to the work you would like to do for a career? (n=74) (%)				
Not at all related	50	32	38	40
Somewhat related	27	16	28	24
Very related	23	53	34	35

#### Table 3.22: Parents' Employment Characteristics, Cohorts 4-6

Note: Standard Deviations are presented in parentheses

A key component of the theory of change is that participation in Career*Advance*<sup>®</sup> will move respondents from a job to a career. At baseline, the majority of participants and matched comparison respondents were working in jobs that were not or only somewhat related to the work they would like to do for a career (n=48). A quarter of the respondents were working in jobs that were very related to what they would like to do for their career.

# 7. Employment earnings and participation in public benefit programs

Employment, earnings, and benefit receipt patterns were collected from Oklahoma state agencies responsible for the federal-state Unemployment Insurance (UI) and a number of publicly funded health and human service programs. The Oklahoma Employment Security Commission (OESC) provided quarterly UI wage and benefits data for parents who provided signed consent to share their records. Oklahoma Department of Human Services (OKDHS) provided data on consenting parents' quarterly public benefit receipt from multiple programs, including Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), Low Income Home Energy Assistance Program (LIHEAP), State Supplemental Assistance, Child Care Assistance, and Medicaid.

This analysis includes data for Cohorts 4 and 5. Data for Cohort 6 are not yet available. All findings are reported across the entire sample regardless of participation in the Career*Advance*<sup>®</sup> program. This allows stakeholders to get a snapshot of parents' earnings and benefits data over time without prematurely influencing program development or the ongoing research studies. Future analyses will separate participants and comparison group members to estimate the impact of Career*Advance*<sup>®</sup> participation.

Figure 3.10 shows the percent of participants who were employed and who received UI payments and other medical and social supports at any time during the study time period (from 3<sup>rd</sup> quarter 2009 through 2<sup>nd</sup> quarter 2012). Over three-quarters of participants were employed in at least one quarter during this time. The majority of participants also received SNAP benefits during at least one quarter and nearly two-thirds received Medicaid.



Figure 3.10: Percent of Participants in Cohorts 4 and 5 who were Employed or Received Benefits During the Study Timeframe

\* Study time frame: 3rd/4th quarter 2009 - 2nd quarter 2012

Table 3.23 presents key findings on employment. Individuals with earnings greater than \$0 in the quarter were considered employed (reported amounts that were \$0 and individuals who had no record from OESC were considered not employed). The

number and share of sample parents employed each quarter, the average quarterly earnings for those employed, and the range of quarterly earnings are detailed from the 4<sup>th</sup> quarter of 2009 through the 2<sup>nd</sup> quarter of 2012 (eleven quarters). The share of employed parents ranged from a low of 39% (2012-Q1) to a high of 50% (2009-Q4). The average (median) quarterly earnings of those employed each quarter ranged from \$2,292 (2012-Q2) to \$4,009 (2010-Q4)

	2009- Q4	2010 -Q1	2010 -Q2	2010 -Q3	2010 -Q4	2011 -Q1	2011 -Q2	2011 -Q3	2011 -Q4	2012 -Q1	2012 -Q2
Number Employed	28	27	49	53	50	47	47	50	47	42	53
Percent Employed (%)	50.0	48.2	45.4	49.1	46.3	43.5	43.5	46.3	43.5	38.9	49.1
Avg Qtrly Earnings of Employed	\$3,77 6	\$3,41 3	\$3,41 6	\$3,26 5	\$4,06 9	\$3,14 1	\$3,20 6	\$3,61 7	\$3,36 9	\$3,36 4	\$2,93 0
Median Qtrly Earnings	\$3,15 8	\$3,13 5	3,009	\$3,19 1	\$4,00 9	\$2,98 8	\$2,43 0	\$2,69 5	3,372	2,506	\$2,29 2
Minimum Qtrly Earnings	\$212	\$253	\$69	\$50	\$110	\$21	\$73	\$235	\$60	\$87	\$25
Maximum Qtrly Earnings	\$8,88 7	\$7,97 3	\$12,01 0	\$8,49 4	\$12,14 1	\$9,89 7	\$13,42 1	\$14,03 1	\$9,00 2	\$13,1 78	\$9,82 4
<b>N</b> : <sup>1</sup>	56	56	108	108	108	108	108	108	108	108	108

Table 3.23: Quarterly Employment and	Average Earnings for	Those Employed,
Cohort 4-5		

<sup>1</sup> Participants who had earnings of \$0 as well as those who had no record reported from OESC (missing) were counted as not employed. The number of individuals in Cohorts 4 and 5 was 108. Data is not available for Cohort 5 (45 individuals) for 2009-Q4 and 2010-Q1. Source: Oklahoma Employment Security Commission.

Table 3.24 shows the percent of respondents who received UI payments and other medical and social supports in each quarter. The percent of respondents who received Medicaid ranged from to a high of 51.6% (2009-Q4) to a low of 11.8% a year later (2011-Q1). The share receiving SNAP benefits averaged about 67% across all quarters with a low of 57% (2009-Q4) to a high of 72% (2012-Q1). Relatively low shares of parents in the sample received other public assistance benefits such as TANF and Energy Assistance.
	2009- Q4	2010- Q1	2010- Q2	2010- Q3	2010- Q4	2011- Q1	2011- Q2	2011- Q3	2011- Q4	2012- Q1	2012- Q2
UI Payments (%) <sup>1</sup>	8.9	10.7	0.0	8.3	8.3	6.5	7.4	7.4	9.3	7.4	6.5
Medicaid (%) <sup>2</sup>	51.6	50.5	47.3	43.0	41.9	11.8	14.0	14.0	14.0	14.0	10.8
SNAP (%) <sup>2</sup>	57.0	62.4	63.4	63.4	67.7	73.1	68.8	69.9	71.0	72.0	66.7
TANF (%) <sup>2</sup>	2.2	2.2	3.2	3.2	1.1	1.1	0.0	1.1	1.1	2.2	1.1
Child Care Assistance (%) <sup>2</sup>	8.6	9.7	8.6	15.1	12.9	11.8	10.8	10.8	7.5	11.8	11.8
State Supplemental Payments (%) <sup>2</sup>	3.2	3.2	3.2	4.3	3.2	3.2	4.3	5.4	5.4	5.4	5.4
Energy Assistance (%) <sup>2</sup>	8.6	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	6.5	0.0

Table 3.24: Percent of Participants who Received Benefits per Quarter, Cohort 4-5

 $^{1}$  N = 56 for 2009-Q4 and 2010-Q1; N = 108 for all other quarters. Participants who had earnings of \$0 as well as those who had no record reported from OESC (missing) were counted as not employed. The number of individuals in Cohorts 4 and 5 was 108. Data is not available for Cohort 5 (45 individuals) for 2009-Q4 and 2010-Q1.

 $^{2}$ N = 93. The number of individuals in Cohorts 4 and 5 was 108; 15 individuals has missing data.

#### Conclusion

This section presented the balance between Career*Advance*<sup>®</sup> and matched comparison families and baseline characteristics of Cohort 4-6 participants to better understand the sample. Overall, results from ChildPlus and the survey data indicate that the matched comparison group is relatively well matched to Cohort 4-6 Career*Advance*<sup>®</sup> participants. This is noteworthy and central to the success of the CAP Family Life Study. Any differences between the two groups will be controlled for statistically in future analysis in order to control for non-random selection into Career*Advance*<sup>®</sup> and estimate the effects of participation in Career*Advance*<sup>®</sup> in the short and long term

In terms of individual and family, we find that parents in the CAP Family Life Study are approximately 30 years-old (range 19 to 56). There are two males in Career*Advance*<sup>®</sup> (and two in the matched comparison group), indicating that men are underrepresented in Career*Advance*<sup>®</sup>. The race/ethnicity of respondents is fairly mixed, with the largest percentages of respondents African American (40%; n=66) and White (29%; n=66). The remainder of the respondents are American Indian, Eskimo, or Aleut (7%; n=12), other race/ethnicity (12%; n=20), or Latino (10%; n=16). Almost all of the respondents reported being born in the United States (94%; n=154). Almost all of the families are living in or near poverty.

The baseline level of education is relatively mixed for Career*Advance*<sup>®</sup> and matched comparison parents in the CAP Family Life Study. Only 9% (n=14) of the parents have less than a high school degree. The largest proportion of parents have a high school degree or GED (44%; n=72) or a career tech certificate (32%; n=52). Few parents begin with a postsecondary degree, with 12% of parents having an associate's degree (n=12), and 3% having a bachelor's degree or higher (n=4) at baseline.

Baseline descriptive analysis also suggest a fair amount of variability in key measures of parents' psychosocial and executive functioning skills, parenting and home environment, and earnings and participation in public benefit programs. For example, there is variability in the degree to which parents' perceive their lives as stressful. In future analysis, we will examine whether participants' stress levels increase or decrease as a result of program participation and/or as a result of family, work, and life changes. This type of analysis will be conducted for all measures of parents' psychological functioning, parenting, and earnings to better understand the effect of Career*Advance*<sup>®</sup> on outcomes and elucidate possible mechanisms by which effects may or may not occur.

Children's characteristics and development is a key component in the theory of change for both parents in Career*Advance*<sup>®</sup> and their children. In terms of children's characteristics, the Wave 1 Family Life Study Survey asked parents a series of questions about their oldest child that attended CAP. The average age of the target child in the Family Life Study is 3.89 years, with a range from 27 months to six years. The race/ethnicity of the children closely matches that of the adults.

Direct child assessments were used to capture children's development and functioning across multiple domains including (1) basic academic skills; (2) math skills; (3) language skills; (4) executive functioning and effortful control; and (5) children's internal representations. In Year 2, we attempted to situate our children's performance in comparison to other samples of children. For example, all children in CAP were assessed with the Bracken School Readiness Scale. The Bracken assesses children's knowledge of color, letter identification, number/counting, comparisons, and shape recognition. The average national Bracken score is 100 with a standard deviation of 15. The average score of children at CAP was 87.0 in fall 2011. The average score of children than CAP but lower than national norms.

Results also suggest that children received a high degree of exposure to CAP (mean=181 days per year) and have high rates of attendance (85%). Data on children's dosage of CAP and attendance will be imperative as we examine the effects of Career*Advance*<sup>®</sup> on children. In addition, the CAP Family Life Study is interested in the quality of early childhood education and the extent to which it may strengthen or

weaken the effects of Career*Advance*<sup>®</sup>. Data from the teacher survey and direct observations of classroom quality indicate that children do experience different levels of quality, suggesting a possible mechanism for the relation between Career*Advance*<sup>®</sup> and child outcomes.

We also compared the results for similar constructs collected in both the parent survey and administrative data collected from the Oklahoma Employment Security Commission (OESC) and Oklahoma Department of Human Services (OKDHS). We found that there were a few important differences regarding employment status and earnings between the two sources. For example, data from the parent survey suggested that 44% of parents were employed at baseline. Administrative data indicated that 77% of parents were employed at least one quarter from 2009 through 2012. The differences in employment status are more than likely due to the longer time period in the administrative data (11 quarters) compared to the parent survey which reflects the employment status at the time of entry into Career*Advance*<sup>®</sup>. Moreover, employment status of the parent survey may reflect parents' changes in employment as a result of joining Career*Advance*<sup>®</sup>.

In addition, average earnings are collected in both the parent survey and administrative data. However, in the parent survey, average earnings reflect the monthly earnings for the household (including multiple adults) and average earnings in the administrative data reflect parent's individual earnings across three months. Collectively, these data provide the opportunity to cross check results, as well as provide a detailed history of parents' employment and earnings as well as information on their status and earnings when they enter Career*Advance*<sup>®</sup>.

Overall, results on baseline characteristics of parents and children indicate that participants in the CAP Family Life Study represent a diverse population of low-income families. The CAP Family Life Study collects data from multiple sources, including (1) parent surveys; (2) direct child assessments; (3) teacher surveys; (4) in-home observations; (5) administrative data; and (6) data from CAP. Collectively, these data provide a rich dataset to inform our theory of change and address the effect of Career*Advance*<sup>®</sup> on parents and children. Future reports will use this rich measurement to explore the sample descriptively, to test the hypothesis that parents' educational and career advances may lead to improved parent and child outcomes, and to examine the mechanisms that may help to explain these outcomes.

# Section 4: Career*Advance*<sup>®</sup> Implementation Findings through December 2012

The implementation study of the Career*Advance*<sup>®</sup> program seeks to document the evolution of the program as it has moved from a pilot project into regular operations. The study examines modifications in program design, in order to understand how, when, and why changes were made. The implementation study is an essential source of information for interpreting the outcomes and impacts of Career*Advance*<sup>®</sup> participation. Four published reports document implementation study findings from the design phase in 2008-2009 and the early pilot phase in 2009-2010 through the recruitment of Cohort 6 in Summer 2012.<sup>8</sup>

CAP has approached the design of the Career*Advance*<sup>®</sup> program as a continuous improvement process. Modifications since the start of the CAP Family Life Study in 2011 include expansions of the career training options; refinements to the recruitment, screening, and selection process; and changes to the program's Shared Expectations agreement and performance incentives. This section summarizes key changes in the program that directly relate to the experience and progress of Cohorts 4-6 through December 2012, the end of the first quarter of Career*Advance*<sup>®</sup>'s Year 3 HPOG funding, and the recruitment of Cohort 7.

## Key Research Questions for the Implementation Study

- 1. How has CareerAdvance<sup>®</sup> changed over time and why?
- 2. What progress have CareerAdvance® participants made over time?
- 3. What program and institutional factors contribute to or impede participant progress through Career*Advance*<sup>®</sup>?

## **Research data sources**

The implementation study draws on multiple sources of data to answer the key research questions. These include:

- Biweekly calls with CareerAdvance<sup>®</sup> staff
- Interviews with CAP and CareerAdvance<sup>®</sup> staff as well as key partners, including employers, training providers, and other stakeholders
- CAP program and family records through the Child-Plus data system
- CareerAdvance® participant progress data and administrative records
- Reviews of CareerAdvance® program documents

<sup>&</sup>lt;sup>8</sup> All reports available at: http://www.utexas.edu/research/cshr/rmc1/index.php/projects/currentprojects/380-tulsa.html

- Participant and Career Coach Focus Groups
- Unemployment insurance wage and benefit records from the Oklahoma Economic Security Commission
- Participation and benefit records from the Oklahoma Department of Human Services

# **Key Program Changes**

**Career Training Options.** With HPOG funding, CAP instituted several changes to the Career*Advance*<sup>®</sup> program's training options. The biggest change was the introduction of the Medical Assisting/Health Information Technology (HIT) pathway in Cohort 4 and its refinement over subsequent cohorts, including the separation of Medical Assisting training into its own pathway for Cohort 6. Beginning with Cohort 6, the HIT associate's degree program is only available for fall semester entry. Individuals entering the HIT pathway for the associate's degree in a spring semester will complete a medical billing and insurance course at Tulsa Technology Center before starting classes at Tulsa Community College (TCC). The billing and insurance course does not provide transfer credits to the HIT program at TCC. Figure 4.1 below demonstrates the current HIT career pathway offered by Career*Advance*<sup>®</sup> and highlights key changes.

# Figure 4.1: Career Advance<sup>®</sup> Pathway in Health Information Technology



Two significant modifications to the nursing career pathway were made during the same time period: the introduction of the Patient Care Technician (PCT) training option in Cohort 4; and the elimination of the Certified Nurse Assistant (CNA) Level 3 training and its associated Geriatric Technician Certificate in Cohort 5. The current Career*Advance*<sup>®</sup> nursing pathway is detailed in Figure 4.2. A stand-alone training in Pharmacy Technician, a one-semester program, was introduced in Cohort 7.





**Changes in recruitment and enrollment.** Recruitment and enrollment procedures for CareerAdvance<sup>®</sup> have been refined over time based on changing program standards or grant requirements. In the latest recruitment rounds, CAP has added a career interest survey and a required drug test to better identify individuals most likely to succeed in training. Table 4.1 below documents changes to the recruitment process from Cohort 4 to Cohort 7. Note that each cohort builds on the established requirements of the prior cohort, unless a change is indicated.

Table 4.1: Changes in CareerAdvance<sup>®</sup> Eligibility Standards, Application Requirements, and Selection Criteria

Cohort	Eligibility Standards	Application Requirements	Selection Criteria
	Adult at least 18 years old	Interview with Career Coach	Pass a criminal background
	<ul> <li>Citizen or legal resident for at</li> </ul>	<ul> <li>COMPASS scores required</li> </ul>	check
	least five years	with initial application	<ul> <li>Tuberculosis test</li> </ul>
	<ul> <li>Speak English well enough to</li> </ul>	• TABE scores required prior to	<ul> <li>Interview rating system with</li> </ul>
	participate	interview	11 criteria: attitude, desire to
t 4	<ul> <li>Eligibility tied to workforce</li> </ul>		work, desire for healthcare
hor	standards of healthcare		employment, work history,
S	employers		healthcare work experience,
			flexible work schedule, high
			motivation, low debt ratio,
			participant dress/language,
			financial stability, and access to
			transportation
			<ul> <li>Participants are expected to</li> </ul>
ъ			be able to shoulder some of the
ort			financial burden of
Cohe			participation (such as
0			purchasing their own school
			supplies)
~	<ul> <li>Speak English well enough to</li> </ul>	<ul> <li>Complete a career interest</li> </ul>	<ul> <li>Selected participants must</li> </ul>
pu	participate and succeed	inventory	pass a drug test within one
6 a		<ul> <li>Submit a personal statement</li> </ul>	week of acceptance into the
orts		of 1-3 paragraphs	program
ohc			Academic skills
Ū			at 4 <sup>th</sup> grade or above

Source: CareerAdvance<sup>®</sup> staff and program documents.

Table 4.2 below presents application, selection, and enrollment characteristics for Career*Advance*<sup>®</sup> Cohorts 4-7. Nursing pathway interest appears to remain high, while interest in the other training options has been mixed. Lower shares of nursing applicants are selected for enrollment into the program than are applicants in other pathways.

Table 4.2: Application.	Selection.	and Enrollment	Characteristics.	bv Cohort
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		Nursing			Health Information Technology/ Pharmacy Technician			Medical Assisting		
	C 4	C 5	C 6	C 7	C 4	C 5	C 6	C 7	C 6	C 7
Began application										
process	27	34	33	41	28	16	12	13	6	0
Interviewed	25	24	33	24	22	14	10	8	6	0

Completed all										
application steps <sup>a</sup>	25	30	30	23	22	13	9	8	6	0
Selected for enrollment	16	15	18	15	16	13	7	6	6	0
Enrolled in										
CareerAdvance®	15	13	18		15	12	6		6	
# Eligible ECE centers	12	16	16	17	14	16	16	17	16	17
# ECE centers with										
families enrolled <sup>b</sup>	7	9	9		7	9	6		4	

Notes: <sup>a</sup> A completed application required attending the application interview, taking the COMPASS<sup>®</sup> exam and the TABE tests, and submitting all required paperwork.

<sup>b</sup> In C 4, C 5, and C 6 there were 11 unique centers with families involved in CareerAdvance<sup>®</sup>.

Source: CareerAdvance® administrative data

**Changes in basic skills preparation.** Adult Basic Education and GED preparation have always been key components of Career*Advance*<sup>®</sup>. Many parents lacked high school-level skills or credentials, and typically had been out of school for several years. To understand a potential candidate's readiness for training, Coaches rely in part on scores from two exams. The first is the Test of Adult Basic Education (TABE<sup>®</sup>), which covers four subjects: reading, language, match computation, and applied math. Scores are given as grade-level equivalents (Table 4.3). Mean reading scores for the groups were typically at the 10<sup>th</sup> to 12<sup>th</sup> grade-levels. Mean math computation scores were much lower, however, at the 7<sup>th</sup> and 8<sup>th</sup> grade-levels. Skill levels also ranged widely within individual cohorts and pathways, with some individuals testing at the 1<sup>st</sup> and 2<sup>nd</sup> grade-level in a cohort with others testing at the highest 12<sup>th</sup> grade-level.

				Math			
		Reading	Language	Computation	Applied Math		
Nursing							
Cohort 4	Mean	12.2	10.9	8.6	11		
(n=15)	Range	9.1 - 12.9	4.8 - 12.9	4.9 - 12.9	5.9 - 12.9		
Cohort 5	Mean	10.4	8.2	8.1	8.5		
(n=11)	Range	6.4 - 12.9	2.9 - 12.9	4.4 - 12.9	2.4 - 11.7		
Cohort 6	Mean	11.9	11.4	7.6	10.5		
(n=17)	Range	8.2 - 12.9	7.7 - 12.9	3.5 - 12.1	6.4 - 12.9		
Cohort 7	Mean	11.9	11.8	8.4	10.8		
(n=23)	Range	7 - 12.9	7.7 - 12.9	4.1 - 12.9	7.6 - 12.9		
Health Information Technology / Medical Assisting / Pharmacy Technician <sup>a</sup>							
Cohort 4	Mean	11	11.2	8.4	10.6		
(n=15)	Range	7.6 - 12.9	5.6 - 12.9	3.9 - 12.1	3.5 - 12.9		

Table 4.3: TABE<sup>®</sup> Test Scores by Cohort and Pathway, Cohorts 4-7

				Math	
		Reading	Language	Computation	Applied Math
Cohort 5	Mean	11	11.3	8.3	10.1
(n=11)	Range	6.6 - 12.9	8.4 - 12.9	2.5 - 12.9	1.7 - 12.9
Cohort 6	Mean	9.9	9.3	8.1	9.8
(n=9)	Range	7.4 - 12.9	5.6 - 12.9	4.4 - 12.1	6.7 - 12.9
Cohort 7	Mean	11.6	9.8	7.4	9.2
(n=8)	Range	9.1 - 12.9	2.7 - 12.9	2.7 - 11.2	5 - 12.9

<sup>a</sup> Due to low numbers of enrollees, test results for these three groups are reported together. Note: Scores are presented as grade-level equivalents. Source: *CareerAdvance®* administrative records

The second test in Career*Advance*<sup>®</sup> participant selection is the COMPASS<sup>®</sup> Exam, which is also used by many colleges and universities to assess college readiness and identify any need for remedial/developmental education courses. The test has three sections: reading, English, and Algebra; each section is scored on a 100point scale (Table 4.4). Each college establishes its own standards, which often vary within an institution dependent on the standards of specific programs. At TCC, "A COMPASS<sup>®</sup> Placement score of 66+ on the Algebra test is needed to go straight into college level math. A COMPASS<sup>®</sup> Placement score of 75+ is needed on the English test as well as a score of 80+ on the Reading test to go straight-into college-level writing."<sup>9</sup> No cohort's average score met TCC standards for college-level math. Results are mixed for college-level writing: most cohorts' average scores met the reading standard but fell just short on the English exam.

		Reading	English	Algebra			
Nursing							
Cohort 4	Mean	87.9	78.1	44.1			
(n=14)	Range	64 – 99	22 - 99	26 – 76			
Cohort 5	Mean	74.6	53.5	33.4			
(n=11)	Range	56 – 92	8 - 94	22 – 59			
Cohort 6	Mean	84.7	71.9	41.4			
(n=18)	Range	64 – 99	25 - 99	18 – 75			
Cohort 7	Mean	86.3	74.6	40.2			
(n=23)	Range	76 - 98	17 - 86	35 - 99			
Health Information Technology / Medical Assisting / Pharmacy Technician <sup>a</sup>							
Cohort 4	Mean	84	73.3	36.4			
(n=14)	Range	70 – 99	28 - 99	23 – 51			

	Table 4.4: COMPASS®	Test Scores b	v Cohort and Pathway.	Cohorts 4-7
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<sup>&</sup>lt;sup>9</sup> Email from Online Advisement, Tulsa Community College. <u>onlineadvisement@tulsacc.edu</u>. July 25, 2012.

Cohort 5	Mean	85.8	64.4	43.8
(n=11)	Range	50 - 98	7 - 99	19 – 75
Cohort 6	Mean	80.2	49.2	32.3
(n=12)	Range	64 – 96	6 - 87	20 – 45
Cohort 7	Mean	84.1	73.6	31.6
(n=7)	Range	72 - 95	25 - 96	21 - 62

<sup>a</sup> Due to low numbers of enrollees, test results for these groups are reported together. Source: CareerAdvance<sup>®</sup> administrative records

One way that Career*Advance*<sup>®</sup> has addressed the wide range of basic skills revealed by the TABE and COMPASS exams was to send students with low skills to an "Advanced Nursing Skills" course led by Union Public School's Adult Basic Education program. This course included math, reading, and writing instruction designed to bring skill levels up to the standard required for passing the General Education Development (GED) exam. For participants who continued to struggle, particularly those who could not meet the COMPASS cut scores to continue into PCT training, Career*Advance*<sup>®</sup> arranged for group and individual tutoring. The program took an additional step for some participants, sending them to a Sylvan Learning Center for individualized instruction.

While Tables 4.3 and 4.4 detail the wide basic skill range of accepted participants, Career*Advance*<sup>®</sup> actually turned away other applicants based in part on low basic skills. In fall 2012, the program worked with Workforce Matters, an Austin, Texas-based consultant to design an Educational Pathways Program for CAP parents. The intent of the program is to help parents build basic skills for future entry into Career*Advance*<sup>®</sup> or other postsecondary education or workforce training opportunities. The design includes pieces for "skill-ready" individuals, those testing at the 6<sup>th</sup>-8<sup>th</sup> grade level; "college-bound" individuals, those testing at the 9<sup>th</sup>-12<sup>th</sup> grade level; and "careerbound" individuals, those whose test results indicated that they were ready to enter college-level coursework. For parents with very low basic skills (5<sup>th</sup> grade and below), CAP has developed referrals to community-based organizations. The Educational Pathways Program, which began enrolling CAP parents in January 2013, will be discussed further in next year's report.

#### **Participant Progress**

Cohorts 4, 5, and 6 all completed at least one semester of training by January 2013. The progress participants have made along each training pathway is detailed in the tables below. Table 4.5 presents the progress and achievements of participants in the nursing pathway, while Table 4.6 presents details for participants in the HIT pathway.

In the nursing pathway, 31 of 32 participants who completed CNA1 passed the CNA certification exam. Eleven participants found employment as a CNA. Six of 11 participants from Cohort 4 who completed PCT passed the Oklahoma Advanced Unlicensed Assistant (AUA) certification exam. Four of those found employment as a PCT. Three participants are enrolled in the LPN program at Tulsa Tech and one is enrolled in the RN program at TCC.

Career Path Step	Milestone	C4	C5	C6	Totals
	Enrolled	15 <sup>a</sup>	11 <sup>b</sup>	16 <sup>c</sup>	42
	CNA 1 Completed	13	7	12	32
	CNA Certification Exam Passed	13	7	11	31
CNA	CNA 2 Completed	14	8	14	36
	CNA 3 Completed	13	N/A <sup>d</sup>	N/A <sup>d</sup>	13
	Geriatric Tech Certificate Obtained	12	N/A <sup>d</sup>	N/A <sup>d</sup>	12
	CNA Employment Obtained		3	1	11
	Enrolled	13	4	6	23
Γ A	Completed	11	3		14
PC	AUA Certification Exam Passed	6			6
	PCT/AUA Employment Obtained	4			4
	Application		1	8	9
	Accepted	N/A	1	3	4
Z	Enrolled	N/A	1	2	3
	Graduated	N/A			0
	NCLEX-Practical Nursing (PN) Exam Passed	N/A			0
	LPN Employment Obtained	Im Passed66it Obtained44018013N/A13N/A12ing (PN) Exam PassedN/A-Ineral Ed Requirement102id Requirement01ogram ApplicationN/A0			
	Working Towards General Ed Requirement	10	2		12
	Completed General Ed Requirement	0	1		1
	LPN-to-RN Bridge Program Application	N/A	0		0
z	Application	0	1		1
Ř	Enrolled	0	1		1
	Graduated				0
	RN Exam Passed				0
	RN Employment Obtained				0

Table 4.5:	Participant	Proaress i	in Nursina	Pathwav as	of Januarv	2013
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Note: In this and following tables, gray boxes indicate that a cohort has not yet reached a particular milestone.

<sup>a</sup> This number includes two (2) individuals who enrolled with CNA certification and therefore did not participate in the CNA 1 class or take the CNA exam.

<sup>b</sup> This number includes three (3) individuals who enrolled with CNA certification and therefore did not participate in the CNA 1 class or take the CNA exam, and one (1) individual who entered the Nursing Pathway at the LPN level.

<sup>c</sup> This number includes three (3) individuals who enrolled with CNA certification and therefore did not

participate in the CNA 1 class or take the CNA exam.

<sup>d</sup> CNA3 and its associated Geriatric Tech Certification were dropped from the pathway in Cohort 5. Source: CAP administrative records submitted on February 19, 2013.

In the HIT pathway, 100% of the participants who completed Medical Assisting (MA) passed the Registered Medical Assistant exam. Almost half found MA employment. As of January 2013, HIT participants had not yet completed any of the milestones in the second step of their pathway.

Table 4.6: Participant Progress in Health Information Technology / Medic	al
Assisting Career Pathway as of January 2013	

	Cohort 4 Cohort 5		Cohort 6		Totals
			НІТ	MA	
Enrollment	15	11	6	5	37
Medical Assisting Start	15	11	N/A <sup>a</sup>	5	31
Medical Assisting Completed	9	8	N/A <sup>a</sup>		17
Registered Medical Assistant (RMA) Exam Passed	9	8	N/A <sup>a</sup>		17
MA Employment Obtained	6	2	N/A <sup>a</sup>		8
Medical Coding Start	3	1	6	N/A <sup>a</sup>	10
Medical Coding Completed				N/A <sup>a</sup>	
Certified Professional Coder Exam Passed				N/A <sup>a</sup>	
MC Employment Obtained			1	N/A <sup>a</sup>	1
HIT Start	5	5	0	N/A <sup>a</sup>	10
Certified Coding Associate's Exam Passed				N/A <sup>a</sup>	
HIT Associate's Degree				N/A <sup>a</sup>	
Registered HIT Exam Passed				N/A <sup>a</sup>	
HIT Employment Obtained				N/A <sup>a</sup>	

Notes: <sup>a</sup> In Cohort 6, the HIT and MA pathways were separated.

Source: CAP administrative records as of January 2013.

Table 4.7 details the status of Cohort 4, 5, and 6 participants as of January 2013. Nearly three-fifths (58%) are still actively engaged in Career*Advance*<sup>®</sup> training.

Table 4.7: Career Advance<sup>®</sup> Participants: Status as of January 2013

	Nursing			HIT			MA	
	C 4	C 5	C 6	C 4	C 5	C 6	C 6	Total
Enrolled	15	11	16	15	11	6	5	79
Active	10	3	9	6	7	6	5	46

Inactive / Exited	5	8	7	9	4	0	0	33

Source: CAP administrative enrollment records as of January 2013.

#### Factors that Impede or Support Progress

Focus groups provide an important source of information for understanding how program components and other factors impede or support the individual's progress through training. Focus Groups are conducted twice annually with participants at all levels of the program. In December 2012, focus group sessions were also held with individuals who voluntarily left Career*Advance*<sup>®</sup>. Questions for the focus group sessions concentrated on the chosen career pathway, current and prior employment, employment goals, program experiences, suggestions for program improvement, and family roles and parenting.

**Impeding factors.** Factors that hinder progress or otherwise present barriers to participant success are considered impeding factors. Career*Advance*<sup>®</sup> participants highlighted multiple impeding factors in focus group sessions held in December 2012. Among these, time management, partner meetings, incentive policies, and teacher quality/course design issues were common across participants at various levels.

School-life-work balance is frequently cited as an issue among participants in Career*Advance*<sup>®</sup>. Many felt like trying to work and go to school at the same time was overwhelming. "*I can't even get laundry done, much less work*." The perceived utility of program components was also an issue of time. Based on participant feedback, the HIT pathway was modified to drop the initial training component in Medical Assisting. This nine-month program had no direct relation to the rest of the pathway and tended to attract people who were more interested in personal interactions with patients than would be the norm in an HIT or medical coding position.

Partner meetings became a concern for participants further along in a career pathway, with some indicating that there was too much repetition of topics at partner meetings and others that the benefits of the meeting did not outweigh the cost in time and gas. The program responded to this concern by reducing the frequency of partner meetings once participants move beyond the first stage of the pathway. This change allowed Coaches to meet more often with participants on a one-to-one basis to discuss individual needs and advancement goals.

Being in the pilot group—the people going through a newly designed training program like the MA/HIT pathway—can present challenges. While the pilot group provides valuable information to CAP and its training partners about the design of various components, the participants themselves often have to work through less than ideal conditions. The length of the Career*Advance*<sup>®</sup> pathway and the way the project

has unfolded mean that CAP program staff do not yet have any participant that has gone all the way through the nursing or HIT pathway. Therefore, participants in the cohorts examined here have in many ways been part of the pilot group, they have been the first to enter a new career option or have gone through components that are no longer required. During a focus group, participants in the first Career*Advance*<sup>®</sup> Medical Coding class reported multiple frustrations with classroom facilities, the instructor, and the experience in general. *"The teachers need to be more effective; they need to know how to work with adults with different learning styles." "It just feels like it was put together at the last minute. It wasn't well thought-through." "There is only one computer in the classroom; we are trying to use our smartphones to finish assignments. This is a class for work that is done almost entirely on computers."* 

**Supportive factors.** Most participants identified numerous ways that CAP, the Career*Advance*<sup>®</sup> program, Family Support staff, and their families were supporting them in their pursuit of career training. For some, the motivation was personal: "I don't want to be stuck in just another job; I want a career." Others highlighted key features of Career*Advance*<sup>®</sup>, such as peer support, the Career Coach, and financial incentives, all very intentional program components. Participants seem to particularly value the peer support that develops within cohorts. *"We keep each other going."* Another shared that:

"I'm taking PCT for the second time. The first time I was just in the regular [Tulsa Community College] class, and I wasn't as serious. I didn't know how important it was to be in a group that has had similar life experiences. It's easier this time because I'm with my CareerAdvance<sup>®</sup> group."

The Career Coach guides participants as they progress through the program. The participants' connection with the Coach as someone who is committed to helping them achieve success was stressed by multiple participants as a key factor in their *progress. "She is always there; she keeps motivating us – we aren't alone."* Another way that Career*Advance*<sup>®</sup> differs from many occupational training programs is the level and type of financial support that is available to participants. Through a monthly incentive for good attendance and gas cards to cover some of the transportation costs associated with participation, the program seeks to make the program financially feasible for parents through supports that are conditional on performance.

Participants also report a strong connection with CAP-Tulsa as a key factor in their continued participation and success. "CAP treats you like family. They want you and your kids to do better and be better."

# Section 5: Learning from Participants' Experiences: Focus Groups and Intensive Interviews

The Year 1 report of the CAP Family Life Study described baseline experiences of Cohort 4 CareerAdvance<sup>®</sup> participants and their perceptions of the influences of early career training experiences on themselves and their young children. These parents, like earlier cohorts, highly value Career Advance<sup>®</sup> as a "once in a lifetime" opportunity. The most positive aspects of the program reported by Cohort 4 parents in their first four months of exposure to the program included (1) the benefits of financial support and having training costs fully covered; (2) increased confidence in returning to school and enjoying the challenges of learning again; (3) the matching of their own school schedule to their child's, including the availability of before and after child care during training; (4) the value of peer support; and (5) the intensive staff support provided by CAP and CareerAdvance<sup>®</sup>. These parents also experienced challenges associated with balancing work, school, and family, including (1) financial pressures as well as (2) physical and emotional stress. Cohort 4 CareerAdvance® participants' perceptions of the impact of program participation on their children included both benefits and challenges. Positive aspects of parents' return to school included reports of (1) increased positive engagement and learning at home and (2) educational role modeling; negative aspects included reports of (1) insufficient quality time with their children and (2) increased stress.

In understanding program experiences, it can be as helpful to interview nonparticipants, or those who have left a program, as it is to interview participants (Yoshikawa, Weisner, Kalil, & Way, 2008). Having rich information to compare across groups can highlight the unique contributions of the program in question. The impact evaluation design of Career*Advance*<sup>®</sup>, with a matched comparison group, affords an important opportunity to leverage the quantitative matching process to obtain qualitative data. The present report expands on the qualitative data collected for the Year 1 report to include analyses of the experiences of both Career*Advance*<sup>®</sup> participants and matched comparison parents in Cohorts 4 through 6. It reports on two focus groups of randomly selected Cohorts 4-6 parents: (1) a focus group of Career*Advance*<sup>®</sup> program participants who exited the program; and (2) a focus group of matched comparison parents. It also describes themes from the study of in-depth individual interviews of a subset of randomly selected Cohort 6 Career*Advance*<sup>®</sup> participants (n = 11) and matched comparison parents (n = 11) using individual case summaries.

#### **Focus Groups**

**Parents who exit.** The six participants in the focus group of parents who exited the program each had a pre-school-aged child attending one of CAP's early education

centers at the time of their Career*Advance*<sup>®</sup> enrollment, including Disney, Eugene Field, Sand Springs, and Reed. Four were enrolled in the Nursing track and two in the Medical Assistant/Health Information Technology pathway. Most had worked previously in the healthcare field and attained training certificates before entering the Career*Advance*<sup>®</sup> program: one was employed as a medical secretary, and three had achieved certification as Nursing Assistants (CNAs), of whom one also was certified as a Medical Assistant (MA). Another had 17 years of experience as a CNA.

Parents participated in Career*Advance*<sup>®</sup> for a minimum of four months (Cohort 6) up to a maximum of 18 months (Cohort 4) at the time of the focus group. They exited the program for a variety of reasons, including (a) academic challenges (e.g., not passing the entrance exam for the Patient Care Technician or Licensed Nurse Practitioner programs); (b) family issues (e.g., a single mother working up to 80 hours per week while caring for her dying grandmother and children); (c) personal issues (e.g., mental health concerns and/or high levels of stress); and (d) concerns about the length of the program and their rate of progress in it. Choices of next steps in education and training after exiting the program varied as well. One mother who did not pass the PCT entrance test found employment as a CNA, yet earning nearly half as much as she had previously as a medical secretary. Another decided to focus on her family and her own mental health without working. The other four are entering health training programs, either switching from Nursing to HIT/MA or vice versa, one with the Career*Advance*<sup>®</sup> program and three without the direct assistance of CAP, although two plan to engage in CAP's newly created Educational Pathways program to support their efforts.

Four initial themes emerged from the experiences of exiting parents:

- (1) Parents who exit CareerAdvance<sup>®</sup> report feeling positive about their participation, even when leaving before reaching their desired goal, and remain motivated to improve their education, although sometimes in different training pathways or careers.
- (2) Program peers and the CareerAdvance<sup>®</sup> coach are especially valued elements of the program, and most maintain a connection with either or both after exiting.
- (3) Parents also report an improved sense of self-worth, possibly as a result of program participation.
- (4) Parents who exit are benefiting from other related CAP programs that indirectly support their progress in education and careers, including the Adult Learning Initiative (redesigned and now called the Educational Pathways Program) and Healthy Women, Healthy Futures.

When asked about their decision to leave the Career*Advance*<sup>®</sup> program, parents described their experiences positively:

It means a lot to just to have somebody say 'Here's the money for you to go to school, just go.' That's something that will follow you when you become successful.... It is something that will be with you for the rest of your life because it was support, it was help you didn't have. ... It motivates you.

I'm thankful. I'm thankful for the chance they gave us. I'm thankful they chose me, and I feel bad it didn't work for me. I'm responsible because I'm the one that decided to quit because I didn't meet the requirement to continue. I want to be a nurse. That's not the question asked, but when? I don't know.

This second parent was not able to pass the PCT entrance exam but plans to persist in training toward a bachelor's in Nursing (BSN). It is unclear if and how she will reach this goal, yet her motivation remains high, and she keeps in contact with other parents in her cohort. It is remarkable for "exiters" from a workforce development program to be so positive about their experience.

While still positive about their experiences, some parents learned that their chosen career path was not right for them:

So I think I would like to go back to school, but I'm thinking that the health care field is not for me because I think it's really stressful, and I'm not a person to handle all of that stress. I know when I worked as a CNA, I loved it. This was before I had my child. I loved it, but it was very stressful and just with my mental illness don't think I can handle it. But I love the program; it was wonderful.

She (our teacher) told us some stories but for people like her, who loves her job even though it wears her out, she loves her job. That's good, but I was just thinking for me, me personally, I don't think I could because under a lot of stress like that, I kind of break under stress like that, and I don't want that kind of stress from my job. Every job has some stress but not another person's life.

These mothers found direct patient care too challenging for them and their life circumstances. One parent is not working or in training at present but plans to return to school in another field; another is beginning a HIT program independently as she receives greater financial support through benefits as a Native American. In both instances, the mothers reported that program participation helped clarify their career goals.

When asked what they missed most in exiting Career*Advance*<sup>®</sup>, these parents discussed their program peers and their coach:

F: How hard was it for each of you to make the decision to leave Career*Advance*<sup>®</sup>?

P4: It was hard for me because I really loved it. I really bonded with my group, and we all knew each other.

P3: That is the hard part.

P4: The coach, I really bonded with her, and I really miss her.....

P2: ... I mean throughout the whole thing my coach was my mentor or my lady, and she, I mean, she was always available by phone, email, anything, and I would talk to her and say 'Well, I'm going through this, and I'm worried about that' and she always had my, what was going to best for me, that was what was number one.

Parents experience the coach and other student parents as supportive of their best interests and understanding of their choice to exit, even when the decision is difficult.

P6: We just like after a couple of days of getting to be with each other, we just exchanged Facebook information.

P1: And we got the cell numbers if we needed something.

P6: See, like I think CareerAdvance<sup>®</sup> is good because they take people from all walks of life, and some people pass up and down the hallways taking their kids back and forth and don't speak to each other, nothing, they don't know each other, but they take us from all walks of life, put us together, we get to know each other and become friends, because we're friends.

P4: And I never felt judged in CAP.

P6: Yeah, everybody had different problems. We were all able to bring our problems to the table at lunch and when we had breaks and stuff, and if somebody could help, they helped us, and we needed to help them. We brought food for potlucks and shared different stuff, and all that kind of stuff. So we was together.

Parents value the sense of shared community and seem to desire a connection to it even when they have left the program. They remain in contact with other parents in their cohort either through Facebook, seeing them at their child's early education center, and/or in some cases making a close friendship - "that's my chica." As several mothers described the closeness: *"We was like sisters in my cohort"* and *"We still all keep in touch even without being in the same cohort."* The cohort-building activities of Career*Advance*<sup>®</sup> are a powerful experience for these women – like many other parents living in poverty, opportunities for friendship and mutual support can be powerful in counteracting the stresses and social isolation of making ends meet.

For a few parents, their peer cohort has been especially beneficial as it has replaced other less positive and even draining influences in their life. In one extreme example, a mother described how her family asked for financial, emotional, and social support even when she was homeless with three children and attempting a return to school:

I was going through this whole thing of not having a place to stay. I was still working. People were asking me for money. How you asking me for money, and I'm homeless? It don't make no sense. I still got three kids to take care of

whether or not I have a place to stay. Now I'm getting back up. I got my own place again. It's like people are like 'Can I come stay with you?' 'No' And it's like I look at my phone ringing and I don't even want to answer it. I don't answer it most of the time. I ignore people. I had my cousin tell me just the other day that I was acting brand new because I don't talk to him no more. But you just eventually as you growing up and I guess it's just a part of life you get tired of people that don't want to do nothing. You're just a negative effect on me. You're not doing nothing positive. You're not calling me at six in the morning saying girl get up. You just get tired of people bumming off of you, even if it's just come sit with you. That still bugs you. You're taking my time up when I could be doing something better for me and my kids and our future, so I'm just letting go of a lot of people, even to my brother. I'm tired of him. I'm tired of my cousin. I'm tired of nieces. You know? And it's like I love them and I'm not trying to be different but I've got to start thinking about me and my kids. Like me and my kids got down to the bottom, and we had nobody to pick us up. We still had people pounding on us. So I'm at that point right now where I'm getting rid of a lot of people and just telling my kids, it's okay to have family and to love them. You'll see them when you see them, but you can't let them take you away from your street or where you want to go because you'll never get there, and there's always somebody wanting something.

This mother distanced herself from relatives who expect too much from her and whose demands interfere with her ability to support her family and achieve her goals.

I feel like my cohort showed me there was women out there just like me. ... I met all the women in my group, and they all had the same stories like me, like yeah I dropped out of high school, got pregnant my senior year. There's other women that that happened to too and the kids' dad took off and haven't seen him since and I felt like ah, some women I can connect with because I was scared, I was nervous. I was like I don't want to go to college. I'm 26 and I didn't know what to think. I just expected it was all going to be fresh teenagers right out of high school and I'm sitting here, don't know nothing but they really made me feel comfortable and now that I've been going, you've just got to put the work in really... A lot of people lost motivation on their own I've noticed but not in my cohort.... We were saying how we were different from mothers who aren't doing this through CAP. We're just all motivated. We want something better, and we're wanting to do something about it instead of just sitting there and complain about it and not do anything.

These cohort experiences seem to help parents recognize that other parents share in their struggles as well as their aspirations.

The support of the Career*Advance*<sup>®</sup> program and CAP seems to suggest an increased sense of self-worth among parents who progress in their education and training. When asked what it means to have the support of the program, they responded:

It makes you more positive and believe in yourself more. I think it goes to the fact that you can find somebody or an organization that's willing to help you better yourself and not to have to go through a lot of hoops and jumps to try to get them to help you. The reason why I failed my original nursing program was because I didn't have financial support; I didn't have tutoring. I wasn't able to keep up with being a single mother, trying to work, trying to figure out how to study, when to study, what to study, and with CareerAdvance<sup>®</sup> you've got somebody that's saying 'We'll give you this, we'll pay for this, and just go.' It's support.

Their sense of self also seems strengthened by the belief among some parents that they can give back the support by serving as role models for their children and other parents.

But I motivated them not even by talking just by them seeing me drop my kids off every day knowing that I'm going to school with that badge up. They got up, and they went to school too. A couple of them got up and went to school.

They role model for other parents and for their own children:

I never gave up and just continued trying, and you're going to show your kids that's it's never too late to go back to school.

They are motivated by the idea of helping others and giving back.

Parents who exit are benefiting from other related CAP programs that indirectly support their progress in education and careers. Two parents in the focus group are hopeful they will have the support of CAP's Educational Pathways Program (EPP) while independently pursing training programs. Their experiences with the ALI program have been positive to date. These same two parents participate in CAP's Healthy Women, Healthy Futures program as well, and discussed the ways in which it helps them become better equipped to further their schooling through therapeutic and grief counseling and better awareness of healthy choices and family well-being.

**Matched Comparison Parents**. The nine participants in the matched comparison focus group each had a pre-school-aged child who attended one of CAP's early education centers at the time they were recruited into the CAP Family Life Study. Seven of the nine parents had children at different CAP centers; two were from the same center. None of the parents knew each other previously. Four were employed at the time of the meeting: working as a hospital nurse in two departments; running a private janitorial service; employed as a home health aide and in a beauty parlor; and working in customer service at a phone company. Another is an evangelical street minister, although it's unclear whether she is paid.

Six are currently enrolled in an educational program: pursuing a GED; attending bible school; working toward a bachelor degree in business management at Oklahoma State University; enrolled in a bachelor degree program in healthcare administration at Northeastern State University; working toward a BSN having recently received an associate degree in nursing (ADN); and enrolled in on-line nursing courses after receiving an associate degree in medical assisting. One mother who works as an RN plans to enroll in school to become a nurse practitioner but does not know when; another recently received an associate degree in nursing. Only one mother has no plans for or recent participation in an educational program.

Five initial themes emerged from this group:

- (1) The CAP agency provides many beneficial supports to families of which they are aware and for which they are grateful.
- (2) Some parents seem to be achieving their educational and career goals without the support of the CareerAdvance<sup>®</sup> program.
- (3) Role modeling for their children may be a significant motivation for many parents' return to school.
- (4) Parents are making careful calculations about the balance of family, work and school.
- (5) Social supports, both in CAP and beyond, seem central to these parents' ability to succeed in work, school and family.

Parents describe and delineate specific ways in which the CAP agency helps their families, including (a) promoting the educational and social development of their children, (b) supporting them in parenting, (c) offering financial and emotional help in crises, and (d) creating a warm, welcoming environment which may influence how they view themselves.

Parents are well aware of the difference between *day care* for children and *school* where the emphasis is on learning and development. For some parents, having their child enrolled in school was a change and a welcome surprise:

I just signed up. I had no idea what I was really signing up for, but I thought it would be helpful. I'll take it. I was just completely amazed with even the things they were teaching the infants and the toddlers to get them ready, and then with my four year old, she was coming home and she was learning. Everyone was just delightful and then when I saw how quickly she transitioned from the four year old classroom to kindergarten, I was like if I can keep my son in as long as I possibly can....

A Hispanic mother who previously had heard negative perceptions of CAP viewed the program in a new light since enrolling:

I'm like CAP is not just a daycare because they [people in the Hispanic community] see it as a daycare. I'm like 'It's not a daycare; it's a school. It's anything but a daycare. It's a school.' ... If they're [your children] going to be somebody, I'm not saying that your mother is a bad mother and she's not

qualified to take care of your kids, and I'm not saying that about my mother. But I think it would be better for them to socialize with other kids their age because if they don't, once they get into kindergarten....

Another mother furthers the point during the conversation:

And if I could jump in right there having done the program for three and four years, and now my daughter is in kindergarten, CAP had her so kindergartenready. The pre-K is so pre-K. It's like my daughter, she knew how to behave, and she was prepared for the classroom environment, and I owe all that to the CAP program. We weren't raised in daycare, and I was very leery going into the three year old program that 'Oh my gosh, I'm about to start my daughter in daycare,' and they proved me wrong. It's a developmental learning style of environment. It's anything but a day care.

Parents describe other examples of the focus on learning, including how CAP's early education has helped a premature infant learn to crawl, assisted with potty training, and taught children letters, numbers, and how to write their names. They are aware that CAP provides an important "head start" for their children that will help them "be somebody" in the future.

Furthermore, parents are cognizant of the support they as well as their children gain from CAP programs:

...just helping you feel a better parent because there were times I couldn't understand why this two year old is doing this, why this five year old is acting like that. Going to the Incredible Years [parenting curriculum] really helped me to understand as a mom what I needed to give them and be able to make that relationship between us better because sometimes you raise your kids according to how your parents raised you, whether it was good or bad, and so to basically renew your mind and a better way of raising them, and having that better relationship. I just love it.

This mother further explains the value of another CAP parenting program, *Parent Connections*, which brings parents together to share their parenting experiences:

Oh my, I just loved that because you think you're going through this by yourself, and then you hear another parent say this is happening with my child...oh it was really, really helpful. I always went back home and told my husband so we could enact that in our lives. I loved it. I miss it.

Parents understand how helping children and parents are deeply connected:

I really like how they help the children but most of all, they help the adults help the children, which is really awesome. They're concerned about their health and their jobs and everything.

This parent implies that helping parents improve their own opportunities and health seems to influence both parents and children.

CAP also provides key support in crises:

It was like six months where everything was dirt bad, and she [Family Support] came through.

Family Support offer needed material support or emergency funds to help families get through an unexpected job loss, health problem, or other family matters.

Beyond the specific assistance, parents seem to feel that how they are treated in the process and the center environment influences how they feel about their circumstances and even themselves.

They make me feel like a wonderful person. I love my CAP. I love the CAP. I love all the teachers there. It's like family. It's wonderful.

The staff was always very 'good morning, good morning, hello' and welcome and warm. It made you felt like you were part of like a family, and I know for myself, there was a couple of single moms, young moms. I'm an older mom and a couple of younger moms loved that. They loved that maybe they were a single mom, and it was just the mom and the child and that morning the welcome they got, I believe it makes you feel like, 'You're back good morning, and have a great day.' You don't know how dysfunctional they out the front door from but when you walk into the warm environment of a welcome and it's every morning. I look forward to the morning greetings. I knew I could count on the staff be at the door making me at least feel like they were happy to see you...

As one mother summarized the feeling she had about CAP: *"Basically this is my second home. If I'm not home, I'm here."* CAP creates an environment to which parents and their children want to return.

Some parents who chose not to enroll in Career*Advance*<sup>®</sup> are pursing training in the health professions on their own. Two of the four employed parents are working in a health profession, and three of the six parents in school are enrolled in healthcare-related training. Another parent recently completed her associate degree in nursing ADN, and one plans to enter school to become a nurse practitioner. Further study will explore the skills, traits, and social and financial supports that may influence the persistence and success of parents without the support of a career coach and peer cohort of the Career*Advance*<sup>®</sup> program.

Like participants in Career*Advance*<sup>®</sup>, parents enrolled in other education and training programs seem similarly motivated by their children:

I'm encouraging all my kids to school, school, school. That's my job to get them to school, school so that they won't be poor and in poverty, you know? ... They're probably sick of me hearing it, but I'm just trying to go to school just to prove to them that this is how you do things, otherwise you don't go anywhere in life. My mother never cared what I did so that's about it.

And I'm working towards my Bachelors of Science in Nursing with a plan to be a registered nurse and break the cycle of poverty I was raised under. I don't want my daughter to live on the system her whole life and go on to raise her children on the system. So, my goal is to have a really stable mom job that my daughter will want to be just like me when I grow up, when she grows up. [laughter]

These parents are aware that their choices are likely to influence their children's choices. As one mother summarized: "*They have this thing my mom always says, 'Like your kid's a reflection of yourself so normally your kids follows your footsteps.*"

Like middle class parents, many of these parents are aware of the need to balance the demands of work and building a career with the need to balance their time with children. Some parents consciously trade off school or work, not believing that they can be successful in their roles as parents and pursue all three simultaneously. Some parents have learned their lesson the hard way, dropping out of school before reaching their goal or quitting work in order to stay in school, often with a challenging reduction in family income.

I decided to quit my job so I could focus more on my kids and my schooling because I was not able to focus on going to school full time, working full time, and taking care of my kids full time.

Like most parents, they struggle with their competing identities as parent, wage earner, student, and individual adult.

CAP's support system for parents and children alike seems to be an important factor in parents' ability to manage their competing identifies and move ahead in life. CAP is described as a "family" and as a "resource for social connection": "*The parents, teachers, I met everybody. I met all my friends through there [the CAP center].*" CAP helps children learn and grow, supports parents in parenting, provides support in crises and to set goals, and creates an environment of trust and kindness. As one parent summarized the sentiments of many, "*To have that support system really helps you, like you said, to move forward with your dreams.*"

#### **Individual Interviews**

Intensive, individual interviews with a subset of randomly selected Cohort 6 parents echo similar themes as the focus groups and provide an important source of data triangulation. The 22 Cohort 6 parents (11 Career*Advance*<sup>®</sup> participants and 11 matched comparison parents) consisted of 20 mothers and two fathers, 11 of whom categorized themselves as black, five as Hispanic, four as white, one as Native American, and one as other. Four were married and 10 reported being in a romantic relationship at the time of the interview. Six lived with the other parent in the household while 16 did not. Fifteen were employed at least part time, and 16 received a high school degree, four a GED, and two had received neither.

Collectively, the 22 case summaries offer an in-depth window into CAP parents' daily lives: their strengths and struggles, goals for themselves and their children, experiences with CAP, history and experiences in education and work, and strategies

for managing work and school with very young children. Three themes are identified in the first analysis:

- (1) Parents experience CAP educating their children in concrete and specific ways, and these experiences may motivate parents in their education and careers.
- (2) Parents use a variety of strategies to manage work and/or school while raising young children, including accessing a range of social networks, creating family routines, tailoring work schedules to fit family life when possible, and applying an optimistic orientation towards life.
- (3) Achieving credentials and degrees for low-income parents with very young children is challenging and often involves multiple attempts to return to school: almost all parents have had some postsecondary education experience and of these, half have attempted three or more programs, typically without receipt of a certificate or degree and often with significant debt.

**Children and Parental Motivation**. All 22 Cohort 6 parents describe positive experiences for their children in CAP's early education program; take pride in their children's success in school; and are able to name specific age-appropriate milestones their children are achieving. They describe (a) CAP's safe and structured learning environment; (b) specific ways in which their child is advancing academically; and (c) socio-emotional skills their child has developed since entering CAP.

"It's not a day care; it's a school." First and foremost, parents seek for their children to be safe in "day care", yet they also recognize the value of a structured learning environment or "school." Parents identify the regular routines, healthy eating, and attention to special needs as supporting their children in learning and growing. They also observe that their children are learning in multiple realms:

Oh he learn. He learned his colors, learned to write out his name, you know, what his name's spelled like. He know his picture; he know his cubbyhole where he put his book bag and his papers. And that's pretty good. He done learned a lot of stuff from here though.

Parents also focus on their child's achievement of age-appropriate cognitive and developmental milestones:

Now he's in the 3-year-old. So yeah, he is good at like learning like the routine, like the daily routines that they have when they're in the 2-year-olds and then they're learning like, he knows like his ABC's and he knows all these songs and so he's learning a lot. And he knows how to count to 20. And his vocabulary is a lot better, too. Like he knows all these animals and like animals that I don't even think he'll know.

Everybody's sweet. Everybody's always, um, worried about how he's doing and how it's going and if his development is going good and he's where he needs to be. And I like the way how they let me know that, you know?

Like this mother, some are surprised by their child's expanding knowledge base.

These parents also value the socio-emotional skills their children are developing that address, for example, shyness and aggressiveness, help children identify and express feelings, and learn cooperative play and sharing. Parents identify that the program addresses negative behaviors and promotes positive ones:

She has learned how to express herself without screaming and yelling. That was like the biggest thing because before she'd get mad and she'd just scream and nobody knew why. They helped her use her words to say what was wrong with her and why she was acting the way she was. So that right there has been the biggest one.

I think what's big for her is that she gets to help other kids too so she feels like she's a leader and she's not a follower so that has definitely helped her and to be her own person.

These parents express positive feelings about their child's advancement since their child's enrollment as well as recognize the importance of their own role in supporting their child. While still positive about their children's learning at CAP, a few parents express significant concern about the challenges of single parenthood and/or the needs of a child with diagnosed developmental challenges.

CAP parents have similar dreams for their children: to do well in school, go to college, and achieve more educationally than their parents, or "to be better." These parents also have college aspirations for themselves as well. Parental motivation for their own education has a variety of origins. Some had highly challenging early life experiences (physical abuse or neglect, parental drug abuse or incarceration) and are motivated to be different from their own parents. Others view their past choices as poor and are motivated to approach a return to school differently this time for a second (or third, or fourth...) chance. A few come from families with high educational expectations for college and feel that they have failed until they have fulfilled these expectations. For many, they believe that going to college will provide them with increased credibility and make them "worth something."

Role modeling for their children is the most consistently identified motivation for these parents to go back to school.

I just think – so I just think like even being a role model. Like say if their dad is a doctor, 'Oh, I want to be that.' Like they'll see like, okay, I was – 'My mom was there to do this for me or my dad was able to do this for me, we have this nice house. Like I want to do that for my kid.' Some people, it's like that. Or some

people are just spoiled and just on the other side, so it's kind of like at least you can say like with me, instead of me like saying, 'Oh, my mom and dad never graduated, so why should I?' It could be the other way around, too, so.

This mother identifies how parents can be both positive and negative role models for their children in pursuing further education. Children will aspire to examples of successful careers just as they may repeat the limited schooling of their parents. At present, parents enrolled in school identify concrete ways in which they model schoolrelated behaviors for their young children:

Yeah when she sees me with my work, she wants homework too so her teacher started giving her homework. She's so eager to do it. She runs in the house, gets her pencil and she just starts writing. I'm like do you know what you're doing? She's like yes, I've got to trace the numbers and it's like okay. So I guess, and you know that fact that her sisters have homework. She's always like 'Mom, I want to do something' so usually I have an activity book for her where she can just color and shapes, something she can do while they're doing homework. But I mean, I guess since she sees me going to school, she knows you're supposed to but I don't think she realizes that I'm older than a typical student, but she likes school and I think CAP, and seeing everybody around her in school has helped her like school.

Like many others in the sample, this mother believes that her daughter observing her studying, doing "homework" side-by-side, and knowing that her mother is in school helps her child to feel positive about school, and may eventually help her persist as well.

Three of the 22 parents seem to make a direct link between their children's learning at CAP and their motivation to return to school. One is motivated to further her education in order to be a better a parent, another is moved by her child's excitement about learning and wants to experience the same, and a third wants to increase her own knowledge base on behalf of her child.

For example, one parent explains that enrolling her sons in CAP has made her want to go back to school.

It influenced me to make me want to go back to school myself. I have been to a couple of colleges and never really finished them. I just started one major and just stopped because I was more into living my life, doing what I wanted to do, and school wasn't it. So now that I see how I want to raise my kids and how they have to get there, it influenced me to want to go back to school. And I want to be a teacher.

It seems that through her child's CAP experiences, she now knows how she wants to raise her sons and having an education will help her do it well. Specifically, she wants to

be a middle school math teacher. Another expresses that having her child in CAP has made her think about education differently; it has made her want to go back to school.

- *F:* Has B1<sup>10</sup> being here at McClure make you think about education any differently?
- P: Yes.
- F: And how?
- *P:* I was thinking about going back to school myself.
- *F:* Oh, that's great.
- *P*: Yes, I just don't know what exactly to do, so I'm kind of like debating.
- *F:* And how did B1 being here make you think about going back to school? Like, what's the connection there?
- P: I don't know, maybe because he's coming home excited. I want to come home excited too (laughter). I think so yeah. I want to come home and be excited too!

Seeing her son come home excited every day makes her want to get excited about school, too.

A third mother believes that she should return to school so that she can be educated enough to teach her daughter:

- F: Great and has S being at CAP here influence how you think about education at all? How?
- P: Well for one it makes me definitely want to be more educated. That way I can teach her more than what I'm currently doing. I mean I'm in the medical field and I'm pretty stable at where I am but I don't think there's, you can never know too much or be too educated.
- *F:* And tell me a little bit more, like I want to understand the link between S being here and you wanting to be more educated. What was it about her being here that?
- P: Well she can tell me what a hexagon is and I don't know what one is [laughter] I'm thinking I ought to go back to school. I don't even know this and my 4-year-old knows this.

These three mothers, in relating their educational pursuits with their children's, seem to understand the unique opportunities and support provided to them and their children simultaneously. This support may increase their likelihood of persistence, even when financial, personal, and family challenges arise (Sommer, et al., 2012). Following these families longitudinally will provide further insights into whether an awareness of two-generational educational connections influences parents' educational persistence over time.

**Parental Strategies and Skills.** The 22 Cohort 6 case summaries suggest that CAP parents employ a variety of strategies and skills to balance the needs of their family, work schedules, and, in some cases, training and education while their children

<sup>&</sup>lt;sup>10</sup> All names in participant interviews are replaced with initials.

are enrolled in CAP's Head Start program. Not surprisingly, they (a) access a large and varied network of social supports; (b) arrange work schedules, when possible, around family needs; (c) maintain a positive orientation despite a complex set of financial, personal, and relationship demands; and (d) create schedules and routines to manage the complexity of their lives.

The majority of parents in the sample (n=20) indicated that they rely on *social support* -- defined broadly as a person, program, organization, or affiliation that helps them to get by or get ahead. Parents discussed the receipt of emotional, financial and instrumental support from a variety of sources, including CAP, extended family, religious organizations and peers. Many parents rely on family members to supplement childcare while they work or attend school. For example, one mother who enrolled in the Career*Advance*<sup>®</sup> program was only able to do so because her family watched her daughter while she worked weekend shifts at her service job, thus accommodating her new daytime school schedule without losing essential earnings. Without child care support from her family, she would not have been able to enroll in the program.

Other parents noted that family members and support organizations (such as a food bank at their church) have helped to supplement household financial resources during an employment or school transition. This in-kind or direct cash support from family, friends and outside resources was essential to making ends meet.

Emotional support from peers appeared to play an especially significant role in helping parents balance their lives. Participants value social support from other parents in similar life circumstances, those struggling with limited and often patchwork financial resources.

I: Was there anything or anyone that also helped you?

*P*: Yeah the other girls from the group. They were like look we'll help you as much as we can ... so they were like if you need us to come study with you, we'll come. Just support.

I: Did you use their support?

*P*: Yeah we had study groups. Some of them they were over the phone because I was like I'm not going anywhere with all these kids. Just their encouragement for me was I can do this, I can do this and then they just pretty much kept saying don't quit because you're tired. If you're going to quit, make it a good reason like you got your leg cut off, something like that. I was like yeah. Because like in six months I could've been like why didn't I finish and doubt myself and have regrets and now I don't. I know I gave it my best and I passed.

For this mother, classmates in her postsecondary education program provided an important source of camaraderie and a reason to persist.

Parents not only discussed how social support helped them to succeed but also articulated how an absence or withdrawal of support challenged their ability to cope and continue school with work and family demands. One parent noted that when the end of a romantic relationship with a man who helped to care for her daughter coincided with the loss of support from her extended family, she felt unable to manage working full time, going to school and caring for her daughter:

There at the end it got really hard for me to keep working the nights and I would leave school Friday and I would go to work and then Sunday night I would go to work and I was going into school Monday and I kind of got into some financial binds and my car got repossessed and we got evicted from our apartment and so it was one of those things. Something had to give and it was school.

Without much-needed social and family support in her life, she found herself in financial trouble and forced to drop out of school.

Likewise, parents (*n*=5) revealed ways in which their work schedule contributes to their ability to balance their complex lives. Parents noted that flexible hours, and the ability to set their own schedule allowed them to better manage their responsibilities. For example, one parent said that her flexible work schedule made it possible for her to pick her child up from school or take a day off without fear of jeopardizing her job or earnings. Job flexibility appeared to give parents a sense of stability and control. Some parents described how they worked hard to obtain a flexible schedule, in some cases advocating for a promotion or seeking new employment. By contrast, other parents discussed ways in which their work schedule created undesirable circumstances for their family or with school. For example, night work shifts sometimes hinder parents' ability to balance work and family responsibilities.

So I wouldn't see my kids, it... until my off day because they would get out of school and then I would be like, "Okay," I would give them a kiss, "I'll see you later," and I leave and it got to the point where my kids, when I walk out the door they would be like, "Are you coming back?" because they would be asleep by the time I get home. And then when they wake up for school their dad don't bother me, he'll just get up and he... he'll just take them. So they don't see me in the mornings. So that's the only part about it is when I miss my kids when they away.

Parents' work environment and circumstance have varied effects on their ability to balance their responsibilities. Some parents were able to seek out employment that made their lives easier, while others dealt with less than ideal conditions.

Many participants (*n*=9) discussed the ways in which a positive orientation toward life helped them to manage the responsibilities in their hectic lives. Parents revealed a variety of different manifestations of this positive orientation. For example, some parents noted that they tried not to worry about issues in their lives that they could not fix. Doing so appeared to relieve stress, allowing parents to focus on aspects of their lives over which they did have control over:

*P: Just try not to, like, you know, worry about certain things. Like, you know, just let it work itself out.* 

I: Mmm hmm. So you think that not worrying too much about things it helpful?

*P*: Yeah. Very helpful. Because it's like it kind of relieves stress. You don't have to, you know, sit there and worry about something that... you know, that'll get taken care of on its own.

Other parents adopted a "one-day at a time" mantra. Living in the present and taking challenges step-by-step appeared to help parents to manage their many responsibilities:

I would just say pray about it because that's how I got through it and take it one day at a time. That's what I would say. That's how I got through it.

In general, parents' discussion of their optimistic orientation toward life indicated that it was an effective coping mechanism that helped them to persist through challenges. However, given different circumstances or parent temperament, it is also possible that the same strategies could be detrimental to a parent's ability to confront and manage their responsibilities. For example, on the one hand, not worrying about circumstances over which one does not have control may relieve stress and help one cope; on the other hand, this same strategy may be a form of problem avoidance or denial. Deeper explorations of parents' attitudes and approaches to problems will differentiate further when an optimistic orientation helps and when it hinders parents' success in advancing in their education and careers with young children.

Many parents (n=9) indicated that consistent routines and daily schedules helped them to manage life. Daily routines provided parents with a sense of security and made them feel more in control. Parents' daily routines included specific activities with children, protected family time, and shared regular meals. One mother noted:

...so now life is great because we wake up, I go to school, I go to work, I pick her up, we go home, we cook dinner, we sit down and eat together, we do the bath, get our clothes ready for the next day and we get to go to bed at a decent time. Before that we didn't have, I mean she took a bath and everything but there was no schedule

It is clear that for this parent (and several others in the study) having a routine contributed to their sense of success. Daily routines also appeared to lead to a sense of stability. Many parents described their daily routines and discussed a sense of stability in the same breath:

I: ...Why is now going so well

P: I'm stable for one.

I: And stable in what way?

*P*: As in I have my own place. I'm not living with this person and that person. So me and my family is together in our own place, and we just have I guess a schedule and a routine going.

While the direction of causality is unclear (do routines lead to family stability, or does stability help parents develop routines?), daily routines appear to contribute to parents' ability to successful in managing their work, school and family responsibilities.

**Repeated Postsecondary Experiences.** Participants reported similar patterns of past postsecondary education participation: 19 interviewees reported at least one past postsecondary entry prior to the interview, and as a group they reported enrollment in 52 postsecondary education programs (a number that is most likely underreported due to the number of years since high school for most parents in the sample). About half of these programs were in the fields of health<sup>11</sup>, accounting, criminal justice, and cosmetology and about a quarter were for general requirements in undecided fields. Only nine interviewees reported earning credentials from their prior postsecondary experiences (a total of 13 credentials were reported), mostly certificates or licenses from programs that typically span a few weeks to a few months. Only one interviewee reported earning an associate's degree. Interviewees' revealed current educational loan debt ranging from \$1,300 to \$45,000.

Of the 19 interviewees who attempted a postsecondary training or degree program, about half were frequent enrollers (attempted three or more programs; n = 9). Frequent enrollers showed some continuity in their post-secondary education (PSE) pursuits: they attempted at least two programs within the same field or area, or in the case of two Career*Advance*<sup>®</sup> participants, their current program field is related to one of their past programs. Frequent enrollers differed from non-frequent enrollers (n = 10) on a number of dimensions. For instance, frequent enrollers were more likely to have earned a credential (6 out of 9) than non-frequent enrollers (3 out of 10). However, the two highest frequent enrollers (5 or more PSE entries) did not earn even one credential. Frequent enrollers also were more likely to have been exposed to postsecondary education while completing high school (5 out of 9) than non-frequent enrollers (1 out of 10), either by taking college-level courses or by entering a vocational program.

Those parents who enrolled in three or more education programs beyond high school entered and exited for a variety of reasons, and often their reasons differed for each program they attempted. Some of the most common reasons for entering a postsecondary program in the past included the following: expectations from self or family, following friends or family, fulfilling a career dream or desired path, improving employment conditions and opportunities, and/or taking advantage of a free program. This 31-year-old mother with four prior PSE entries followed a friend into a program and availed herself of a program at no cost:

<sup>&</sup>lt;sup>11</sup> Matched comparison respondents were selected in part due to their interest in the health field, in order to match them with Career*Advance*® participants. Consequently, it is no coincidence that the interviewees as a group have prior postsecondary education in the field of health.

If you would get, you know, the CNA license, they'd give it to you for free if you take the course and pass... If you work with them for a year. So I was like, okay. Only doing it 'cause my friend was doing it. Okay? I was a follower, not a leader. (laughing)

Another mother, 23 years old with three prior PSE entries, enrolled again and this time to improve her employment opportunities after a job loss:

... I got laid off and then so I was like oh crap what am I gonna do? So then that's when I started looking for like, CNA something, because I thought maybe that's something I would want to do. At least it would be more of a permanent job, and if I were to get laid off or something like that I would be able to find another job quick.

Only 6 out of the 33 total programs entered by this sample of CAP parents (those who enrolled in three or more programs) resulted in a credential. In other words, most exits from training and educational programs were not due to completion, but rather the result of a program interruption. These interruptions were due to unforeseen events or circumstances; difficulties balancing the responsibilities of school, work, and family; challenging or inconvenient program requirements; programs not leading to the desired career path; and/or health issues or pregnancy. For example, a 34-year-old mother discussed how she was prescribed bed rest due to a high-risk pregnancy and had to drop out of the LPN program she had started after completing a medical assisting program. Later she had enrolled in cosmetology training as a step toward fulfilling her dream to open her own salon. Her life was stable at the time – she was engaged, her daughter was happy, she received support from her mother and stepfather, and consequently she believed that she had the time, energy and support required to build a business upon completion of her training. The day before the program commenced, her fiancé ended their engagement and her parents began a divorce proceeding and withdrew their support. She attempted to persist but the challenges were overwhelming:

There at the end it got really hard for me to keep working the nights and I would leave school Friday and I would go to work, and then Sunday night I would go to work and I was going into school Monday morning, and I kind of got into some financial binds and my car got repossessed and we got evicted from our apartment and so it was one of those things. Something had to give and it was school.

Another 25-year-old mother started three different programs, did not obtain a viable credential despite getting close, and accumulated \$17,000 in debt. She entered her

first Associate degree program seemingly in an unplanned fashion, and struggled with the workload and lack of adequate computer access:

I went there for a semester but it was kind of hard because a lot of the work when you start getting into college type work. A lot of stuff to be done on the computer and stuff and at that time I didn't have like, you know, computers and laptops, so it was like hard to be trying to write all these essays and, 'Oh, I have to go to the library,' and they time you. 'Oh, you have only an hour-and-a-half.' So it just got to that point where I was like, 'I don't want to do this 'cause this is like, you have to have so much done' [...]

This mother encountered inconvenient program requirements and difficulty balancing school, work, and family during her second postsecondary entry and exit. The program required attendance once a week, but also included scheduling time consuming out-of-class group meetings that were difficult to arrange around the schedules of her job and child. Her third program entry was for a certificate in medical assisting rather than an associate's degree, and although she successfully completed her coursework, she was unable to sit for the certifying exam the date it was offered free of charge. She has since been unable to save funds to cover the \$125 fee now required.

## Conclusion

Focus group and interview data corroborate and expand the findings of each type of data and together provide a detailed initial picture of parents' perspectives on CAP, CareerAdvance<sup>®</sup>, and their strategies for balancing work, family, and school. These analyses summarize parents' views as to the ways in which CAP supports their children academically and socio-emotionally; the essential system of supports that help some parents advance in their education and careers, both with the CareerAdvance<sup>®</sup> program and without it: and the skills and coping strategies families adapt to manage the complexities of caring for young children, earning a family income, and advancing their own credentials and careers. Unfortunately, their record of success is limited: CAP families have made repeated past attempts to earn credentials and degrees; few have completed the programs they begin; and often they are left with significant debt that financially burdens their family for years to come. Using a sample of both matched comparison parents and participants who have been accepted but have not yet begun CareerAdvance<sup>®</sup>, these data provide evidence for the need for an intensive workforce training program like CareerAdvance<sup>®</sup>. The data suggest that these parents need extensive financial and social supports to overcome the many obstacles to advancement that result from limited human and social capital, irregular and insufficient financial resources, often turbulent and complicated lives, and the demands of caring for young children, frequently alone.

Future analyses will include longitudinal analyses of a subsample of both Cohort 6 and 7 parents, allowing for an examination of how parents' strategies and skills evolve over time and in particular the influence of specific elements of the Career*Advance*<sup>®</sup> program from the onset of program participation and up to three years thereafter. Social networks and the supports of career coaches and peers are of particular interest as their influence may evolve as parents advance. Future waves of data collection will focus on parents' experiences over the last year only, relying less on long-term retrospective accounts that may be biased by parents' longer-term reconstructions of their experiences. Additionally, future Career*Advance*<sup>®</sup> analyses will combine quantitative and qualitative data to substantiate postsecondary education and career timelines and to explore how certain subgroups of parents or given pathways predict various outcomes of interest, including educational and career advancement, earnings, and personal and family well-being.
## Section 6: Learning from and Disseminating to External Audiences

Our cross-disciplinary research team is committed to collaboration among program and institutional partners as well as participation in a wide variety of policy, program, and research forums and conferences. Our goals are to: (1) maximize the rigor and quality of the study; (2) foster dialogue about study findings; and (3) contribute to the nascent field of two-generation programs and broader workforce policy at the federal, state, and local level. As researchers and advocates for the growing field of twogeneration interventions, members of our cross-university research team presented at the following meetings:

- University of California Los Angeles Graduate School of Education & Information Studies, *Escape from Poverty: Two-Generation Education Interventions for Low-Income Parents and Children*, Colloquium Series: Psychological Studies in Education Division, February 27, 2012, Los Angeles, California (presenter Lindsay Chase-Lansdale)
- Women Employed, Improving Life Opportunities: Two-Generation Education Interventions for Low-Income Parents and Their Young Children, April 3, 2012, Chicago, IL (presenter Lindsay Chase-Lansdale)
- Los Angeles Alliance for a New Economy (LAANE), Improving Life Opportunities: Two-Generation Education Interventions for Low-Income Parents and Their Young Children, April 20, 2012, Los Angeles, California (presenter Lindsay Chase-Lansdale)
- Aspen Institute, *CareerAdvance<sup>®</sup>: A Model Two-Generation Program Lessons Learned,* Invited Presentation during Ascend's site visit to CAP, May 3, 2012, Tulsa, Oklahoma (presenters Lindsay Chase-Lansdale, Christopher King, and Teresa Eckrich Sommer) Please see Appendix Section 6 for this presentation.
- National Head Start Conference, Promoting Dual-Generation Anti-Poverty Programs: The Promise of Combining Adult Workforce Training with Early Childhood Education, June 14, 2012, Washington, DC (presenters Terri Sabol and Emily Ross, co-authored by Lindsay Chase-Lansdale and Teresa Eckrich Sommer) Please see Appendix Section 6 for this presentation.
- American Mojo, CareerAdvance<sup>®</sup>: A Model Two-Generation Program Lessons Learned, July 12, 2012, Lowell, MA (presenters Lindsay Chase-Lansdale and Teresa Eckrich Sommer)
- Ray Marshall Center, Foundation for Child Development, and Aspen Institute, Two-Generation Policy Approaches: State & Local Convening, July 23, 2012, Austin, TX. Please see Appendix Section 6 for an agenda from this meeting.

- Evanston Community Foundation, *Improving Life Opportunities for Evanston Families: Two-Generation Education Interventions for Low-Income Parents and Their Young Children,* September 27, 2012 Evanston, IL (presenters Lindsay Chase-Lansdale and Teresa Eckrich Sommer)
- Aspen Institute, The Big Idea: What Is a Two-Generation Approach, and Why Is It a Game Changer?, Ascend ThinkXChange, October 9, 2012, Aspen, CO (presenters Lindsay Chase-Lansdale, Christopher King, Steven Dow, and Teresa Eckrich Sommer)
- Association of Public Policy and Management (APPAM) 34<sup>th</sup> Annual Research Conference, November 8-10, 2012, Baltimore, MD
  - Organized and convened Symposium, 21st Century Model for Parent Engagement: Educating Low-Income Parents and Children Simultaneously; conveners Lindsay Chase-Lansdale, Teresa Eckrich Sommer and Terri Sabol
  - Presented paper, New Models of Parent-Child Engagement in Early Childhood Education: The Role of Social Capital in Promoting Low-Income Parents' Education and Careers (presented by Teresa Eckrich Sommer).
     Please see Appendix Section 6 for this presentation.

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