

SUSTAINING TWO-GENERATION STRATEGIES:

A CASE STUDY OF TULSA'S CAREER*ADVANCE*[®] PROGRAM

Amanda Briggs
Christopher T. King
Tara Smith

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

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EXECUTIVE SUMMARY

This report examines the *CareerAdvance*[®] program in Tulsa (OK) as a case study on the sustainability of a two-generation anti-poverty strategy that seeks to increase family economic mobility by investing intensively in sector-based, career pathway education and training for parents, while their children are simultaneously enrolled in quality early childhood education. It is the length and intensity of the *CareerAdvance*[®] program that creates the most serious challenges for sustainability. Current program dynamics have resulted in a situation in which a significant share of *CareerAdvance*[®] participants have no children of preschool age currently enrolled in a CAP Tulsa or Tulsa Educare program. Another significant share of participants simply cannot afford the opportunity cost involved in going to school for an extended period rather than working a full-time job. Grant funding from the Administration for Children and Families' Health Professions Opportunity Grant program (HPOG) is set to expire at the end of September 2015, so this is an important time to consider the sustainability of various *CareerAdvance*[®] components associated with program outcomes and impacts.

The sustainability of the *CareerAdvance*[®] program is analyzed using the Microsoft Scaling Framework, which provides a lens to consider the program's design, adaptability, use of technology, and context. This analysis indicates that some components of the *CareerAdvance*[®] program, e.g., wrap-around services and peer supports, lend themselves to positive and sustainable outcomes for participants, and some components, e.g., a strong workforce intermediary and identifying more reliable funding streams, require further investment. Based on this analysis, the report offers a series of recommendations for policymakers and program staff implementing two-generation programs, and considers the challenges associated with bringing them to scale. Key recommendations include: hiring an employer representative to bolster relations with employers and assist with job placement, supporting technology purchases for required coursework and training, and reinforcing the importance of linking investments in adults and their children in whole-family development.

INTRODUCTION

This report examines the Career*Advance*[®] program in Tulsa (OK) as a case study on the sustainability of a two-generation anti-poverty strategy that seeks to increase family economic mobility by investing intensively in sector-based, career pathway education and training for parents, while their children are simultaneously enrolled in quality early childhood education. It is the length and intensity of the Career*Advance*[®] program that creates the most serious challenges for sustainability. Current program dynamics have resulted in a situation in which a significant share of Career*Advance*[®] participants have no children of preschool age currently enrolled in a CAP Tulsa or Tulsa Educare program. Another significant share of participants simply cannot afford the opportunity cost involved in going to school for an extended period rather than working a full-time job. Grant funding from the Administration for Children and Families' Health Professions Opportunity Grant program (HPOG) is set to expire at the end of September 2015. Since the program is facing real financial constraints in the near future, this is an important time to consider the sustainability of various Career*Advance*[®] components associated with program outcomes and impacts.

This paper seeks to ascertain the difficulties and strengths associated with sustaining the Career*Advance*[®] program in its current form in Tulsa, and to draw lessons for other two-generation programs by analyzing the program's sustainability in the context of scale. After an overview of the research methodology, an analytic framework based on the Microsoft Scaling Framework for social innovation and working at scale is presented. The case study of Tulsa's Career*Advance*[®] program is analyzed in the context of the Microsoft Scaling Framework, highlighting opportunities and challenges for sustaining the two-generation program and its associated outcomes and impacts, and, by inference, the program components and services that are hypothesized to produce them.

It is important to note that the focus of this report is on sustaining program outcomes and impacts—program results that have either been demonstrated already or that are emerging or promising but have not yet been fully realized due to time limitations—rather than sustaining the fidelity to the original program model. By its nature, sustaining the program requires adapting to new challenges.

RESEARCH METHODOLOGY

To analyze the potential for sustainability of aspects of the CareerAdvance® program that are most likely to lead to future program success, an asset map is utilized to identify the missing, weak, and strong capacities in the current program design relative to the scaling framework. Key research questions addressed in this study include:

1. What are the current assets of the CareerAdvance® model?
2. What are the missing capacities that should be the focus of improvement in the existing model when considering sustainability of the program?
3. What are the recommendations for sustaining the CareerAdvance® program? What lessons can be learned for scaling up future 2-generation efforts?

DATA SOURCES

This paper's analysis relies on a series of implementation and evaluation reports prepared as part of the ongoing evaluation of CareerAdvance® conducted under the Health Professions Opportunity Grant (HPOG) and HPOG-University Partnership programs funded by the U.S. Department of Health and Human Services. Data from these reports include both qualitative and quantitative information collected since the program began pilot operations in 2009. Additional information from extended discussions with senior CareerAdvance® Career Coaches is also incorporated to strengthen the analysis.

RESEARCH DESIGN

The research design features two primary components:

1. *CareerAdvance® Asset map* - An asset map was developed to describe the assets CareerAdvance® has in place already that might be used to sustain the program in the future.
2. *Theory of Scaling* - A scaling model provides a framework for determining the CareerAdvance® program's capacity for sustainability and future scaling efforts.

LIMITATIONS

The current lack of data on long-term outcomes and true impacts from the *CareerAdvance*[®] program is an unfortunate reality. Middle- and long-term outcomes for children whose parents are enrolled in the program will be unknown for at least a decade. Short-term outcomes for parent participants—e.g., program persistence, certification—are more readily available, and suggest that participating in a two-generation strategy has beneficial results that are aligned with the program’s Theory of Change.

It is important to note that there is an inherent and necessary tension involved with estimating program impacts for participants relative to a well matched comparison group of similarly situated parents not participating in the program, as is being done for the HPOG-UP-funded evaluation.¹ Estimating training program impacts for participants too soon, for example less than two years after program exit, can lead to a false finding of no impact or even negative impact, as participants focus their efforts on building skills rather than working and comparison group parents devote more time to labor market activity (see King and Heinrich, 2011).

¹ Professor P. Lindsay Chase-Lansdale of Northwestern University is the principal investigator for the quasi-experimental evaluation. Dr. Christopher King of the University of Texas at Austin’s Ray Marshall Center is co-principal investigator of the evaluation, which is funded by USHHS’ HPOG-UP program and the W.K. Kellogg Foundation.

SOCIAL INNOVATION AND WORKING AT SCALE

Program officers and researchers implementing and analyzing two-generation strategies are increasingly interested in sustaining current programs that demonstrate strong preliminary evidence of outcomes and bringing them to scale. Without established best practices or a consensus for how to best scale these programs, considering two-generation strategies in the context of social innovation may serve as a useful construct for stakeholders interested in this work.

In Murray et al.'s work, *The Open Book of Social Innovation* (2010), social innovation is defined as “new ideas (products, services and models) that simultaneously meet social needs and create new social relationships or collaborations” (p. 3). Two-generation strategies are a manifestation of this idea, merging models of early childhood development, adult education and workforce development to create a novel anti-poverty strategy. Everett Rogers (1962) established the concept of bringing social innovations to scale and explored positive and negative attributes that tend to help or hinder the scalability of an innovation. Because diffusion of innovations occurs within a larger social system, the context of when a strategy is introduced, its rate of adoption, and its perceived compatibility with public opinion are all likely to affect public acceptance of the idea.

Everett describes one attribute that can give an innovation relative advantage as “the degree to which it is perceived as being better than or superseding the advantage of other strategies” (p. 236). There has been much public frustration with increasing income inequality in recent years, and states have been discussing and implementing two-generation pilot projects throughout this time, in part because of the perceived advantages that such strategies may have over traditional early childhood or adult workforce and education programs addressing children and adults separately (see Mosle et al., 2014; and Lombardi et al., 2014). The proliferation of two-generation pilot projects around the country may be an indication that this is a good time to try to scale two-generation programs focused on training people for jobs that pay good wages, offer advancement opportunities and are intentionally focused on the outcomes of parents and their children. With evaluation metrics and data reporting already in place, the CareerAdvance® program is ripe for consideration.

SCALING WITH INTEGRITY

It is important to differentiate between scaling a program to replicate its structure, and scaling a program to replicate its intended purpose. The program’s structure, including its characteristics and metrics—e.g., numbers served, funds spent on educational activities, and numbers of credentials earned—can more easily be replicated than its impacts. In order to sustain positive impact, expansion must stay true to the original purpose of the project and the population it was initially designed to help.

For a scaled-up version of CareerAdvance® to accomplish its goal—breaking the intergenerational cycle of poverty—care must be given to sustaining program *impacts* related to the economic self-sufficiency of families who are served, rather than simply scaling up the number of participants served and the services provided. The remainder of this chapter explains how an appropriate model of scaling used to analyze program sustainability in CareerAdvance® should be less focused on enrollment numbers—serving more people—and more focused on what additional or current components appear to create positive outcomes for participants.

THE MICROSOFT SCALING FRAMEWORK

The scaling framework utilized in this report is adapted from Cynthia Coburn’s 2003 article, “Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change.” Coburn and Chris Dede of the Harvard University Graduate School of Education are credited with laying the foundation for the framework, which the Microsoft Corporation has since molded into a scaling scheme to be used as a guide for scaling up educational innovations. The human capital investment provided to CareerAdvance® participants through the program is primarily educational in nature, coupling coursework at community colleges with Career Coaching to prepare students for work in high growth healthcare occupations.

The Microsoft Scaling Framework identifies five dimensions to consider for scaling up an education innovation, including: depth, sustainability, spread, shift, and evolution. This Framework describes how to scale up effective education reforms in the classroom, but is relevant for examining the scalability of two-generation strategies as well. As shown in Table 1, the Model also details four key components of sustainability: robust design,

avoiding the trap of mutation, technology, and context. These components are the focus for this analysis.

Table 1. Microsoft Scaling Framework

DIMENSIONS OF SCALE	DEPTH	SUSTAINABILITY	SPREAD	SHIFT	EVOLUTION
POWER OF DIMENSION	Robust Design Robust design involves developing interventions that retain substantial efficacy in relatively barren contexts, in which some conditions for success are absent or attenuated				
TRAPS TO AVOID	Trap of Mutation Developers should ensure that ways they modify the innovation to adapt to various inhospitable contexts do not undercut its core conditions for success				
ROLE OF TECHNOLOGY	Computers and Telecommunications Among other strengths, technology can enhance the engagement students have in learning, can differentiate instruction to meet the needs of various types of learners, and can provide tools to help overwhelmed teachers accomplish administrative and assessment tasks.				
NEXT STEPS TO EXPLORE	Contexts How can I modify the innovation (robust-design) so that it functions in various types of inhospitable conditions? How typical is each condition for success in my target population of users? How can I support “robust-design” users in evolving towards conditions for success that enable full effectiveness?				

Source: Adapted from Microsoft Scaling Framework (2014), Coburn (2003), and Dede et al. (2005).

Robust design involves developing interventions that retain their purpose regardless of their operating environment. Program design must be robust enough to accomplish its goals in new surroundings, but not so rigid that it precludes making needed changes to the program. Avoiding the trap of mutation is concerned with ensuring that the innovation can adapt to various contexts without modifying its original ‘conditions for success’ to the extent that it no longer can be considered the same program. The role of technology is an important consideration as well. A large amount of educational coursework and training has moved online, while a substantial portion of coursework assigned in traditional in-person courses requires personal computers and wireless Internet at home, posing problems for students who do not have adequate technology at home. Context, the final dimension in the Microsoft model, is important in considering the program’s future sustainability. Context is concerned with how the design of a model can evolve toward conditions for success and adapt to its surroundings.

To evaluate the sustainability of the *CareerAdvance*[®] model, one must ask how adaptable the design of the program is to different settings, whether or not technology can be utilized effectively to supplement learning that would benefit *CareerAdvance*[®] participants and their children, and how the program can be implemented to support the future success of the program. All of these elements of sustainable scaling are used in the following analysis.

Adopting an education-based scaling model is beneficial and appropriate when studying *CareerAdvance*[®] because its parents earn certifications through community college classes that they take while training for healthcare jobs and ultimately careers. Furthermore, creating sustained change in the lives of participants is an important goal of the *CareerAdvance*[®] program. Moreover, important dimensions in the model, including depth, sustainability, spread and shift, are all relevant when considering challenges of scaling up a two-generation strategy.

LIMITATIONS

According to Coburn (2003), externally developed reforms are hard to sustain because programs are typically designed with a unique set of circumstances in mind. These projects are further confounded by the short-term influence of resources that tend to flood into a project at the pilot phase, but often are not sustained over time. Coburn states that funding will indeed “dissipate over time, as external developers turn their attention to other sites” (p. 6).

Additionally, research that captures many of these metrics, including sustainability, is often qualitative and can involve time-consuming survey methods and focus group analysis, rather than quantitative data that can be more easily tracked by software and run in a regression analysis. However, even given the data limitations, these components of scale are important to address because, as Coburn states, “they capture what is important rather than only what is easily measurable (p. 4).”

Furthermore, scaling up effective educational pilot interventions in general can be tough work. “[P]ilots may be inherently unscalable because of their design, and how they tend to be labor intensive and expensive” (Brown & Moy, 2010). Cullinane (2013)

elaborates on this problem when scaling up education innovations, stating that problems can be avoided by prioritizing the design of innovations and initiatives for scale from the moment of conception rather than trying to grow a pilot to scale (p. 2).

Note that these limitations primarily apply when taking a program as it currently stands and replicating it in another location without making modifications appropriate to the particular context. Model replication of this kind is not what is addressed in this report. Rather, this analysis focuses on a nuanced, robust strategy in which *characteristics* of the program itself can be sustained over time in an existing program and potentially carried over to new locations contributing to both program retention rates and positive impacts for families.

The next section presents a case study of CareerAdvance® through the development of an asset map that will be used to analyze the program along the four dimensions of sustainability described above.

CASE STUDY: TULSA OKLAHOMA'S CAREERADVANCE® PROGRAM

In 2008, the Community Action Project of Tulsa County (CAP Tulsa) began working with leading researchers with the Harvard Center for the Developing Child and the Ray Marshall Center for the Study of Human Resources at The University of Texas at Austin's LBJ School of Public Affairs to improve services and outcomes for the families served in Tulsa's early childhood education programs. The training program that became *CareerAdvance*® is based on a career pathway model in the healthcare sector. It was launched as a pilot program in 2009-2010 following a design phase in 2008-2009, both of which were supported by the George Kaiser Family Foundation. *CareerAdvance*® was designed based on proven research in human capital development. In 2010, the program was awarded a five-year, \$10 million Health Professions Opportunity Grant (HPOG) by the US Department of Health and Human Services Administration for Children and Families. Today, families at early childhood centers operated by the Community Action Project of Tulsa County (CAP Tulsa) and Tulsa Educare, as well as participants enrolled in the Temporary Assistance for Needy Families (TANF) program, are eligible to participate. The ongoing implementation study of the *CareerAdvance*® program, led by the Ray Marshall Center, provides important context for this evaluation.²

CareerAdvance® is also the subject of a quasi-experimental impacts evaluation for parents and children connected with *CareerAdvance*® through 2017 led by Northwestern University and the Ray Marshall Center and funded by an HPOG-University Partnership grant. Additional funding from the W.K. Kellogg Foundation and the Foundation for Child Development supports longitudinal data collection and further analysis of two-generational outcomes from *CareerAdvance*® participation.

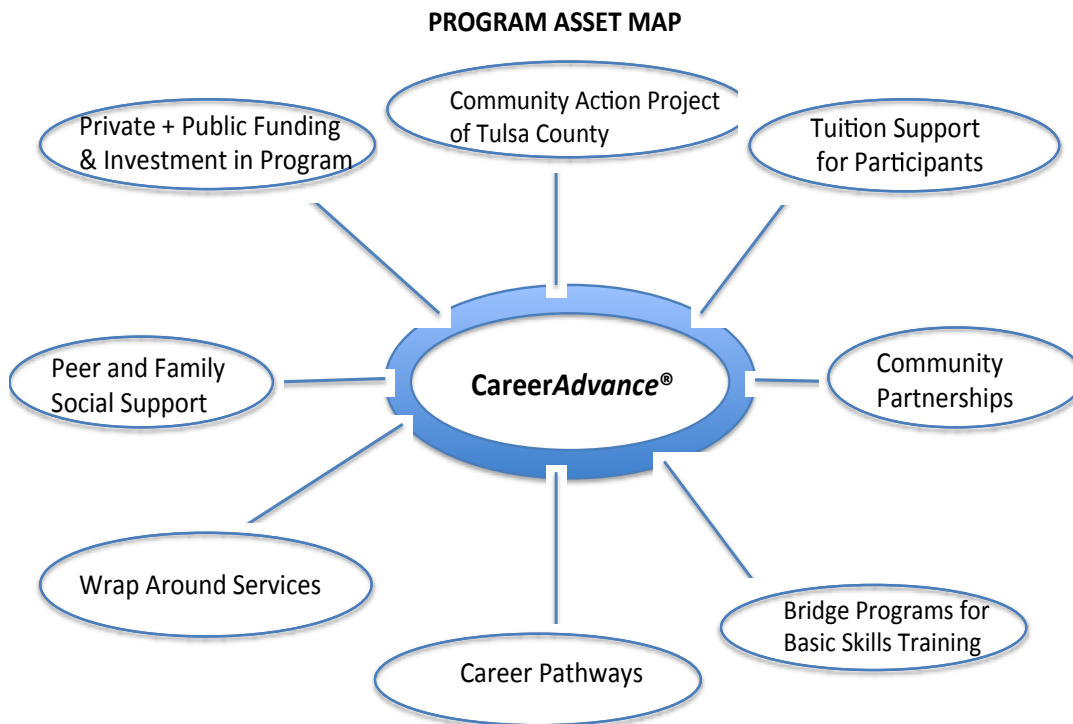
This broad research base provides a wide range of data needed for the two key components of the case study: (1) the development of a *CareerAdvance*® program asset map, and (2) the construction of a sustainability profile based on the Microsoft Scaling Framework outlined in the prior section.

² Reports from the implementation study are available at: <http://raymarshallcenter.org/2008/07/01/tulsa/>

CAREERADVANCE® ASSET MAP

Figure 1 provides a graphical depiction of the assets of the CareerAdvance® program, as identified through an examination of CAP Family Life Study and implementation reports. The sections that follow provide additional information and an assessment of each component of the asset map.

Figure 1. CareerAdvance® Asset Map



Working clockwise from the top, the first critical component to assessing the CareerAdvance® program is CAP Tulsa and its culture of innovation. Seven additional aspects are profiled in the program asset map.

Asset: CAP Tulsa

CAP Tulsa is an anti-poverty agency that works with families to provide education and skills, in accordance with a belief in “empowering low-income families with the

education and tools they need to break the cycle of poverty” (CAP Tulsa, 2014). Most of the services it provides to Tulsa families are not contingent upon participation in the CareerAdvance® program, including early education, enrichment programs, skills classes for parents, and assisting families with affordable housing and tax credit applications. Participants in CareerAdvance® have been outreached and recruited as parents of children already receiving early childhood education services through CAP.

CAP Tulsa currently operates 13 early childhood learning centers, which serve around 2,300 students, age 0-4 years. CAP Tulsa is the contracted Head Start provider in the Tulsa area and received some \$13 million in federal funding for the operation of Head Start and Early Head Start programs in FY 2015 (CAP Tulsa Annual Report, 2014). Including state and other funding, CAP Tulsa received nearly \$40 million for its early childhood programs.³ CAP Tulsa’s early childcare programs meet multiple standards of quality that are recognized in the field. In 2011, CAP Tulsa was awarded a Center of Excellence in Early Childhood Award by the National Office of Head Start (CAP Tulsa report, p.1). The National Association for the Education of Young Children (NAEYC) has also accredited CAP centers and their work, recognizing that CAP meets ten (10) standards deemed necessary for a program to be considered high quality.

Finally, Pre-K teachers of students at CAP centers have demonstrated higher-than-average scores on CLASS metrics, when compared to the average CLASS scores of educators teaching in Head Start programs nationally, according to CAP.⁴ Recent studies also have validated the quality of CAP Tulsa’s ECE programs for children (Gormley et al., 2011).

- ❖ **Asset Importance:** Children of CareerAdvance® participants receive Head Start services at CAP Centers. Their parents are able to commit to their coursework knowing that their children have a safe place to learn. Through CAP’s ancillary services, these participants have access to a variety of anti-poverty services at

³ Email communication to the authors from Dr. Monica Barczak on April 6, 2015.

⁴ CLASS metrics include three domains by which teacher instruction is evaluated, including: emotional climate, classroom organization, and instructional support

their disposal, while allows them to more effectively take advantage of programming.

Asset: Tuition Support for Participants

CareerAdvance® covers the cost of participants’ tuition, fees, books, and required supplies. Incentive performance ‘payments’ (in the form of gas cards) are also awarded to participants who meet certain pre-determined goals, including class attendance, credential attainment, etc. Focus group data over time indicate that tuition support for educational training provided by the CareerAdvance® program is an asset highly valued by participants.

- ❖ ***Asset Importance:*** Free tuition and related performance bonuses allow low-income parents at CAP to access education and training in a way that other participants may not be able to.

Asset: Community Partnerships

CareerAdvance® works closely with many community partners, including Tulsa Community College (TCC), the Tulsa Technology Center (Tulsa Tech), Tulsa and Union Public Schools, and Workforce Tulsa, the Tulsa workforce investment board. Holding courses at TCC and Tulsa Tech allows participants to document their training and education with a credential while providing a physical space for students to be served by the program.

- ❖ ***Asset Importance:*** Community partnerships serve as a link between conceptualizing the program’s goals and actually realizing them. Participant success in earning a credential is essential for the program to produce the desired results for parents. Partnerships with public schools must be in place to limit the disruption that transition between a CAP center and elementary education can create for young children, as well as to access adult education and ESL services.

Asset: Bridge Programs and Basic Skills Training

While CareerAdvance® admission policies and criteria have evolved over time, there have always been safeguards built into the program for participants who may be coming into the program with basic skills deficits that will put them too far behind in college coursework. These safeguards allow participants who are willing to learn and invest time in ‘bridge’ coursework and basic skills the opportunity to gain skills crucial to their success before enrolling in a more advanced career pathways.

- ❖ ***Asset Importance:*** CareerAdvance® recognizes the need to help participants build a solid foundation in basic skills along with occupational skills development. This investment is intended to help participants reach their longer-term goals, a point in time where they will be more likely to pass along the educational and economic benefits on to their children.

Asset: Career Pathways

Well-designed career pathway models that are responsive to the needs of the labor market can be highly successful as a workforce development strategy (King, 2014c). The inclusion of additional pathways in the CareerAdvance® program over time has provided participants more flexibility and choice, but also more challenges from a program implementation standpoint. The educational pathways themselves have been modified and streamlined to more efficiently move participants through the necessary credentials they need to meet their goals.

- ❖ ***Asset Importance:*** Career pathways are the routes by which participants make progress in the program. Participants’ future wage increases and other associated benefits are dependent upon the success of making their way through these pathway programs.

Asset: Wrap-Around Services

In addition to tuition support, participants receive childcare and transportation assistance in the form of gasoline cards that can be used to reimburse travel expenses. While CAP Tulsa was already providing ECE services for children that qualified to participate in its programs before the creation of CareerAdvance®, additional wrap-around childcare had to be added to the service mix when parents participating in CareerAdvance® required extra flexibility in their schedules in order to attend classes, participate in practicums, and other training-related activities.

- ❖ ***Asset Importance:*** These support services are essential for participants. Their importance cannot be understated, as the decision to provide wrap-around childcare or the process of finding a childcare replacement could prohibit a participant from enrolling and continuing to participate in CareerAdvance®.

Asset: Peer and Family Social Support

Peer and family social supports for program participants were deliberately and explicitly incorporated into the CareerAdvance® program based on research indicating their importance for success in community college education (Pathways to College Network, 2011). These supports include the assignment of a Career Coach based on the associated career pathway track a participant enrolls in, monthly partner meetings to discuss progress in the program, and the ongoing support of a Family Support Specialist, which all participants receive as part of their participation in CAP Tulsa programs.

- ❖ ***Asset Importance:*** Participants reference both Career Coaching and peer supports as being a crucial to their success in the program. Focus group data substantiates that Career Coaches agree.

Asset: Private and Public Funding

The CareerAdvance® program benefits from a mix of private philanthropic funding, federal program funding, and other grant awards. Initial funding for the pilot program

design and its implementation was provided by the George Kaiser Family Foundation, after which USHHS/ACF HPOG grant and other private grants supported CareerAdvance® program expansion. The multi-million dollar HPOG-UP grant awarded in 2011 primarily supports the CAP Family Life Study. An additional \$300,000 was awarded in February 2012 by the WK Kellogg Foundation to support continued data collection and follow up on additional participant cohorts.

- ❖ **Asset Importance:** The mix of funding from public and private entities is important because it is fundamental for the program to sustain services for participants and evolve in the future. This diversity of funding sources has provided program stability and protected it somewhat from any change in priorities by a single funder.

SUMMARY

CareerAdvance® has evolved over time from a program serving a handful of parents in one pathway to serving many parents in more than five (5) career pathways in healthcare. Future research will be helpful to understand the effect of the program on long-term outcomes, which will be analyzed as part of the ongoing CAP Family Life Study. Assets identified here as tantamount to the program's continued success are based on short-term, emerging evidence provided in the Implementation and Family Life Study Reports.

RESULTS OF THE SUSTAINABILITY ANALYSIS

This section presents the result of an analysis of the asset map along the four dimensions of the Microsoft Scaling Framework: robust design, avoiding the trap of mutation, the role of technology, and context. The analysis identified missing capacities that could limit the sustainability of the CareerAdvance® program. Table 2 below summarizes the findings for each of these dimensions.

Table 2. Sustainability Analysis Summary

DIMENSIONS OF SUSTAINABILITY	MISSING CAPACITY
Robust Design	<ul style="list-style-type: none"> • Strong Employment Connections for Participants • Interim Outcome Metrics • “Early” Child Education
Avoiding the Trap of Mutation	<ul style="list-style-type: none"> • Program Safeguards During Expansion
Role of Technology	<ul style="list-style-type: none"> • Adequate and Accessible Technology
Context	<ul style="list-style-type: none"> • Opportunities for Whole Family and Other Support Activities

ROBUST DESIGN

Missing Capacity: Employment Connections for Participants and Recent Graduates

CareerAdvance® is grounded in a long-term theory of change that requires stable job opportunities for participants following attainment of their education credentials. While there has not been adequate time for many students to make it all the way through the program’s pathways, especially nursing, and begin employment, preliminary findings indicate that there may be a disconnect between what the program provides participants (a

labor market credential or two) and the expected outcomes (good wages, long-term employment, career advancement, and fulfilling work).

This is problematic for the program as a workforce development strategy, as the link to employment via a workforce intermediary is weak or nonexistent. While a robust workforce intermediary was part of the initial design of the program, it has not been fully developed or implemented. Current opportunities for participants to access job resources include: an introduction to job openings through word of mouth by Career Coaches, healthcare job presentations in weekly partner meetings, resume completion after a certificate is earned, interview prep seminars, and clothes for interviews. While these are very helpful, participants are still expected to look for jobs on their own, and there are no built in supports for the transition from student to worker. Employer engagement was seen as essential to the implementation of an effective sector-based strategy from the outset.

Missing Capacity: Interim Outcome Metrics

Career Coaches have stated that participants can be hard to motivate to achieve their goals or may have unrealistic expectations about the length of time that completing a career pathway might take, or the difficulty of getting accepted into a program like nursing after completing certifications. Clearly stated expectations and interim outcome metrics, such as a definition of progress, which program staff members are currently developing, would help participants have clear benchmarks to meet along the way to keep them focused on earning the grades and exhibiting the behavior and professionalism necessary to be successful in the long run.

Interim outcome *measurements* exist in the program—for example, the number of certifications earned through completion of a career pathway—but rules for what is required (e.g., grades) of participants in order to meet these measurements and continue in the program do not.

Missing Capacity: “Early” Child Education

The CAP Family Life Study has indicated that the average age of the child of a CareerAdvance® participant being served in CAP Tulsa’s ECE programs is almost 4 years old. When a child has almost aged out of the free ECE services provided by CAP, the associated and expected long-term outcomes that are expected from participation in a CareerAdvance® pathway may not be achieved. Therefore, the expected return on parental investment for the child may not be fully captured in the data, confounding research findings.

AVOIDING THE TRAP OF MUTATION

Missing Capacity: Program Safeguards During Expansion

Career Coaches and CareerAdvance® participants who have experienced coaching or participated in a newly developed pathway have expressed concerns that some of these additional pathways may not result in the expected outcomes. When new or expanded pathways are developed, the program may have a hard time meeting its goals without undercutting the core conditions for success that were present in the original, more developed ones, both for students of the old pathway programs, and students of the new pathways. Some of the challenges with new pathways are inherent in creating any new education or training option, while others may relate to staff turnover and inexperience.

ROLE OF TECHNOLOGY

Missing Capacity: Adequate and Accessible Technology

Adequate personal laptops and other classroom equipment for students are not available with current funding. Focus group participants and Career Coaches have commented that this contributes to a dearth of learning at home and makes completing assignments more difficult. Coaches have also stated that not having adequate computer skills and knowledge of how to actually use available computer programs can make completing assignments difficult, even with the proper equipment.

CONTEXT

Missing Capacity: Opportunities for Whole Family and Other Support Activities

Links between CAP ECE programs and the CareerAdvance® program—emphasizing the family elements of the program—are embedded into the program conceptually, but need to be reinforced in practice. Additionally, counseling services that address the complex context that participants face and the ways that poverty impacts their lives at home are inadequate or lacking according to focus group participants.

SUMMARY

The four dimensions of sustainability should be included in the program planning process from the beginning. While all of the missing capacities described above were based on an analysis of one program, the issues and challenges are likely to be relevant to other two-generation programs across the country as well. A new program considering use of a career pathway, sector-based model like CareerAdvance® will want to consider the assets that the program is built on and could bring to its participants, in addition to the missing capacities and gaps that might impede sustainability.

RECOMMENDATIONS FOR SUSTAINABILITY

This section presents recommendations for addressing the missing capacities identified in each of the four dimensions of sustainability. A summary of the recommendations is provided in Table 3 below.

Table 3. Summary of Recommendations

DIMENSIONS OF SUSTAINABILITY	RECOMMENDATION FOR SUSTAINABILITY
ROBUST DESIGN	<ul style="list-style-type: none"> • Strengthen the workforce intermediary function and job coaching to bolster employer relations and the job search process • Establish measurable goals for progress based on participants' career pathway goals • Outreach to families with toddlers as appropriate
AVOIDING THE TRAP OF MUTATION	<ul style="list-style-type: none"> • Identify core components of the program model that are good foundations for program expansion • Prepare coaches and other staff for new competencies prior to launching the expanded effort
ROLE OF TECHNOLOGY	<ul style="list-style-type: none"> • Provide enhanced access to technology or support technology purchases, including laptops, Internet connections, software required for coursework, and computer training
CONTEXT	<ul style="list-style-type: none"> • Reinforce the links between adult and child programs to emphasize whole-family development

ROBUST DESIGN

- ❖ **Recommendation:** Strengthen the workforce intermediary function and job coaching, bolstering the job search process

An employer representative should be integrated into the program design of CareerAdvance®. This person would bolster the process of participants finding a job, preparing for interviews, and managing the challenges associated with full time work. They would also help the participant find job postings and keep track of employers that hire program graduates over time, so that a network of alumni could be utilized for future program graduates who are searching for jobs.

Furthermore, healthcare providers and hospitals that have committed to helping CareerAdvance® participants work for their organization should regularly visit the program and recruit students into their positions. Perhaps most importantly, employers should tell the employer representative more explicitly what they are looking for in candidates so that the coaches can help participants prepare. They can also inform the program more fully about their on-the-job requirements and conditions. It may be useful to look closely at how Capital IDEA and Project QUEST, two Texas-based workforce intermediaries, utilize such positions to maintain strong employer-participant relationships and achieve high job placement rates and longer-term earnings impacts (see Smith and King, 2011).

- ❖ **Recommendation:** Establish measurable goals for progress based on participants' career pathway goals.

CareerAdvance® is currently investigating how to integrate better measures of progress and interim outcome metrics into the program. These metrics should be integrated into the program design for future cohorts in order to avoid situations where a participant is accepted into the program and allowed to continually receive services without meeting interim goals that are essential for their success at the end of the career pathway.

The Center for Law and Social Policy (CLASP) is currently examining how interim outcome metrics can be used to help participants achieve their goals, while also acknowledging the stress and circumstances that their students are under as they complete these programs (CLASP, 2014, p. 4). This sort of support takes into consideration the family's needs and challenges, yet also prioritizes success.⁵

- ❖ **Recommendation:** Deliberately and purposefully outreach to families with younger children as appropriate.

⁵ See <http://www.clasp.org/resources-and-publications/files/CLASP-AQCP-Metrics-Feb-2013.pdf>

CareerAdvance® staff should consider enrolling some parents with younger children in the future. While there are concerns about both the private and social costs of taking time away from parenting younger children, if a mother is already pursuing education or training without tuition support—or working full-time in a job that does not have family supporting wages—the CareerAdvance® program could be quite beneficial. This could help address some of the challenges that young parents face when they enroll their children in early childhood education and could also help preserve any positive impacts that come from receiving quality education earlier.

AVOID TRAP OF MUTATION

- ❖ **Recommendation:** Identify core components of the program model that are good foundations for program expansion.

The majority of funding for the CareerAdvance® program goes toward tuition assistance and related costs (including performance-based payments) for students pursuing career pathways in healthcare careers. For this reason, program staff may benefit from intensively focusing on educational investments with their partner institutions that both retain students at high rates and adequately prepare them for well-paying jobs upon graduation. Healthcare programs with robust curricula and a good track record of preparing students for the required certification exams are preferable. Furthermore, employer partners should be engaged *before* program expansion to ensure that the skills developed and technology utilized for training in new courses mirrors those found in the workplace (e.g., hospitals in Tulsa).

Furthermore, focus group feedback from participants and interviews with Career Coaches indicate that peer support provided by the CareerAdvance® program is of paramount importance. However, this core component could be strengthened by refining weekly meetings with each cohort to ensure that staff members are as efficient as possible with participants' limited time. Weekly handouts or email reminders regarding academic timelines (deadlines, test dates, etc.) could be

presented to cohorts of students in the same program, opening up time for additional one-on-one support, bonding among cohort members, and soft skills training, including interview and job search information.

❖ **Recommendation:** Prepare Coaches and other staff for new competencies prior to launching expanded efforts and new career pathway options

Prior to expanding the program to additional career pathway options or partnering with additional education providers, staff members at CareerAdvance® should analyze the remaining high-growth healthcare pathway options along a number of factors, which might include completion rates and success of students who are in traditional college programs, employer perceptions of the marketability of certifications earned through prospective programs, and the quality of the teaching staff available to work with CareerAdvance® students. Teachers must challenge participants to achieve at or above the traditional student population, while also being sensitive to the demands that these students face outside of the classroom.

In addition, once a pathway or aspect of the program has been targeted for expansion, Career Coaches must receive additional preparation and training on issues such as in-depth knowledge of student requirements, the characteristics of successful students in similar programs, and an understanding of the challenges that might arise for students. Finally, staff retention at all levels of Career Advance® must be emphasized and rewarded. Each time a new staff member must be trained, the expertise in the type of healthcare program students are guided through and the trust formed between coach and participants are lost.

COMPUTERS AND TECHNOLOGY

❖ **Recommendation:** Provide enhanced access to technology or support technology purchases, including laptops, Internet connections, software required for coursework, and training.

While diverting existing program resources to invest in computers and technology would be challenging, it would greatly benefit participants working in these pathways and could also help them teach skills to their children at home. As learning across generations is one of the goals of the program, and increased skills with technology could help make participants more marketable and more able to successfully complete their schoolwork, this is a much-needed investment.

CONTEXT

- ❖ **Recommendation:** Reinforce links between adult and child programs to emphasize whole-family development

Participants should receive additional support from counselors and program staff to help address some of the complex challenges that poverty and having young children while being simultaneously enrolled in an educational program present. This support could take the form of site visits or play time at CAP early education centers so that parents have additional opportunities to interact with their children in the context of CareerAdvance®. Program curriculum should also be adapted to more explicitly link the services and programs provided to participants and their children.

Model Program Profile: Play to Learn

One example of a program integrating technology and reinforcing the bond between parent and child is United Way's "Play to Learn" program, which is part of the Success by Six Initiative of United Way for Greater Austin (2013). Parents receive a tablet, which has educational apps that they can use at home after completing in-person meetings for parents and children for eight weeks. Participation awarded parents a year of Internet services if parents went to story time at the library with their children, reinforcing the connection between parent and child. United Way conducted a study of the outcomes (2013), and found that parents were more likely to be happier and kids were more likely to read more with their parents and have better social skills.

CONCLUSIONS

Even with private investment in two-generation strategies, fiscal constraints are a pervasive problem for the sustainability of this program and future efforts. Comments from Career Coaches in response to interview questions indicate that support from coaches and peer cohorts, financial incentives (in the form of tuition, testing fees attendance incentives and travel reimbursements), and childcare are fundamental aspects of the program that need to be supported. All of these aspects are costly. Future analyses must identify options for maintaining stable funding for two-generation programs over the long-term, particularly for the components most associated with participants' persistence, completion and ultimate success in the labor market.

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