

Two-Generation Programs in the Twenty-First Century

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Abstract

Two-generation programs explicitly target low-income parents and children in the same family. In this paper, we focus on two-generation programs that intentionally and strategically link education, job training, and career-building programs for low-income parents *simultaneously* with high-quality early childhood education for their young children. This definition thus emphasizes an investment strategy to build human capital for both children and parents and implies an intensive, extended approach. This type of two-generation program may represent a promising and innovative antipoverty strategy for families. In the past five years, the renewed appeal of a human capital two-generation perspective has led to a number of initiatives on the ground, a significant advance over earlier efforts along these lines in the 1980s and 1990s. Ironically, evaluation evidence for recent innovation lags behind current policy and practice. However, theoretical evidence that supports two-generation programs is compelling.

Visionary leaders in philanthropy have been key catalysts in this resurgence of interest in two-generation programs. In addition, the prominent public policy focus in the past several decades regarding welfare dependency has largely given way to a concern about the United States' competitive position in the world economy. The United States lags behind many other countries on multiple indicators of educational attainment, even though there is widespread acknowledgement that education beyond high school is essential for success in the global economy of the twenty-first century. With advancing technology and globalization, many jobs in the U.S. increasingly require higher levels of education and training than in the past, reflecting the significant disappearance of family-supporting, low-skilled jobs. Yet, many members of our current and future workforce are unprepared for the demands of the twenty-first century. This lack of preparation is especially evident in the inadequate levels of school success among low-income children and their parents. In addition, childhood poverty remains persistently high at over 20%, and social inequality has increased substantially.

As a consequence, various national conversations are underway in search of promising new approaches, including two-generation human capital programs for parents and children, to combat the pressing issues of economic hardship, low education, and their deleterious consequences for families and society. The purpose of this paper is to integrate theories from developmental science, economics, and education to evaluate the assumptions underlying two-generation programs, to outline possible mechanisms of effects on children, to synthesize and critique what has been tried to date, and to describe some emerging, promising programs across the nation.

Our bottom line: The jury is out and will be for some time regarding whether new human capital two-generation programs can be successfully implemented, as pilot programs or at scale. Very little impact data are available on whether the effects on children and families are stronger than those of single-generation programs. Yet, new approaches to two-generation human capital programs are worth pursuing and testing.

Two-Generation Programs in the Twenty-First Century

In principle, two-generation programs have a unifying form: they explicitly target low-income parents and children from the same family. However, program structures and content vary widely. For children, these can include health and education services, such as home visiting, early childhood education, and trauma programs. Services for parents can involve parenting, literacy, English language, GED, and postsecondary education programs, mental health, child abuse, and domestic violence counseling, case management, and workforce development. In this chapter, we focus on a specific type of program along the two-generation spectrum: those that intentionally link education, job training, and career-building services for low-income parents *simultaneously* with early childhood education for their young children. These programs emphasize an investment strategy to build human capital for both children and parents, implying an intensive, extended approach. In the past five years, the appeal of a human capital two-generation perspective has led to a number of initiatives on the ground. Ironically, evaluation evidence for recent innovation lags behind current policy and practice. However, the theoretical evidence that supports two-generation programs is compelling.

The purpose of this chapter is to integrate theories from developmental science, economics, and education to evaluate the assumptions underlying two-generation programs, to outline possible mechanisms of effects on children, to synthesize and critique what has been tried to date, and to describe some emerging programs across the nation. Our bottom line: The jury is out and will be for some time regarding whether new human capital two-generation programs can be successfully implemented, as pilot programs or at scale. Very little data are available on whether the impacts on children and families are stronger than those of single-generation

programs. Yet, new approaches to two-generation human capital programs are worth pursuing and testing.

Brief History. The goal of addressing the needs of vulnerable parents and children together is not new, and the concept of linking parent services to early childhood programs was first explicitly introduced with the launch of Head Start in 1965.¹ This perspective was strengthened in the early 1990s, as the Foundation for Child Development coined the term “two-generation program” and sponsored a volume called *Two Generation Programs for Families in Poverty: A New Intervention Strategy*.² Innovation at that time involved two strategies: (1) embedding some self-sufficiency programs for parents within various early childhood education programs; and (2) adding child care to education and employment services for parents. We call these programs “Two-Generation 1.0.” In the first set of Two-Generation 1.0 programs, the self-sufficiency services that were linked to early childhood programs included adult basic education, GED attainment, and strategies to obtain entry-level jobs and exit welfare. In general, the adult programming within these child-oriented settings was not intensive, widely implemented, or extensively studied.³ Instead, most services for parents in early childhood education programs in the 1980s and 1990s emphasized family support, parenting, literacy, mental health, and access to public benefits.⁴ These latter dimensions were seen as more closely aligned with the primary mission of early childhood programs: achieving positive developmental outcomes for children.⁵ The second set of Two-Generation 1.0 programs in the 1980s and 1990s started with parents, primarily adolescent mothers on welfare. Their primary goal was to promote life skills, high school graduation or GED attainment, employment, and reductions in long-term welfare dependency.⁶ The program elements that directly targeted children were undeveloped with low take-up rates, often involving child care of unknown quality. However, these large-scale parent-

oriented demonstration programs were comprehensive, and they aimed to address many components of teenage mothers' lives, including parenting. Moreover, most were evaluated with random-assignment designs.⁷ During this era, Two-Generation 1.0 programs seemed to be a promising new direction in services to combat social inequality.

Yet, by the late 1990s, the impetus to expand two-generation programs faded away in part because of disappointing findings from the large demonstration programs for adolescent mothers (see below) and also because of the new dominance of “work-first” policies.⁸ Welfare reform under the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) mandated employment, decreased education and training options, and implemented time limits and sanctions for not following the rules. This extraordinary legislation, combined with the expansion of the Earned Income Tax Credit (EITC) and the booming economy in the late 1990s, resulted in the steepest decline in the welfare rolls in the history of the program—approximately 60%, exceeding even the highest hopes of most supporters.⁹ At the same time, federally funded job-training programs for low-income adults declined significantly. For instance, the 1998 Workforce Investment Act (WIA) primarily supported job search and placement programs rather than human capital investments.¹⁰

The prominent public policy focus in the 1980s, 1990s, and early 2000s regarding welfare dependency has largely given way to concern about the United States' competitive position in the world economy and the fact that the U.S. lags behind so many other countries on multiple indicators of educational attainment.¹¹ This is combined with widespread acknowledgement that education beyond high school is essential for success in the global economy of the twenty-first century.¹² With advancing technology and globalization, many jobs

in the U.S. increasingly require higher levels of education and training than in the past, reflecting the significant disappearance of family-supporting, low-skilled jobs.¹³ Yet, many members of our current and future workforce are unprepared for the demands of the twenty-first century. This lack of preparation is especially evident in the inadequate levels of school success among low-income children and their parents.¹⁴ In addition, childhood poverty remains persistently high at over 20%, and social inequality has increased substantially. As a consequence, various national conversations are underway in search of promising new approaches to combat the pressing issues of economic hardship, low education, and their deleterious consequences for families and society.¹⁵

In the twenty-first century, visionary leaders in philanthropy have been key catalysts in a resurgence of interest in two-generation programs. For example, in 2008 the Bill and Melinda Gates Foundation launched an ambitious postsecondary education agenda with the goal of doubling --by 2025-- the percentage of low-income students who would earn a postsecondary degree or other credential with genuine value in the workplace.¹⁶ Other philanthropic leaders include: the George Kaiser Family Foundation, who, in collaboration with the Community Action Project of Tulsa, Oklahoma¹⁷ (CAP Tulsa), funded a pilot human capital two-generation program, called *CareerAdvance*[®] in Tulsa, Oklahoma; the Foundation for Child Development who added a dual-generation component to its Pre-K through 3rd Grade initiative¹⁸; the Annie E. Casey Foundation's initiative to expand and study implementation strategies for two-generation human capital interventions¹⁹; the W.K. Kellogg Foundation's leadership in fostering innovative family engagement programs²⁰, and the establishment of a new center, Ascend, at the Aspen Institute. This latter initiative is called *Two Generations, One Future* and represents significant

investment and visionary leadership in building political will and a broad two-generation perspective in policy, practice, research, philanthropy, and media.²¹

The Central Concepts Behind Two-Generation 2.0 Programs

We highlight a second wave of programs—“Two-Generation 2.0 Programs”—that has a renewed and explicit focus on promoting the human capital of low-income parents and children within the same program. What is different about this new wave? As we will describe below, the first step is combining the currently existing silos of human capital programs for adults and children (See Figure 1). For parents, education and training components go beyond only adult basic education and GED attainment to include postsecondary education and certification. Similarly, second wave two-generation programs capitalize upon new directions in job training programs that go beyond search and placement to include workforce intermediaries or sectoral job training and other innovations.²² Two-Generation 2.0 programs recognize the compelling evidence that high-quality early childhood education centers can have significant short- and long-term positive impacts on children’s lives. Thus, these settings are an essential building block for new two-generation programs. The twenty-first century two-generation approach also considers the full range of low-income families, not just those who are on welfare. As programs unfold, considerable thought is given to which subgroups are most likely to succeed and how they should be targeted and approached. Most Two-Generation 2.0 programs are in the pilot stage, requiring innovation and experimentation on the ground. Advocates and leaders of current efforts across the nation are united in their belief that Two-Generation 2.0 programs will be more effective than single-generation programs in enhancing healthy development over the life course for young children in low-income families.

Why Would Two-Generation 2.0 Programs Be More Effective?

What is the scientific rationale for why two-generation programs might be more effective than single-generation programs? We briefly offer a number of theoretical frameworks from developmental science that shed light on the assumptions underlying these programs. First, continuity and change theory addresses the question of how much change is realistic or possible for low-income children whose development has gotten off to a difficult start. Widely substantiated empirically, this theory states that for most children over time, significant continuity in the environment *and* within the child is the rule rather than the exception.²³ Once a young child has started along a particular path of development (e.g., heightened stress sensitivity, delays in vocabulary and numeracy), the developmental pathway forward is likely to proceed in a similar fashion in the absence of new opportunities, resources, or interventions. The following statement by Knudsen, Heckman, Cameron, and Shonkoff for why early childhood education is vital for low-income children captures the notion of developmental continuity well: “Early learning begets later learning, and skills beget skills.”²⁴ Likewise, most home environments are also difficult to change readily. They are shaped by parents’ characteristics and experiences, such as their own educational attainment, employment, income, mental and physical health, ability to handle stress, and ways of relating to one another, their children, and their extended families. To be more effective in redirecting low-income children’s life trajectories, programs should simultaneously target the individual child *and* the child’s home environment. Human capital two-generation programs thus go about changing the child by fostering learning and social competence in an early childhood education program, and they may change the child’s home environment by promoting parents’ education, employment, and income.

Second, the power of “proximal” environments is a central tenet of ecological theory.²⁵ Numerous studies have shown that the quality of the child’s “close-in” environments is most influential for subsequent development, especially during the early years when the child’s developing systems are exquisitely sensitive to environmental forces.²⁶ Quality dimensions include cognitive stimulation, richness in literacy and numeracy, regular routines, warmth and responsiveness, appropriate limit-setting, role modeling, opportunities to develop emotion regulation, executive function, attention, and the like.²⁷ Two-generation programs, then, are likely to be more effective than single-generation programs if the low-income child experiences the combination of two positive proximal environments, rather than just one. A child who returns home from a stimulating educational setting to a stressed family environment with few learning resources and parents worried about making ends meet is likely to do less well than a child who experiences enriching environments both within and outside of the home.

The third relevant framework is called risk and resilience theory.²⁸ It is an insightful theory that addresses how children adapt to environmental and biological challenges. Development is often compared to the notion of “modern plastics” that can adjust readily under one or two difficult short-term conditions (e.g., bending but not breaking in strong winds), and then return to normal once the adverse event has subsided (e.g., self-righting after the storm).²⁹ Supported by numerous studies, risk and resilience theory posits that child development is likely to be seriously hampered by chronic and cumulative adversities, such as the combination of family economic hardship, low parental education, parents’ poor mental health, problematic parenting, and limited access to enriched learning opportunities outside of the home.³⁰ Subsequent empirical research has also documented family strengths and other protective factors in the child or in the environment—such as a sunny personality, responsive and stimulating

parenting, or high-quality early childhood education—that promote resilience or positive development in the face of multiple challenges and risks. The most significant implication of this theory for two-generation programs is that intensive interventions in more than one domain of a child’s experience are essential.³¹ “For young children facing cumulative and chronic risks, interventions need to be multi-level, individually tailored in intensity, targeting multiple domains of competence, and of sufficient length to promote lasting change.”³²

A Change Model for Two-Generation 2.0 Programs

Here we present a change model that illustrates the possible ways in which two-generation programs may strengthen child development (See Figure 2). In many respects, this model draws upon the theoretical foundation of chapters in this volume, in addition to the three theories previously described. Notably, human resource and investment theories propose that successful learning, social development, and earning power across the life span depend on monetary and nonmonetary resources in the environment, the individuals’ inherent predispositions, and the interplay between the two.³³ Adequate resources and positive transactions result in higher levels of human and social capital, social interaction, cognitive stimulation, and life opportunities. Family stress theory argues that living in a low-income environment is deleterious for child development due to the related stressors, and these in turn lead to psychological distress of parents and inadequate parenting.³⁴ For low-income families, both investment and family stress processes are operating.³⁵

As shown in Figure 2, successful two-generation programs could influence parents to pursue more credentialing, educational attainment, and better jobs.³⁶ Positive workforce outcomes could eventually result in increased income, improved financial stability, higher self-

esteem, better mental health, lower levels of stress, and more effective parenting practices.³⁷ Improvements in children's development would follow, including school success and social competence.³⁸ Parents with more education and training may also boost the literacy and numeracy environments at home along with other domains of cognitive stimulation.³⁹ Parents may serve as better academic role models, have higher educational expectations, and be better guides and advocates for their children's schooling, all of which may promote children's motivation, engagement, and school success.⁴⁰

Our model also highlights the complexity of the two-generation approach. For example, there may be family system effects where children's advances in learning form an additional feedback loop, stimulating parents both to expand opportunities for their children as well as to raise their educational expectations for themselves.⁴¹ These synergistic effects are illustrated in our model by the bidirectional arrows between parents' and children's trajectories. Negative outcomes are also possible. For example, the multiple demands of employment, school, and childrearing may lead to elevated levels of parental stress and excessive time apart from children—risk factors for healthy family functioning, parenting, and children's development, especially for infants and toddlers.⁴²

Building Blocks for Two-Generation 2.0 Programs

The building blocks for Two-Generation 2.0 programs involve the combination of early childhood education for preschoolers with postsecondary education and workforce training for parents. What is the evidence from these different domains of services that encourages the establishment and expansion of two-generation programs today?

Early Childhood Education Programs. Early childhood education programs have more than a forty-year history of research on program design, implementation, and child outcomes, with compelling evidence for their critical role in promoting positive life trajectories for low-income children.⁴³ We also have extensive evidence for what defines a high quality early childhood program.⁴⁴ Early childhood education classrooms that are characterized by emotionally supportive teacher-child interactions, effective behavior management strategies, and classroom activities that promote student engagement and higher-order thinking are consistently linked to gains in children’s learning.⁴⁵ Structural features of early childhood education programs, such as strong educational and training qualifications of teachers, years of experience, and smaller class sizes, provide a foundation for teachers to facilitate effective interactions with children that are cognitively stimulating and supportive.⁴⁶ In addition, practices that acknowledge and embrace diversity and promote intergroup relationships are key elements of effective early education.⁴⁷

In terms of child impacts, the strongest, most rigorous, short- and long-term findings come from two high-quality and pioneering model programs that were launched in the 1960s and 1970s: the Abecedarian Project and the Perry Preschool Project. Both programs offered enriched early childhood education to children (beginning in infancy and preschool respectively), including well-developed curricula, experienced and trained teachers, and parent involvement components.⁴⁸ Notably, both Abecedarian and Perry Preschool randomly assigned children to the experimental program or to a control group. The control group could access other available programs in the nearby communities, but at that time in the U.S., the availability of other early childhood education settings was limited. In the short term, children in these model programs showed higher levels of learning and social development than did the control group. Long-term

impacts (from elementary school through ages 21 to 27) years) include lower levels of special education placement, grade retention, high school drop-out rates, teenage pregnancy, criminal activity, and higher levels of earnings.⁴⁹ By age 30, adults from the Abecedarian program were over 4 times more likely than controls to have completed college.⁵⁰ Notably, the Perry Preschool and Abecedarian programs were expensive and small, involving a total of 104 and 123 families respectively. They were also limited to African-American families in two small cities, and they were designed for the mid-twentieth century.

Two-generation 2.0 program architects can also turn to the research evidence from three additional sets of programs: (1) the Child-Parent Program; (2) Head Start; and (3) Universal Prekindergarten. The Child-Parent Program (CPC) was launched in 1967 by the Chicago Public Schools with funding from Title I of the Elementary and Secondary Education Act. It explicitly offered a multi-year enriched educational program from preschool through second grade to approximately 1000 low-income children and their parents, while the control group of approximately 550 children and parents was drawn from randomly selected similar schools. Program components for parents primarily emphasized significant engagement in activities at school or in field trips, as well as a parent resource room staffed by a trained coordinator who was often another parent from the community. This parent resource room served as an important space for social connections and as a location for a variety of workshops, speakers and courses, including parenting, health and GED courses.⁵¹ A series of studies (from program end through age 28) shows that CPC participation was related to numerous positive outcomes, although not as sizable as those from the previously discussed model programs. These include higher levels of school readiness, school performance, and high school completion, lower levels of involvement in the criminal justice system, and better physical health.⁵² The CPC program was much larger

than the Abecedarian and Perry Preschool model programs, and it was successfully implemented in a large metropolis. It was also less expensive, providing a well-researched example of possibilities for creating contemporary two-generation programs. However, the evaluation design of CPC is quasi-experimental since schools were randomly chosen for a comparison group of children, and children themselves were not randomly assigned to treatment versus control. In addition, there were no assessments of child development prior to the intervention, so we do not know if the two groups of children and families differed from one another from the beginning.⁵³

Head Start programs could also be a component for new two-generation programs. The nation's oldest and largest early childhood education program was launched in 1965 as part of the War on Poverty. Head Start provides comprehensive services including early childhood education, medical, dental and mental health care, nutrition counseling, and family support.⁵⁴ It is seen as an important opportunity for low-income children and their families, but its quality is uneven, and program intensity varies considerably with many programs offering only half-day programs during the school year and nothing in the summer.⁵⁵

In 1998, Congress commissioned a randomized control trial evaluation of the impact of Head Start on child development, and an ambitious study of 4,667 children from 383 centers was launched in 2002. A central question for the study involved developmental timing: Do outcomes differ as a function of access to Head Start at age three versus age four? Thus, newly entering three-year-olds and newly entering four-year-olds were randomly assigned from a waitlist to Head Start or the control group. Parents of the three-year-olds who were assigned to the control group were informed that their children could attend Head Start the following year at age four. Children were assessed after one year of Head Start, and in the spring of kindergarten, first grade

and third grade. The Head Start Impact Study (HSIS) found that one year of Head Start led to modest improvements in children's language, literacy and math, but did not affect social development. However, by the end of kindergarten, first and third grades, these cognitive impacts had faded.⁵⁶

Head Start supporters are disappointed by these findings. However, it is important to recognize a number of controversies in the evaluation design. First, a significant proportion of the control group (40%) attended early childhood education centers in their communities, including Head Start (e.g., the latter subgroup were non-compliers). With widespread demand for early childhood education in the twenty-first century, the increased use of licensure for preschool programs, and the rapid expansion of state-funded and regulated pre-kindergarten programs, many early childhood settings in the United States have achieved at least a minimum level of quality. The current question, then, is whether we expect Head Start centers to be of higher quality than other centers and preschool programs. It follows that differences between children in Head Start versus those in community or school-based early childhood programs might not be as large compared to designs where the control group does not have access to centers.⁵⁷

A second controversy involves the three-year-old cohort and what their families decided when these children turned four. While 47% of the three-year-olds in the control group switched to Head Start at age four, approximately 33% of children who were randomly assigned to Head Start at age three did not attend Head Start the following year. These cross-over patterns may have diluted the randomized design, and may have underestimated the impact of Head Start on child development. In addition to the Head Start Impact Study, a sizable body of non-experimental studies (i.e., those that use existing longitudinal data sets and sophisticated designs

and statistical techniques that may account for unmeasured biases) has provided evidence of short- and long-term effects of Head Start on a variety of child outcomes. These include higher levels of cognitive development and social competence, lower mortality later in childhood, higher rates of high school graduation, college attendance, health, and earnings, and lower levels of involvement in the criminal justice system.⁵⁸ This large body of research indicates that Head Start programs can indeed be part of a Two-Generation 2.0 strategy.

State-funded prekindergarten programs provide a third set of early childhood education opportunities for two-generation programs. At least forty states have launched prekindergarten programs, doubling the number of states since 1980.⁵⁹ Prekindergarten programs are the best evidence to date that early childhood education centers can be implemented at scale, but the quality of these programs is also variable.⁶⁰ The research on the impact of prekindergarten on child outcomes is just emerging. Two recent rigorous studies of prekindergarten programs, one conducted in 5 states—Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia-- and the second in Boston, used sophisticated statistical techniques and reported promising findings, yet significant variability in child outcomes. Prekindergarten participation was linked to increases in pre-reading, early math skills, vocabulary knowledge, and executive functioning.⁶¹ These positive findings occurred in some states but not others, and variation in levels of state funding did not explain this pattern. A third study using a large national data set of approximately 10,000 children entering kindergarten and followed over time found that prekindergarten participation was related to higher levels of reading and math skills at the beginning of kindergarten, but these gains faded by the spring of first grade.⁶² Interestingly, prekindergarten participation was also associated with a small increase in behavior problems that persisted into first grade. However, this troubling pattern was not evident for children in

prekindergarten classrooms that were located in the same schools as kindergarten. Others have also found that prekindergarten is of higher quality when it is school-based.⁶³

The most promising findings for prekindergarten have emerged from a series of studies of the universal prekindergarten program in the greater metro area of Tulsa, Oklahoma. With a rigorous statistical approach similar to the five-state study, these investigations found that short-term positive developmental outcomes for children in prekindergarten were significantly higher than those for children who had not experienced prekindergarten. The largest differences occurred for pre-reading skills, followed by spelling and math skills. These findings translate into an equivalency pattern where prekindergarten children were performing five to nine months ahead of their peers at program end.⁶⁴ A subsequent study found that prekindergarten participation was linked to improved socioemotional development.⁶⁵ It is important to note that Oklahoma boasts one of the oldest and highest quality prekindergarten programs in the country; the key quality dimensions of class size and teacher-student ratios are excellent. All teachers have a B.A. and have been certified in early childhood education. Moreover, their salaries and benefits are commensurate with those of expert teachers in the Oklahoma K-12 system.

In summary, these studies provide ample evidence of best practices and guidelines for how to choose or design the early childhood education component for the emerging wave of two-generation programs. These programs also reflect some of the tenets of the key theories outlined above: (a) an intensive focus on enriching proximal environments for children, (b) timing during the early years; (c) promoting protective factors, such as social competence and positive relationships; and (d) sustained duration. Clearly, a central criterion for creating Two-Generation

2.0 human capital programs is the connection with high quality early childhood education programs.

Education and Workforce Development Programs for Parents. In contrast to the above picture of early childhood education, the thirty-five-year history of education and workforce training programs for low-income parents has not been as encouraging.⁶⁶ However, program development and evaluation were extensive in the 1980s and 1990s, and they offer a variety of key implications for current two-generation program architects. These ambitious education and job training programs for low-income parents began in response to concerns about adolescent parenthood and subsequent long-term welfare reliance. The first such program was called Project Redirection, a comprehensive program launched in 1980 by the Manpower Demonstration and Research Corporation (MDRC). The successful implementation of such a complex, multi-site program reflected some key innovations. Targeted towards socioeconomically disadvantaged young, adolescent mothers, the program's criteria for participants were the following: seventeen years of age or younger, pregnant or parenting, without a GED or high school degree, and currently on or eligible for welfare cash assistance.⁶⁷ Services were offered for one year to the participants and included individual counseling; programs on life management, parenting, and employability skills development on-site; referrals to health, education, and employment services in the community; and stipends for participation (\$30 per month, equivalent to \$83 in 2013). Child care was also offered, but program participants largely relied on family members instead.⁶⁸ Three additional, significant innovations were implemented: individual participant plans, peer group sessions, and mentoring by older women in the community. The goal was to increase adolescent mothers' human capital in the context of a highly supportive environment. Project Redirection was sophisticated in its recognition of the

challenges and joys of early parenthood, but it did not target children directly.

The quasi-experimental evaluation of Project Redirection compared approximately 300 program participants to a control group of about 370 adolescents from similar communities over four time points: baseline, program end (one year later), and at two and five years post-enrollment. At the end of the program, Project Redirection was associated with higher levels of school enrollment and job experience, and lower levels of repeat pregnancy. However, by the two- and five-year follow-ups, most of these advantages had faded. Program mothers had modestly lower levels of welfare participation (49% versus 59%) but higher levels of childbearing than controls, and there were no significant differences in education, job training, and employment outcomes. In general, Project Redirection mothers remained quite disadvantaged at age 22, with 48% having received a GED or high school diploma, 13% with some college attendance, 22% who completed a job training program, and 35% who were employed with monthly earnings of \$737 (or \$1,369 in 2013).⁶⁹

It is important to note, however, that positive outcomes emerged for children at the five-year assessment, four years after Project Redirection had ended. Program mothers reported better parenting skills, more breastfeeding, and they were more likely to have enrolled their children in Head Start than the comparison group. Children in the program had higher levels of receptive vocabulary, lower levels of behavior problems, and the quality of the home environment was also higher.⁷⁰ These findings represent the first indication that education and training programs for low-income teenage mothers, combined with intensive support services, can lead to long-term, positive child outcomes, even without evidence of continuing positive human capital outcomes for parents.⁷¹ However, caution is warranted because of the quasi-experimental nature of the study design and the smaller sample at the five-year follow-up.

Project Redirection marked the beginning of a wave of similar large programs with randomized evaluation designs. Yet, virtually none of these programs had sizable, systematic effects on mothers' education and employment, and in some cases there were a few unintended negative impacts. There were three multi-site programs operating in the late 1980s through the early or mid-1990s: the New Chance Demonstration, Ohio's Learning and Earning Program (LEAP) (both evaluated by MDRC), and the Teen Parent Program (TPD), evaluated by Mathematica Policy Research. New Chance and TPD involved a wide range of services including case management, life skills counseling, parenting, as well as education and workforce training, while LEAP featured mandated school attendance.⁷² Program eligibility criteria were similar to those for Project Redirection, except that all participants were currently on welfare, and mothers in all three programs were seventeen to nineteen years of age. New Chance was voluntary for participants, while TPD and LEAP were mandatory, linking school and work requirements to welfare cash payments. Actual program participation ranged from six months for New Chance (much less than the offering of one year) to almost two years for LEAP, and was variable for the Teen Parent Demonstration (one to five years) due to the timing of new intakes with program end.⁷³

The samples for the three randomized evaluations were sizable: 2,000 for New Chance, 4,000 for LEAP, and 5,000 for the Teen Parent Demonstration. Program impacts were studied over time, and the final data points occurred post baseline at 3.5 years for New Chance, 3 and 4 years for LEAP, and 5 and 6.5 years for TPD.⁷⁴ Across the three programs, GED attainment was the primary positive education impact. Approximately 45% of New Chance mothers obtained a GED, compared to 33% of controls, yet more control mothers obtained a High School degree than did program mothers (10.4% versus 6.9%). The Teen Parent Demonstration had no impact

on GED attainment, and resulted in a modest increase in high school degrees in one site (34% versus 30%), a five-percentage point decrease in another site, and no difference in the third site. LEAP had no effects on high school completion, and it improved GED attainment only for the subgroup of mothers who were enrolled in school at baseline (10% versus 4.4%). New Chance had no impact on employment, monthly earnings, or welfare participation; LEAP's subgroup in school increased employment modestly in the year prior to the follow-up, with no discernible difference in monthly earnings; TPD had both positive and negative modest impacts on employment.⁷⁵ Average monthly earnings ranged from \$251 to \$557 (or \$347 to \$769 in 2013) across the various subgroups of the three experimental programs. Effects on welfare participation for TPD and LEAP were also small and mixed.

With a focus on improving mothers' human capital and decreasing welfare dependency, all three programs viewed child care as a work support and provided a mixture of different types of assistance. New Chance developed a more explicit two-generation perspective by offering on-site developmentally appropriate child care. However, no data are available on the quality of that care, and participation was low and variable, with enrollment averaging 11 hours per week for infants and toddlers and 18-19 hours per week for 3- and 4-year olds.⁷⁶ The TPD and LEAP offered child care assistance that was comprised of community referrals, child care subsidies including relative care, and free on-site child care. Yet, most TPD participants relied on relatives and no information is available for LEAP.⁷⁷

The New Chance and Teen Parent Demonstration Programs also measured parenting and child outcomes. Neither program had an impact on children's school readiness, vocabulary knowledge, or prosocial behavior. These findings are not surprising, given the weak impacts on mother's education, employment, and income. Notably, New Chance mothers reported higher

levels of parenting stress and child behavior problems as compared to the control group.⁷⁸

Program evaluators speculate that New Chance raised the hopes and expectations of its participants, urged activities such as school or employment that could increase stress, and that young mothers may have found these roles difficult to juggle, especially in the face of little clear personal progress.⁷⁹

The final past human capital initiative of relevance to the new wave of two-generation programs was the Job Opportunity and Basic Skills (JOBS) program, ushered in as part of the requirements of welfare reform legislation in the late 1980s—the Family Support Act of 1988.⁸⁰ We do not review the most recent set of welfare-to-work programs, often referred to as Next Generation, because the majority did not involve education and training; instead their focus was on making work pay through wage supplements for employment. MDRC again conducted the evaluation for the JOBS program, and the study is called the National Evaluation of Welfare-to-Work Strategies (NEWWS).⁸¹ Implemented from 1988 to 1996, eleven programs were involved in seven sites. Two types of programs were tested, in addition to one hybrid. One set of programs was called Human Capital Development (HCD) and had an “education-first” focus prior to fostering labor force participation; the second set of programs was called Labor Force Attachment (LFA) with a “work-first” approach, emphasizing job search and quick placement into any type of job. The HCD programs primarily involved basic adult education classes (e.g., a remedial focus) as well as GED courses, and specifically did not promote postsecondary training. The sole hybrid program in Portland, Oregon combined a focus on employment with more advanced education and training, and also counseled participants to seek higher-paying jobs even if it meant turning down a job offer with low wages.⁸²

The JOBS program also focused only on welfare participants, but unlike the prior

demonstrations, the average age of the mothers was thirty. The sample for the full NEWWS study was approximately 40,000 mothers across all eleven sites, but many central findings for the differential impacts of the Human Capital Development and Labor Force Attachment programs have been reported for the three sites where randomization to each of the programs and a control group occurred within the same site (Atlanta, GA; Grand Rapids, MI; and Riverside, CA). The work and education requirements of the JOBS program were not time limited (as opposed to welfare regulations under PRWORA of 1996), so participants could stay on welfare and have continued access to programs, although the majority of program and control group participants had left the rolls by the five-year follow-up. For the Human Capital Development groups in the three sites above, JOBS participation was related to significantly higher rates of high school graduation and GED attainment than in the control group, but the absolute levels were low (16.5% versus 7.3%). A recent re-analysis of the HCD programs, using a different statistical strategy, has confirmed that program participants generally increased their education at any point across the education distribution.⁸³ This finding draws upon the JOBS-Child Outcomes Study (JOBS-COS) in the above three sites that followed 3000 mothers and their children for two years, also with a randomized design. Children were three to five years old at baseline and five to seven years of age at follow-up. Notably, the study found that mothers' increases in their own education (irrespective of certification) were linked to children's higher scores on a school readiness test. This association did not occur for the children whose parents were in the LFA group. In terms of other human capital outcomes for parents, the LFA and HCD impacts on mothers' employment, earnings, and welfare receipt were minimal. The earnings impacts over a five-year period ranged from \$1000 to about \$2500 (or \$3700 to \$5000 in 2013) for most sites, and the experimental groups were lower on welfare receipt than the control groups by about four

percentage points.

An interesting outlier is Portland, Oregon, the home of the hybrid program. This site achieved more than a \$5000 impact in earnings (\$7,338 in 2013) over five years in addition to greater employment stability. Portland's program characteristics may have important implications for today's two-generation program design. The Portland program providers set employment in higher-paying jobs as the goal, and they were successful in conveying this message to participants. Many participants were then directed to the most appropriate mix of training programs including GED classes and those that would lead to a certificate or trade license. The Portland site also collaborated with local community colleges from the outset to create and implement the program, and as a result, this was the only site where participants took postsecondary courses.⁸⁴

Implications for Two-Generation 2.0 Programs. In summary, a number of lessons for current two-generation programs are evident, despite the minimal impacts of the past experimental education and training programs for low-income mothers. The first involves the promise of comprehensive services combined with key social support and instrumental guidance. Project Redirection pioneered these ideas, and since then various adult-oriented programs have moved these innovations forward. Program components such as peer supports, mentors, coaches, and counselors have been shown to be effective for low-income students in general, although only a few studies have focused on low-income student-parents.⁸⁵ This evidence is being used by Two-Generation 2.0 program architects. Similarly, there are hints from the NEWS evaluation that programs can increase mothers' education and that this in turn is linked to improvements in children's learning. It is encouraging that educational advances even without certification were beneficial for children, a finding that has also emerged from non-experimental studies.⁸⁶ New

programs are addressing issues of educational remediation and certification. There are also hints from Project Redirection that young mothers' human capital development is associated with long-term positive outcomes for children, but the study included minimal measures of how parental behaviors changed at home, so much remains to be learned in this domain.⁸⁷ Similarly, there are hints regarding the importance of postsecondary education and credentialing for labor market success, now a widely held view with extensive evidence for the broader population.⁸⁸

These large-scale demonstrations also suggest some cautionary lessons. Targeting only adolescent mothers for education and workforce development seems very risky in hindsight, given their developmental immaturity.⁸⁹ Employment goals were minimal in Two-Generation 1.0 programs, and monthly earnings were not sufficient to support a family. Today's emerging two-generation programs place a top priority on preparing parents for jobs that will lead to family-supporting wages. The challenge of combining multiple roles (worker, student, parent) was also evident in the above studies, and the potential for too much stress in Two-Generation 2.0 programs should be addressed, especially for young parents with infants and toddlers. Finally, it also seems important that new two-generation human capital programs should not begin by targeting the youngest and most seriously disadvantaged families on welfare as in the studies above, but rather consider older parents and subgroups of low-income families with fewer barriers to education.

The Emergence of Two-Generation 2.0 Programs in the Twenty-First Century

In general, Two-Generation 1.0 programs were missing key elements, whether they were based in the early childhood education world and or in the adult education and training world. For instance, none of the parent-oriented Two-Generation 1.0 programs was able to enroll participants' children in high-quality early childhood education onsite. Similarly, the Two-

Generation 1.0 programs based in early childhood education settings had very limited engagement with experts in adult learning, postsecondary education, and workforce development. This clearly demonstrates the extent to which parent-oriented programs and child-oriented programs have developed in separate siloes, and also highlights the challenges to implementing two-generation programs smoothly, seamlessly, and effectively. Based upon the theory and evidence to date, we suggest that the adult and child services in Two-Generation 2.0 programs should be of equivalent intensity and quality. Research going forward should examine program implementation, the balance of adult and child programs, and the quality and intensity of the services.

These issues seem to be reflected in the findings of the one Two-Generation 2.0 program that has been implemented and experimentally evaluated—the Enhanced Early Head Start (EHS), a program operating from 2004-2007 as part of MDRC’s multisite Enhanced Services for the Hard-to-Employ Demonstration and Evaluation Project. Program architects added education and workforce components to Early Head Start programs (targeted to children from infancy to age three years)⁹⁰ in Kansas and Missouri, so the treatment group was called “Enhanced Early Head Start.”⁹¹ The human capital programs for parents involved an on-site staff specialist who assessed parents’ needs, provided information and guidance about available education and job training programs in the community, and provided Early Head Start staff with training on these resources. Approximately 600 families were randomly assigned to Enhanced Early Head Start or to a control group who could seek other local services. In general, the outcomes study at 42 months after random assignment revealed minimal impacts. Virtually, no significant differences between the experimental and control groups were evident for parents’ employment, earnings, income, and parenting or for their children’s social or cognitive development. Moreover, parents

in the experimental condition reported higher levels of psychological distress.⁹²

The evaluators offer a number of interpretations that have implications for Two-Generation 2.0 programs. First, the parent-focused services were difficult to implement in part because the front line Early Head Start staff varied considerably in their expertise in, comfort with, and delivery of these services. Second, especially in rural areas where child care and transportation were not readily available, some parents expressed a strong interest in staying home with their young child rather than pursuing education and employment.⁹³

We would argue that another likely reason for modest impacts of EHS is that services were characterized more as referrals rather than engagement in actual education and job training programs, so the parental programming was not intensive. The MDRC study also suggests caution with regard to offering this type of two-generation programs to parents with very young children.

Why Be Optimistic? In the face of the limited impacts of past programs on child development and parents' human capital, why are we optimistic about a second wave of innovation, implementation, and evaluation of two-generation programs? First, designers of intensive education and training programs for parents have only just started to explore the positive repercussions of being based in organizations "where the children are." It is a new idea to view high-quality early childhood education centers and Prekindergarten programs as platforms for attracting parents into education and training.⁹⁴ Early childhood education centers promote social capital as parents and children participate regularly and get to know one another, program leadership, family support staff, and children's teachers.⁹⁵ These programs are likely to foster trusted, connecting communities for parents and to be strong allies who share in the hopes, expectations, and efforts to promote children's healthy development. Moreover, with the right

combination of staff expertise, early childhood education centers could contribute strategically to maintaining parents' participation in job training programs and to enhancing their success. For example, in the day-to-day as parents experience their young children thriving and learning at the center, they may be more motivated to improve their own education and economic standing.⁹⁶ Indeed, new findings from the Head Start Impact Study reveal that parents whose children were randomly assigned to Head Start were more likely to increase their *own* educational attainment (particularly at the postsecondary level) as well as employment over time than did parents of control group children.⁹⁷ Formalizing an education and job training program within an early childhood education organization could build upon this naturally-occurring momentum. In other words, education and training programs for parents that emanate from their children's early childhood education centers may be more effective than those in separate silos.

Second, the education and workforce development world has made considerable progress since the large-scale interventions for teenage mothers on welfare during the 1980s and 1990s. One of the most significant advances is the emergence of workforce intermediaries (also called sectoral training) throughout the United States, which are "local partnerships that bring together employers and workers, private and public funding streams, and relevant partners to fashion and implement pathways to career advancement and family-supporting employment for low-skilled workers."⁹⁸ A key leader in this arena, Robert Giloth, emphasizes that workforce intermediaries are more effective with low-income adults because of their central mission to be "a trusted, valued partner serving the needs of both employers and less-skilled individuals."⁹⁹ This aligns with the untapped role of early childhood education centers, namely that they can be a key partner as a workforce intermediary. To date, several randomized trials have shown that workforce intermediaries have had strong, positive effects on the employment and earnings of

low-income youth and adults,¹⁰⁰ but the focus of these studies has not been on parents *per se*. Applying the principles of workforce intermediaries offers considerable promise for new two-generation programs. These principles include more direct links with employers and partnerships with community colleges, where effective program innovation involves peer supports, coaching, and other enhanced student services.¹⁰¹

What is Currently on the Ground? Table 1 summarizes the emerging Two-Generation 2.0 programs in the United States. We have identified nine active human capital two-generation programs, and they reflect four types of structures: (1) adding education and job training programs for parents to existing early childhood education settings; (2) integrating early childhood education programs into education and workforce training programs; (3) merging parent and child programs that exist separately in umbrella organizations or agencies; and (4) establishing residentially-based parent and child educational programming on or near college campuses or in public or mixed-income housing.¹⁰² Below, we present an example of each category.

Adding Adult Programs to Child Programs: CareerAdvance[®], Community Action Project (CAP) of Tulsa. CAP Tulsa is a model antipoverty agency that has received national recognition for its innovation and excellence in various programs for children and adults. The design of CareerAdvance[®] was highly influenced by the advances in the workforce development field, and it is the first fully-operating sectoral, two-generation program in the U.S.¹⁰³ CareerAdvance[®] has taken a conservative approach—starting small with an intensive pilot and gradually expanding over time. With funding and visionary leadership from George Kaiser of the George Kaiser Family Foundation and from Steven Dow, the Executive Director of the

Community Action Project of Tulsa (CAP Tulsa), Christopher King and Hirokazu Yoshikawa developed *CareerAdvance*[®] as an education and training program in the healthcare sector (nursing and medical technology) for parents of young children enrolled in CAP Tulsa's early childhood education centers. The program was piloted in 2009 at CAP Tulsa after a market analysis identified the healthcare profession as a source of family-supporting wages in Tulsa. *CareerAdvance*[®] offers stackable programs in partnership with community colleges so that participants can make concrete progress and/or exit at various points with certificates but then return for further advancement. CAP Tulsa and King have provided strong leadership to develop and maintain partnerships with all of the organizations that are essential components of a workforce intermediary, including community colleges, employers, public schools, GED and ESL programs, and the Tulsa Workforce Board. Other innovations designed to enhance parents' success in school involve contextualized GED preparation, (i.e., GED courses where reading and mathematics skills reflect healthcare terminology and concepts), and a number of effective support components — career coaches, financial incentives, and peer group meetings.¹⁰⁴ With funding from the George Kaiser Family Foundation and the Administration for Children and Families, the *CareerAdvance*[®] program is expanding to include approximately 200 participants by 2015. The program is currently tuition-free and covers all program expenses (such as uniforms, stethoscopes, textbooks) for participants. Participants also receive an in-kind incentive (gas cards) of \$300 per semester for completing coursework. Notably, family support staff in CAP's early childhood education centers offer encouragement to parents to apply to the *CareerAdvance*[®] program, and both family support staff and *CareerAdvance*[®] coaches work together to assist families in making progress. Thus, the two-generation program at CAP meets both of our current guidelines for innovation: (1) the early childhood education component are

Head Start centers with strong levels of quality;¹⁰⁵ and (2) the education and workforce components are career-oriented, intensive, linked with employers and other partners, and offered within a highly supportive context.

In collaboration with other colleagues, we are conducting a quasi-experimental evaluation of CareerAdvance[®], called the CAP Family Life Study. It is a mixed-method, longitudinal study of participants in CareerAdvance[®] and a matched-comparison group of families whose children are in CAP Tulsa's early childhood education centers, but the parents did not enroll in CareerAdvance[®]. The ongoing study (2010-2015) will be comprised of about 400 parents and their children. King and colleagues are studying program implementation, and we are collecting data on parents, children, teachers and schools at baseline and then again each year for up to three years, using quantitative and qualitative methods. The rich measurement in CAP Family Life Study provides an unusual opportunity to understand the program's strengths and weaknesses, to test the hypothesis that parents' educational and career advances could lead to improved child development, and to examine a variety of mechanisms underlying potential outcomes.¹⁰⁶

Adding Child Programs to Adult Programs: Dual-Generation and Training for Green Jobs, Los Angeles Alliance for a New Economy (LAANE). This is an example of a two-generation program whose platform is job creation and employment-based training. It has recently been funded by the W.K. Kellogg Foundation and is being implemented under the auspices of the Los Angeles Alliance for a New Economy (LAANE), an antipoverty advocacy organization whose mission is to promote strong jobs, successful communities, and a healthy environment. LAANE has achieved success in developing sustainable projects that foster employment among low-income families of color in low-income neighborhoods of Los Angeles,

while also improving the environment. LAANE's core activities involve community organizing, coalition building, policy advocacy, and communications.¹⁰⁷ It has been particularly effective in working with numerous other stakeholders in Los Angeles to convince the LA Department of Water and Power to offer many new jobs involving energy conservation with built-in training. This successful initiative is called the Utility Pre-Craft Trainee Program (UPCT), and most trainees are men.¹⁰⁸ "The UPCT Program is a model of an entry-level training program that serves the needs of the utility employer and the worker-trainees, as well as furthering the goals of labor, community, and environmental stakeholders."¹⁰⁹ The UPCT involves numerous partners, including the Department of Water and Power, the Los Angeles Trade Technical College, the Mayor's office, the International Brotherhood of Electrical Workers, and the Southeast Los Angeles County WorkSource Center. The new two-generation program will promote a partnership between UPCT and two high-quality, mixed-income, early childhood education centers to recruit cohorts of parents into the UPCT together. In addition to having a two-generation goal, LAANE is also seeking to increase the number of women employees (currently 3%) in the Department of Water and Power. The Dual-Generation and Training for Green Jobs Program will also involve a set of supportive services, including peer cohorts and career coaches. Notably, the starting wage for UPCT trainee/workers is \$16 per hour, and thus LAANE is not seeking partnerships with Head Start centers, since parents' new income would render them ineligible for Head Start. A pilot program for fifty parents and children is being planned over the next two years, and no research study has been outlined at this time.

Adult and Child Programs Merged Within Existing Organizations: The Atlanta Partnership. The Atlanta Partnership is comprised of the Annie E. Casey Foundation's Atlanta Civic Site, Sheltering Arms Early Learning and Resource Center, Dunbar Elementary School,

and the Center for Working FamiliesTM, Inc. (TCFWFI).¹¹⁰ These individual programs have achieved national recognition and are located on the same campus in Atlanta. One of the closest links is the contiguous nature of Sheltering Arms with Dunbar Elementary School, ensuring that children receive aligned, coordinated, high-quality education from infancy through age 10. The Center for Working Families has a longstanding mission and track record of promoting economic success for Atlanta's vulnerable children and families. The center provides a combination of comprehensive education and workforce development services, as well as coaching and leadership training, in one location so that residents can become competitive in the workforce. The two-generation program specifically targets parents of children in the Sheltering Arms Early Learning and Literacy Resource Center. In 2014, the program hopes to serve approximately 180 parents and children, combining early childhood education, workforce development, and other supportive services. An implementation study and a short-term outcomes study are planned.

Adult and Child Programs Within Residential Settings: Jeremiah Program: Changing Women's Lives for Their Children's Future. The Jeremiah Program was established in Minneapolis and then expanded to St. Paul, in response to local civic and religious leadership's determination to reduce poverty for single mothers and their children.¹¹¹ Although the original founder is a priest and the program is named after a Bible passage, the Jeremiah program does not have a religious affiliation and is funded by a wide range of philanthropic activities. The core program provides safe housing for low-income mothers and their children located near community colleges with onsite high-quality early childhood education, beginning at six weeks through the preschool years. The mission of the Jeremiah Project is to build

mothers' and children's human capital in a highly supportive, goal-oriented context. Services include life-skills and personal empowerment training, guidance and coaching for postsecondary educational success, followed by employment in a career. Over 300 mothers and children have been served in Jeremiah's Minneapolis and St. Paul sites, and plans are underway to expand to Austin, Texas and Fargo, North Dakota. The Jeremiah Program has measured the outcomes of its alumnae over time, and these are quite positive, including very high rates of Associates and Bachelor's degrees, stable employment with a family-supportive wage of over \$17 per hour, and children performing at or above grade level.¹¹² However, no experimental evaluation has been conducted.

Annie E. Casey Two-Generation Economic Success/Early Childhood Framework. In addition to the programs listed in Table 1, the Annie E. Casey Foundation has launched an initiative to strengthen programs that link family economic success with high-quality early childhood education for children.¹¹³ The Casey Foundation's insightful strategy is to identify barriers to the implementation of Two-Generation 2.0 programs, to work with promising programs to combine parent and child services, and to develop new, creative ways to improve implementation. The foundation has selected four sites (Atlanta Partnership, CAP Tulsa, Education Alliance, and the Garrett County Community Action Committee) as grantees for implementation funding. A national evaluator will study challenges to and best practices in two-generation program implementation as well as short-term parent and child indicators.

Conclusion and Challenges for the Future

To sum up, Two-Generation 2.0 programs are in their infancy, and they hold promise for advancing the human capital of low-income parents and children. They draw upon lessons learned from the first wave such programs in the 1980s and 1990s, “Two-Generation 1.0 Programs,” and they are building upon numerous advances in programming for children and adults. We propose several considerations going forward. Ideally, the Two-Generation 2.0 Programs that we have identified in addition to others that may emerge in the future will undergo formal evaluation in the upcoming years. The field is in need of implementation studies that will guide program architects on how best to serve parents and children together. Similarly, evaluation studies are critical if we are to learn whether Two-Generation 2.0 programs are more effective than single generation programs. Second, the issue of duration of programs for each generation is unexplored. Moving mothers with low levels of education onto a postsecondary track with appropriate workforce training takes many years. If an early childhood education center is the point of entry, services for the child will end, and if the mother is in a cohort originating at the childhood education center, her daily interactions at that center will end as well. One solution has been to start the mothers’ programming earlier, when the child is an infant or toddler. However, balancing employment, schooling, and parenting is difficult when children are so young. Another solution might be to coordinate parents’ education and workforce programs with children’s prekindergarten programs. If mothers’ education and training programs start with children’s prekindergarten enrollment, then mothers and children would be integrated into a PreK-to-3rd grade system which ideally offers vertical coordination for both generations over time. Third, programs need to consider their target audience, above and beyond the age of the child. Which subgroups of mothers will benefit the most? Will mothers with more education at the time of entry benefit more, will older mothers exhibit more positive outcomes than teenage

mothers, and will mothers with more experience in the workforce show stronger impacts?

Clearly, other barriers to education and employment must be considered, such as mental and physical health, substance use, family violence, and housing and transportation issues. Finally, programs should be offered to fathers as well as mothers. A few fathers are being served by CareerAdvance[®] at the moment, and they may be an important subgroup in the LAANE program. How and why fathers might be similar or different from mothers in their levels of participation and degrees of success is not known.

In sum, the dual goal of Two-Generation 2.0 human capital programs in the twenty-first century is to help parents advance their own education and achieve economic stability while their children's school readiness and social competence are promoted, thus expanding life opportunities for both generations over time. We believe that the time is ripe for innovation, experimentation, and further study.

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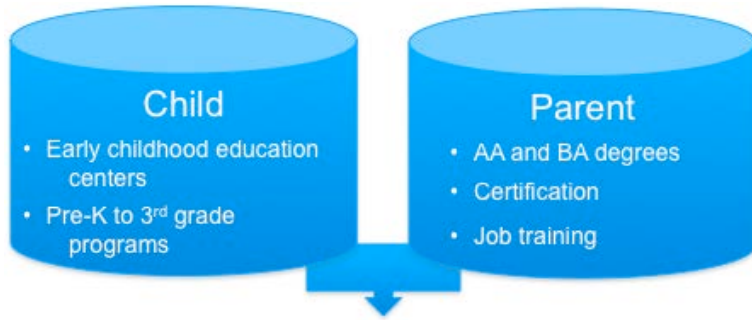
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Figure 1: Two-Generation Human Capital Programs



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Figure 2: Theory of Change for Two-Generation Programs 2.0

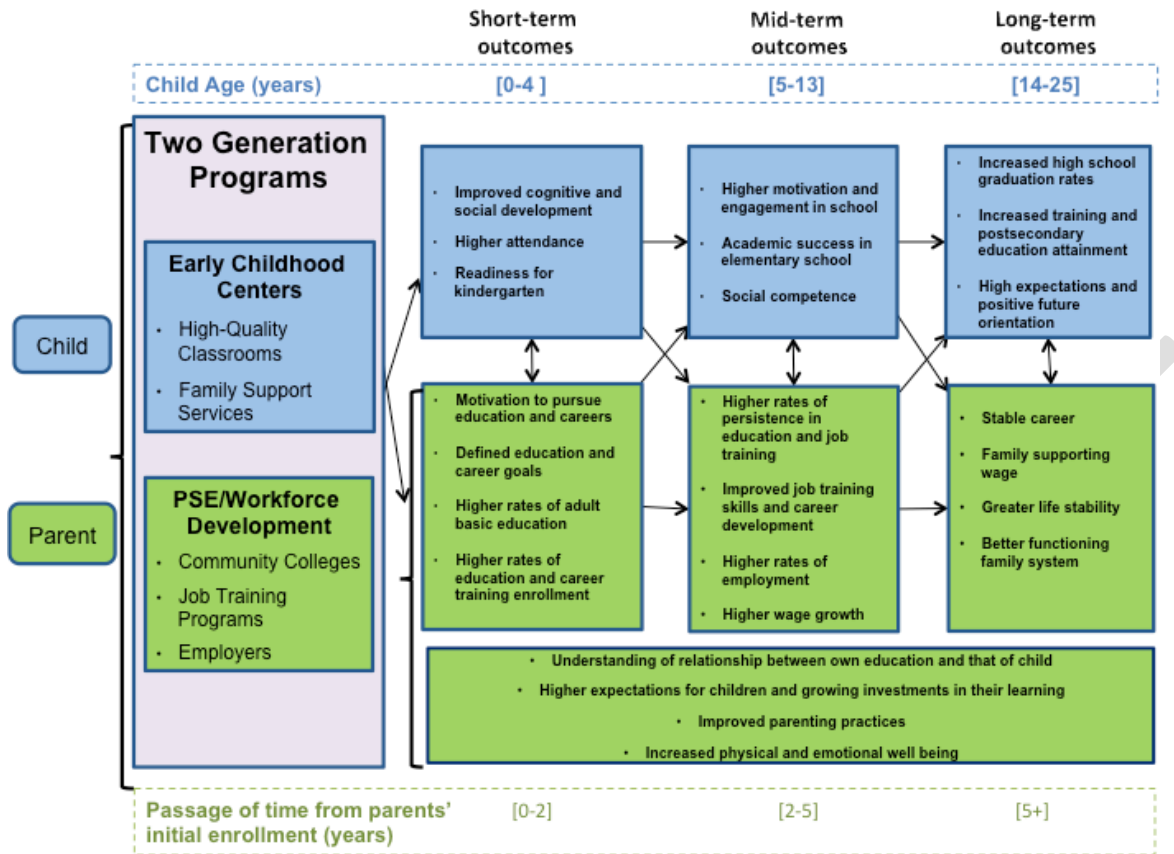


Table 1. Characteristics of Current Two-Generation Programs

Program	Population served	Platform	Services	Background of group leaders	Assessments/ Evaluation
<i>Adding adult programs to child programs</i>					
CareerAdvance® Community Action Project (CAP) of Tulsa, OK	Low-income parents and their children	Early Head Start and Head Start	Stackable training in nursing and health information technology at community colleges; incentives; career coaches; life skill training; peer support; center-based and home-based early childhood education programs	University faculty; antipoverty agency; workforce intermediary	Implementation and outcomes study
College Access and Success Program (CAASP); Educational Alliance	Low-income parents and their children	Early Head Start and Head Start programs	College preparatory classes; GED-preparatory classes; ESL courses; case management services; mental health counseling; financial supports; center-based and home-based early childhood education programs	Non-profit organization; university and college faculty	Implementation and outcomes study
<i>Adding child programs to adult programs</i>					
Dual-Generation and Green Jobs, Los Angeles Alliance for a New Economy (LAANE)	Low-income parents and their children	Job training program and apprenticeships for existing jobs	Employment training in public utility for power and water; relevant courses in community colleges; online learning; peer supports; coaches; early childhood education	Antipoverty advocacy organization; coalitions of community organizers; labor union; government leaders; workforce intermediary	None
<i>Adult and child programs merged within existing organizations or agencies</i>					
Avance Parent-Child Education Program	Low-income families and their children, ages 0-3	Early education programs and elementary schools	Weekly classes on parenting, toy-making, and community resource awareness; volunteer opportunities in early childhood classrooms; monthly home visits; ESL courses, GED prep, and postsecondary education; early childhood education services	Non-profit organization; university graduate students and faculty; early education teachers	Outcomes study

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The Annie E. Casey Foundation Atlanta Partnership	Low-income parents and their children	Early education programs and elementary schools	Workforce development; entrepreneurship opportunities; subsidized housing opportunities; asset-building programs; subsidized child care	Private foundation; elementary schools; neighborhood development agencies	Implementation and outcomes study
Garrett County Community Action Committee (GCCAC)	Low-income parents and their children	Head Start and wraparound child care services	Homeownership education classes; financial literacy classes; support for savings accounts; access to affordable rental units; case management support; Head Start and wraparound child care services	Non-profit agency	Implementation and outcomes study
<i>Adult and child programs as residential programs</i>					
The Keys to Degrees Program at Endicott College	Single parents and their children	Residential college	Housing in residential dorms at Endicott college; scholarships and financial support; courses toward a Bachelor's degree; mentoring partnerships; life skills training; Montessori early education program	College president, faculty, and staff	None
Housing Opportunity and Services Together (HOST) at the Urban Institute	Head of household and their children	Housing authorities	Public or mixed-income housing; financial literacy training; case management for parents and children; workshops of self-sufficiency; incentives; youth support groups and service projects; after school programs	Housing authorities; research think tank	Implementation and outcomes study
Jeremiah Program in Minneapolis and St. Paul, Minnesota	Single mothers and their children	Housing near community colleges	Housing in apartments; education and workforce training; life skills training; partnerships with employers; peer meetings; early childhood education	Community leaders and professionals	Designing a pilot study