

Two-Generation Programs in the Twenty-First Century

P. Lindsay Chase-Lansdale and Jeanne Brooks-Gunn

Summary

Most of the authors in this issue of *Future of Children* focus on a single strategy for helping both adults and children that could become a component of two-generation programs. Lindsay Chase-Lansdale and Jeanne Brooks-Gunn, on the other hand, look at actual programs with an explicit two-generation focus that have been tried in the past or are currently under way.

These explicitly two-generation programs have sought to build human capital across generations by combining education or job training for adults with early childhood education for their children. Chase-Lansdale and Brooks-Gunn explain the theories behind these programs and review the evidence for their efficacy. A first wave of such programs in the 1980s and 1990s produced mostly disappointing results, but the evaluations they left behind pointed to promising new directions. More recently, a second wave of two-generation programs—the authors dub them “Two-Generation 2.0”—has sought to rectify the flaws of earlier efforts, largely by building strong connections between components for children and adults, by ensuring that children and adults receive services of equal duration and intensity, and by incorporating advances in both education and workforce development. These Two-Generation 2.0 programs are still in their infancy, and we have yet to see clear evidence that they can achieve their goals or be implemented cost-effectively at scale. Nonetheless, Chase-Lansdale and Brooks-Gunn write, the theoretical justification for these programs is strong, their early results are promising, and the time is ripe for innovation, experimentation, and further study.

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In principle, two-generation programs have a unifying form: they explicitly target low-income parents and children from the same family. However, their structure and content vary widely. For children, two-generation programs can include health and education services, such as home visiting, early childhood education, and programs for children who have been exposed to trauma. Services for parents can involve parenting, literacy, learning the English language, earning a GED, getting a postsecondary education, treating mental health problems, and preventing child abuse and domestic violence, as well as case management and workforce development. In this article, we focus on a specific type of two-generation program: 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. Evaluation evidence for these recent innovations lags behind policy and practice, but theoretical support for two-generation programs is compelling.

This article integrates theories from developmental science, economics, and education to evaluate the assumptions that underlie two-generation programs, to outline possible mechanisms through which these programs affect children, to synthesize and critique what has been tried to date, and to describe 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 idea that the needs of vulnerable parents and children can be tackled together is not new. The concept was explicitly introduced with the launch of Head Start in 1965.¹ In the early 1990s, the Foundation for Child Development coined the term “two-generation program” and sponsored a book on the subject.² At that time, innovation involved two strategies: embedding some self-sufficiency programs for parents in early childhood education programs, and 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 leave welfare. In general, the adult programs in these child-oriented settings were not intensive, widely implemented, or extensively studied. Instead, most services for parents in early childhood education programs in the 1980s and ’90s emphasized family support, parenting, literacy, mental health, and access to public benefits, all of which were seen as more closely aligned with early childhood programs’ primary mission: achieving positive development for children.³

The second set of Two-Generation 1.0 programs in the 1980s and 1990s started with parents, primarily adolescent mothers on welfare. Their chief goal was to promote

life skills, high school graduation or GED attainment, employment, and reductions in long-term welfare dependency.⁴ The elements of these programs that directly targeted children were undeveloped and underused, and they often involved child care of unknown quality. However, these large-scale, parent-oriented demonstration programs aimed to help in many areas of teenage mothers' lives, including parenting.⁵

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 findings from the large demonstration programs for adolescent mothers were disappointing (see below) and also because “work-first” policies had come to dominate the conversation.⁶ Welfare reform under the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) mandated that recipients work, gave them fewer education and training options, and set time limits and sanctions for not following the rules. This extraordinary legislation, combined with the booming economy in the late 1990s, resulted in the steepest decline in the welfare rolls in the history of the program—approximately 60 percent, exceeding even the highest hopes of most of the law's supporters.⁷ At the same time, federally funded job-training programs for low-income adults shrank significantly. For instance, the 1998 Workforce Investment Act (WIA) primarily supported job search and placement programs rather than training and education.⁸ The public policy focus on welfare dependency in the 1980s, 1990s, and early 2000s has largely given way to concern about the United States' competitive position in the world economy and the fact that we lag behind so many other countries in educational attainment at a time when education

beyond high school is essential for success.⁹ With advancing technology and globalization, many jobs in the U.S. require increasingly higher levels of education and training than in the past, and low-skilled jobs that pay enough to support a family have largely disappeared.¹⁰ Yet many members of our current and future workforce—especially low-income children and their parents—are unprepared for the demands of the twenty-first century.¹¹ In addition, childhood poverty remains persistently high at over 20 percent, and social inequality has increased substantially. In this context, policy makers, advocates, and scholars are seeking promising new approaches to combat economic hardship and low education, and their deleterious consequences for families and society.¹²

Philanthropists have been key catalysts for 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 earn a postsecondary degree or other credential with genuine value in the workplace. Similarly, the George Kaiser Family Foundation collaborated with the Community Action Project of Tulsa, Oklahoma (CAP Tulsa), to fund a pilot human capital two-generation program called *CareerAdvance*; the Foundation for Child Development added a two-generation component to its Pre-K–3rd initiative; the Annie E. Casey Foundation launched an initiative to expand and study implementation strategies for two-generation human capital interventions; and the W. K. Kellogg Foundation is fostering innovative family engagement programs. Finally, the Aspen Institute has established an initiative through its new Ascend center—called Two

Generations, One Future—that represents significant investment in building a broad two-generation perspective in policy, practice, research, philanthropy, and the media.

Two-Generation 2.0: Central Concepts

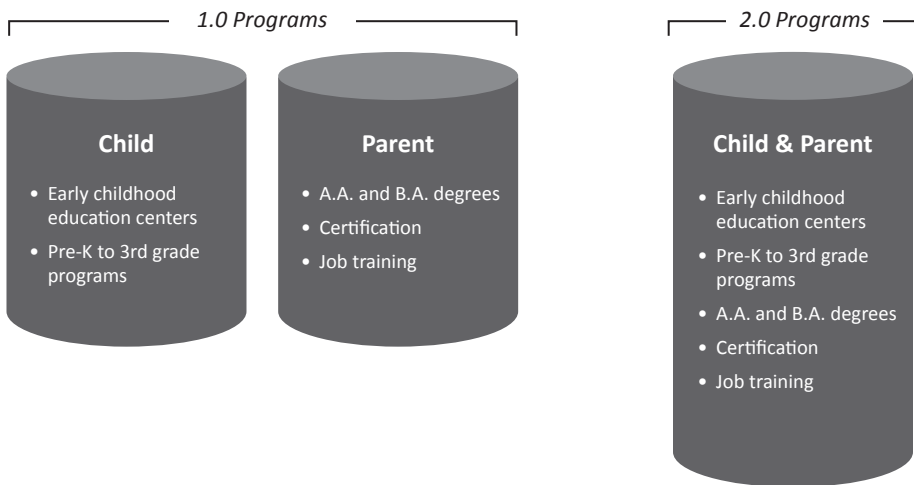
Today, this second wave of programs—we call them “Two-Generation 2.0”—has a renewed and explicit focus on promoting the human capital of low-income parents and children in the same program. What is different about this new wave? First, it combines human capital programs for adults and children that have previously been kept in separate silos (see figure 1). For parents, education and training goes beyond adult basic education and getting a GED to include postsecondary education and certification. Similarly, second-wave two-generation programs capitalize on new directions in job training that go beyond search and placement to include workforce intermediaries, also called sectoral training (we discuss this and other innovations below).¹³ Two-Generation 2.0 programs recognize the compelling evidence that high-quality early childhood education centers can have significant short- and long-term benefits for children. Thus, such centers are an essential building block for new two-generation programs. The Two-Generation 2.0 approach also considers the full range of low-income families, not just those who are on welfare. As programs unfold, their designers are giving considerable thought 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. Advocates and leaders of these 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?

By what scientific rationale might two-generation programs be more effective than single-generation programs? A number of theoretical frameworks from developmental science shed light on the assumptions underlying these programs.

First, continuity and change theory suggests 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.¹⁴ Once young children have started along a particular path of development (for example, heightened sensitivity to stress, delays in vocabulary and numeracy), they are likely to proceed in a similar fashion, unless they encounter new opportunities, resources, or interventions. Eric Knudsen and his colleagues, explaining why early childhood education is vital for low-income children, capture the notion of developmental continuity well: “Early learning begets later learning, and skills beget skills.”¹⁵ Likewise, most home environments are difficult to change. They are shaped by parents’ characteristics and experiences, such as their own education, employment, income, mental and physical health, ability to handle stress, and ways of relating to each other, their children, and their extended families. To more effectively redirect low-income children’s lives, programs should simultaneously target the child *and* the child’s home environment. Human capital two-generation programs go

Figure 1. Two-Generation Human Capital Programs

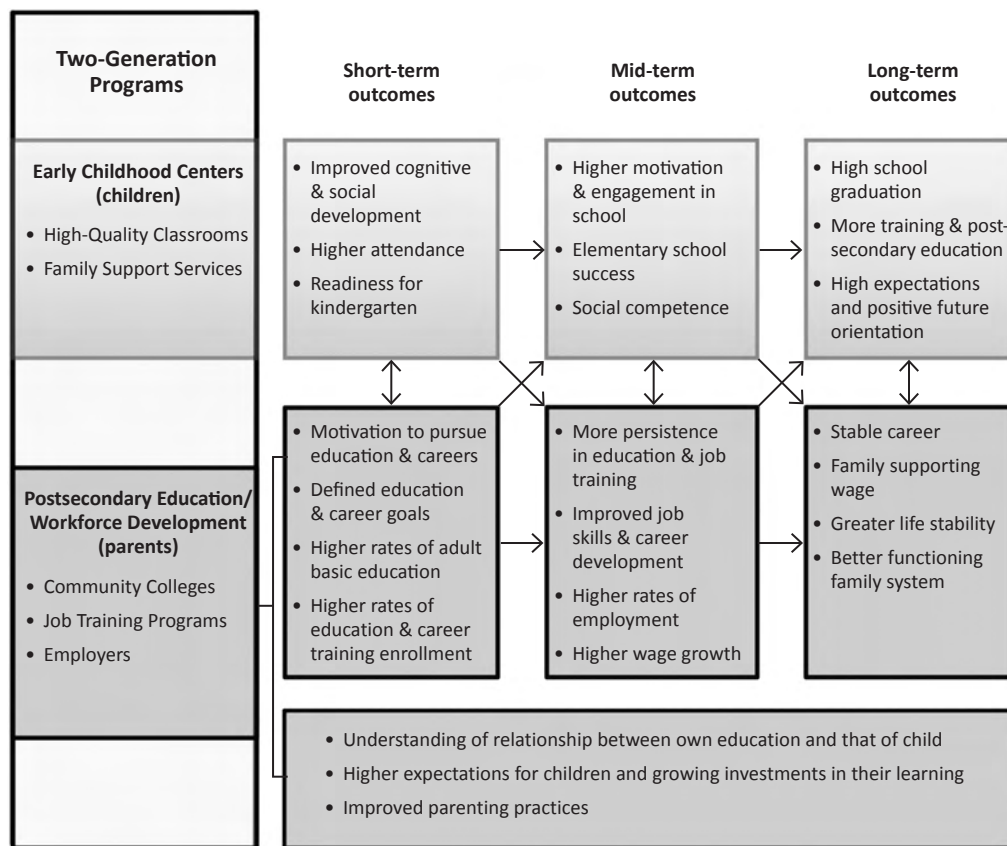
about changing the child by fostering learning and social competence through an early childhood education program, and changing the child’s home environment by promoting parents’ education, employment, and income.

Second, the power of “proximal” environments is a central tenet of ecological theory.¹⁶ Numerous studies have shown that the quality of a child’s “close-in” environments is most influential for later development, especially during the early years when the child’s developing systems are exquisitely sensitive to environmental forces.¹⁷ Factors that affect the environment’s quality include cognitive stimulation, richness in literacy and numeracy, regular routines, warmth and responsiveness, setting appropriate limits, role modeling, and opportunities to develop emotional regulation, executive function, attention, and the like.¹⁸ Two-generation programs, then, are likely to be more effective than single-generation programs if they mean that low-income children experience 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 who are worried about making ends meet is likely to do less well than a child who experiences enriching environments both in and outside the home.

The third relevant framework is risk and resilience theory, which examines how children adapt to environmental and biological challenges.¹⁹ Supported by numerous studies, this theory posits that children can bounce back and even thrive in the face of short-term adversity, but their development is likely to be seriously hampered by chronic and cumulative stress, 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 the home.²⁰ Empirical research has also documented protective factors in the child or the environment—such as a sunny personality, responsive and stimulating parenting, or high-quality early childhood education—that promote resilience or positive development

Figure 2. Change Model for Two-Generation 2.0 Programs



in the face of adversity. The most significant implication of risk and resilience theory for two-generation programs is that intensive interventions in more than one area of a child’s life are essential.²¹ “For young children facing cumulative and/or chronic risks,” write Ann Masten and Abigail Gewirtz, “interventions need to be multi-level, individually tailored in intensity, targeting multiple domains of competence, and of sufficient length to promote lasting change.”²²

A Change Model for Two-Generation 2.0 Programs

Here we present a change model that illustrates how two-generation programs may strengthen child development (see figure 2).

In many respects, this model draws on the theoretical foundation of other articles in this issue, in addition to the three theories we’ve just described. For example, human resource and investment theories propose that successful learning, social development, and earning power across the lifespan depend on monetary and nonmonetary resources in the environment, an individual’s inherent predispositions, and the interplay between the two.²³ These theories suggest that adequate resources and positive interactions produce more human and social capital, more social interaction, more cognitive stimulation, and better life opportunities. And family stress theory argues that the stress of living in a low-income environment harms children’s

development and causes psychological distress for parents, which in turn leads to inadequate parenting.²⁴

As figure 2 shows, successful two-generation programs could influence parents to pursue more credentials, more education, and better jobs.²⁵ Better jobs mean increased income, improved financial stability, higher self-esteem, better mental health, less stress, and more effective parenting.²⁶ Improvements in children's development should follow, including school success and social competence.²⁷ Parents with more education and training may enrich the literacy and numeracy environments at home, and increase cognitive stimulation in other areas as well.²⁸ Better-educated parents may also 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 help children become more motivated, engaged, and successful.²⁹

Our model also shows that the two-generation approach works in complex ways. For example, children's advances in learning might form a feedback loop, stimulating parents both to expand opportunities for their children and to get more education themselves.³⁰ In our model, the bidirectional arrows between parents' and children's trajectories illustrate these synergistic effects. Negative outcomes are also possible. For example, the simultaneous demands of employment, school, and childrearing might increase parents' stress and force them to spend too much time apart from their children, both of which are risk factors for family functioning, parenting, and children's development, especially for infants and toddlers.³¹

Building Blocks for Two-Generation 2.0 Programs

The building blocks for Two-Generation 2.0 programs are early childhood education for preschoolers and postsecondary education and workforce training for parents. What evidence from these areas encourages us to establish and expand two-generation programs today?

Early Childhood Education Programs

The design, implementation, and outcomes of early childhood education have been studied for more than 40 years, and we have compelling evidence that it can play a critical role in promoting positive life trajectories for low-income children.³² We also have extensive evidence of what defines a high-quality early childhood program.³³ For example, when early childhood education classrooms are characterized by emotionally supportive teacher-child interactions, effective behavior management strategies, and classroom activities that promote student engagement and higher-order thinking, they are consistently linked to gains in children's learning.³⁴ Structural features of early childhood education programs can provide a foundation for teachers to interact effectively with children in ways that are cognitively stimulating and supportive; these include smaller class sizes, as well as ensuring that teachers have experience, strong educational qualifications, and training.³⁵ Effective early education programs also acknowledge and embrace diversity.³⁶

The strongest, most rigorous short- and long-term findings about how early childhood education affects children come from two high-quality, 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.³⁷ Notably, both Abecedarian and Perry Preschool randomly assigned children to the experimental program or to a control group. The control group could access other early childhood programs that were available in nearby communities, but at that time in the U.S., such programs were rare.

In the short term, children in the two model programs showed higher levels of learning and social development than did children in the control group. In the long term—from elementary school through ages 21 to 27—children in the model programs were less likely to be placed in special education classes, to be held back a grade, to drop out of high school, to become pregnant as teenagers, or to participate in criminal activity; they also earned more as adults.³⁸ By age 30, adults from the Abecedarian program were much more likely than adults from the control group to have completed college.³⁹ The Perry Preschool and Abecedarian programs were expensive and small, involving 104 and 123 families, respectively. They were also limited to African-American families in two small cities.

The architects of Two-Generation 2.0 programs can also turn to research evidence from three additional sets of programs: (1) the Child-Parent Centers (CPC) Program; (2) Head Start; and (3) Universal Prekindergarten. CPC was launched in 1967 by the Chicago Public Schools, with funding from the federal government. It offered a multiyear enriched educational program from preschool through second grade to about 1,000 low-income children and their parents; a control group of about 550 children and

parents was drawn from randomly selected similar schools. For parents, the program emphasized significant engagement in activities at school or in field trips, and it offered a parent resource room staffed by a trained coordinator who was often another parent from the community. This parent resource room served as a space to make social connections and a site for workshops, speakers, and courses, including parenting, health, and GED courses.⁴⁰ A series of studies, which followed children from the program's end through age 28, shows that CPC participation was related to numerous positive outcomes. The CPC children were better prepared to enter school, and they performed better academically; they were more likely to complete high school and less likely to be involved with the criminal justice system; and they had better physical health.⁴¹ However, these effects were not as large as those related to Abecedarian and Perry Preschool. But CPC was a much larger program than either Abecedarian or Perry Preschool, and it was successfully implemented in a large metropolis. It was also less expensive. Overall, it provides a well-researched example of the possibilities for creating contemporary two-generation programs. However, CPC was evaluated through what researchers call a quasi-experimental design—schools were randomly chosen for a comparison group of children, rather than randomly assigning individual children to treatment versus control groups. In addition, there were no assessments of children's development before the intervention, so we don't know whether the two groups of children and families differed from one another from the beginning.⁴²

Head Start programs could also be a component of new two-generation programs. The nation's oldest and largest early childhood education program, Head Start was launched

in 1965 as part of the War on Poverty. It provides comprehensive services that include early childhood education; medical, dental, and mental health care; nutrition counseling; and family support.⁴³ Although Head Start can be an important opportunity for low-income children and their families, its quality is uneven, and the program's intensity varies considerably around the country. For example, many centers are open only half a day during the school year and not at all in the summer.⁴⁴

In 1998, Congress commissioned a randomized controlled trial to evaluate Head Start's impact on children's 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 if children enter Head Start at age three versus age four? Three-year-olds and four-year-olds on a waiting list for the program were randomly assigned to Head Start or to the control group. Parents of the three-year-olds who were assigned to the control group were told 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, no matter whether children entered at age three or age four, one year of Head Start led to modest improvements in children's language, literacy, and math skills, but did not affect their social development. However, these cognitive improvements faded by the end of kindergarten and stayed that way through the end of third grade.⁴⁵

Head Start supporters were disappointed by these findings. However, it is important to recognize some problems in the evaluation design. First, a significant portion of the control group (40 percent) attended early

childhood education centers in their communities, including Head Start. With widespread demand for early-childhood education in the twenty-first century, increasing requirements that preschool teachers be licensed, and the rapid expansion of state-funded and regulated prekindergarten programs, many early childhood programs in the United States have achieved at least a minimum level of quality. The question we should be asking, 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 and those in community or school-based early childhood programs might not be as large as they would be if the control group did not have access to early childhood programs at all.⁴⁶

A second problem involves the three-year-old cohort and what their families decided when these children turned four. About 47 percent of the three-year-olds in the control group switched to Head Start at age four, and about 33 percent of the children who were randomly assigned to Head Start at age three did not attend Head Start the following year. These crossover patterns may have diluted the randomized design, and thus the study may have underestimated Head Start's impact on child development.

In addition to the Head Start Impact Study, nonexperimental studies (that is, studies that analyze longitudinal data sets, using sophisticated designs and statistical techniques in an effort to account for unmeasured biases) have provided evidence that Head Start has positive short- and long-term effects on a variety of child outcomes. These effects include higher levels of cognitive development and social competence, lower mortality later in childhood, higher rates of high school graduation and college attendance, better

health, higher earnings, and less involvement with the criminal justice system.⁴⁷ 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 offer a third set of early childhood education opportunities for two-generation programs. At least 40 states now have their own prekindergarten programs, double the number in 1980.⁴⁸ These prekindergarten programs present the best evidence to date that early childhood education centers can be widely implemented, but like Head Start programs, their quality varies.⁴⁹ The results of research on how prekindergarten affects child outcomes are just emerging. Using sophisticated statistical techniques, two rigorous recent studies of prekindergarten programs—one of them conducted in Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia, and the other conducted in Boston—reported some promising findings, although child outcomes varied significantly. In some cases, prekindergarten participation was linked to increases in prereading skills, early math skills, vocabulary, and executive functioning.⁵⁰ But these positive findings occurred in some states and not others, and variation in levels of state funding did not explain the pattern. The most promising findings for prekindergarten come from a series of studies of the universal prekindergarten program in the greater Tulsa, Oklahoma, metro area. Using a rigorous statistical approach similar to that of the five-state study, these investigations found that children in prekindergarten had significantly more short-term positive developmental outcomes than did children who had not experienced prekindergarten. The largest differences occurred in prereading skills, followed by spelling and math skills; at the end of the

program, prekindergarten children were performing five to nine months ahead of their same-aged peers who just missed the cutoff and started prekindergarten a year later.⁵¹ Moreover, a later study found that participating in prekindergarten was linked to improved socioemotional development.⁵² It is important to note that Oklahoma boasts one of the oldest and highest-quality prekindergarten programs in the country. Classes are small, and student-teacher ratios are low. All teachers have a B.A. and have been certified in early childhood education, and their salaries and benefits are commensurate with those of expert teachers in the Oklahoma K–12 system.

Clearly, a central feature of Two-Generation 2.0 human capital programs must be high-quality early childhood education. The studies we've described provide ample guidance for how to choose or design the early childhood education component. These early childhood programs also reflect tenets of the key theories we 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.

Education and Workforce Development Programs for Parents

In contrast to early childhood education, the 35-year history of education and workforce training programs for low-income parents has not been as encouraging.⁵³ However, many programs were developed and evaluated in the 1980s and '90s, and they offer key lessons for new two-generation programs. These ambitious education and job training programs began in response to concerns that too many teenagers were becoming parents

and then relying on welfare. The first such program was Project Redirection, a complex, multisite program launched in 1980 by the Manpower Demonstration and Research Corporation (MDRC) and targeted toward socioeconomically disadvantaged teenage mothers. Participants had to be 17 or younger, pregnant or parenting, without a GED or high school degree, and on or eligible for welfare.⁵⁴ They received services for one year, including individual counseling; training in life management, parenting, and employability skills; referrals to health, education, and employment services in the community; and monthly stipends of \$30 per month (\$83 in 2013 dollars). They were also offered child care, though they largely relied on family members instead.⁵⁵ The program also included three significant innovations: individual participant plans, peer group sessions, and mentoring by older women in the community. Its goal was to increase adolescent mothers' human capital in a highly supportive environment. Although Project Redirection recognized the challenges and joys of early parenthood, it did not target children directly.

The quasi-experimental evaluation of Project Redirection compared about 300 participants with a control group of about 370 adolescent mothers from similar communities at four time points: before the program began, when the program ended one year later, and two and five years after participants enrolled. At the end of the program, Project Redirection participants were more likely to be enrolled in school and have job experience, and less likely to have become pregnant again. However, by two and five years after they joined the program, most of these advantages had disappeared. Mothers who had been through the program were somewhat less likely to be on welfare than mothers in the comparison group (49 percent versus 59 percent). But

they were more likely to have had another child, and there were no significant differences between the two groups in education, job training, and employment. In general, Project Redirection mothers were still quite disadvantaged at age 22.⁵⁶

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On the other hand, children of program mothers were faring better at the five-year assessment than were children of comparison-group mothers. Project Redirection mothers reported better parenting skills and more breastfeeding, and they were more likely to have enrolled their children in Head Start. Children of program mothers also had larger vocabularies and fewer behavior problems, and the quality of their home environments was higher.⁵⁷ 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 outcomes for children, even without evidence of continuing human capital improvements for parents.⁵⁸ However, the quasi-experimental nature of the study suggests that these findings should be interpreted with caution.

Project Redirection marked the beginning of a wave of similar large programs with randomized evaluation designs. Yet virtually none of them produced sizable, systematic effects on mothers' education and employment, and

some had unintended negative effects. Three multisite programs operated in the late 1980s through the mid-1990s: the New Chance Demonstration and Ohio's Learning and Earning Program (LEAP) (both evaluated by MDRC), and the Teen Parent Demonstration (TPD), evaluated by Mathematica Policy Research. New Chance and TPD involved a wide range of services, including case management, life skills counseling, parenting classes, and education and workforce training, while LEAP required participants only to attend school. The programs' eligibility criteria were similar to those for Project Redirection, except that all participants were currently on welfare, and mothers in all three programs were 17 to 19 years old. New Chance was a voluntary program, while TPD and LEAP were mandatory for welfare recipients, linking school and work requirements to cash payments.⁵⁹

The samples for the three randomized evaluations were sizable: 2,000 for New Chance, 4,000 for LEAP, and 5,000 for TPD. Program impacts were studied over time, and the final data were collected 3.5 years after the program began for New Chance, three and four years afterward for LEAP, and five and 6.5 years afterward for TPD.⁶⁰ Across the three programs, the impacts on young mothers' human capital were minimal. New Chance appeared to help some mothers earn a GED (possibly at the expense of earning a high school diploma), but the other programs did not produce such clear-cut educational advances. None of the programs consistently helped in other areas of the mothers' lives, such as earnings, employment, or welfare participation.

Rather than taking a two-generation approach, these three programs viewed child care as a support for mothers' education and

work activities. TPD and LEAP offered several kinds of child care assistance, including referrals, subsidies, and free on-site child care. Yet most TPD and New Chance participants relied on relatives for child care, there are no data on the quality of the on-site child care programs, and we have no information about LEAP families' child care participation.⁶¹

New Chance and TPD also measured parenting and child outcomes. Neither program affected children's school readiness, vocabulary, or prosocial behavior. These findings are not surprising, given the programs' weak effects on mothers' education, employment, and income. Notably, New Chance mothers reported higher levels of parenting stress and more child behavior problems than did control-group mothers.⁶² The program's evaluators speculated that because New Chance raised the hopes and expectations of its participants while urging them to engage in activities such as school or work that could increase stress, young mothers may have found these roles difficult to juggle, especially in the face of little clear personal progress.⁶³

One more human capital initiative from the 1980s and '90s offers lessons for the new wave of two-generation programs. The Job Opportunity and Basic Skills (JOBS) program was created through welfare reform legislation, the Family Support Act of 1988.⁶⁴ (We do not review the most recent set of welfare-to-work programs, often referred to as Next Generation, because most did not involve education and training.) JOBS was implemented from 1988 to 1996, with 11 programs at seven sites, and it was evaluated by MDRC in a study called the National Evaluation of Welfare-to-Work Strategies (NEWWS).⁶⁵ The initiative tested two types of programs, in addition to one hybrid program. One set of JOBS programs was called Human

Capital Development (HCD); it focused on “education first” before fostering labor force participation. The second set, Labor Force Attachment (LFA), took a “work first” approach that emphasized searching for and quickly taking any type of job. The HCD programs primarily involved basic adult education (for example, remedial classes) and GED courses, and specifically did not promote postsecondary training. The hybrid program, in Portland, Oregon, combined a focus on employment with more advanced education and training, and it also counseled participants to seek higher-paying jobs even if that meant turning down a job offer with low wages.⁶⁶

Like the programs discussed above, JOBS focused only on welfare participants, but the mothers’ average age was 30. The full NEWWS study of JOBS involved about 40,000 mothers across all 11 sites, but many central findings of differences between the HCD and LFA programs come from just three sites—Atlanta, Georgia; Grand Rapids, Michigan; and Riverside, California. At each of those sites, mothers were randomly assigned to the HCD or LFA programs or to a control group. Mothers randomly assigned to the HCD programs were significantly more likely than control-group mothers to graduate from high school or earn a GED, though the proportion of mothers who achieved these things remained low (16.5 percent for participants versus 7.3 percent for the control group). This increase in education did not translate to higher levels of employment, and neither did participation in the LFA programs.

A recent reanalysis of the HCD programs, using a different statistical strategy, found that when mothers in the HCD programs increased their own education, their young

children were likely to score higher on a school readiness test than children of control group mothers.⁶⁷ This association did not occur for the children whose parents were in the LFA group.

The hybrid program in Portland, Oregon, was an interesting outlier. Participants at this site achieved significantly higher levels of earnings over five years than control group mothers did, and they held on to jobs longer. The characteristics of Portland’s program may have important implications for today’s two-generation program designers. The program set employment in higher-paying jobs as its goal, and successfully conveyed this message to participants. Many participants were 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; as a result, it was the only site where participants took postsecondary courses.⁶⁸

Implications for Two-Generation

2.0 Programs

Although past experimental education and training programs for low-income mothers have generally had minimal effects, they offer a number of lessons for current two-generation programs. The first lesson involves the promise of comprehensive education and employment services, combined with extensive guidance and social support. Project Redirection pioneered these ideas, and other programs that target adults have moved these innovations forward. Program components such as peer support, 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.⁶⁹ 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. There are also hints from Project Redirection that when young mothers develop human capital, there may be long-term positive outcomes for children. However, the Project Redirection study did little to measure how parental behaviors changed at home, and we still have much to learn in this area.⁷⁰ Similarly, these programs presaged the central role of postsecondary education and credentialing to help low-income mothers succeed in the labor market; certainly, there is now extensive evidence for this in the broader population.⁷¹

The large-scale demonstration studies we've discussed also offer some cautionary lessons. In hindsight, targeting only adolescent mothers for education and workforce development seems very risky, given their immaturity.⁷² Also, Two-Generation 1.0 programs set minimal goals for employment, and participants' monthly earnings were not sufficient to support a family. Today's emerging two-generation programs place a high priority on preparing parents for jobs that will lead to family-supporting wages. The studies also show how hard it is to combine multiple roles (worker, student, parent), and Two-Generation 2.0 programs should keep in mind the potential for too much stress, especially among young parents with infants and toddlers.

Two-Generation 2.0 Programs Emerge

In general, Two-Generation 1.0 programs were missing key elements, whether they were based in early childhood education or adult education and training. For instance, virtually no parent-oriented Two-Generation 1.0

program was consistently able to enroll participants' children in high-quality, on-site early childhood education. Similarly, the Two-Generation 1.0 programs based in early childhood education settings had little engagement with experts in adult learning, postsecondary education, and workforce development. This not only shows the extent to which parent-oriented and child-oriented programs have developed in separate silos, but also highlights the challenges to making two-generation programs work smoothly, seamlessly, and effectively. Based on the theories and evidence to date, we suggest that, in Two-Generation 2.0 programs, services for adults and children should be of equal intensity and quality. Research should examine how programs are implemented, how they balance adult and child elements, and the quality and intensity of their services.

Today's emerging two-generation programs place a high priority on preparing parents for jobs that will lead to family-supporting wages.

These issues are reflected in the findings of the one Two-Generation 2.0 program that has been implemented and experimentally evaluated—Enhanced Early Head Start, which operated from 2004 to 2007 as part of MDRC's multisite Enhanced Services for the Hard-to-Employ Demonstration and Evaluation Project. Enhanced Early Head Start added education and workforce components to Early Head Start programs (targeted to children from infancy to age three) in Kansas and Missouri.⁷³ An on-site staff

specialist assessed parents' needs, gave them information and guidance about education and job-training programs in the community, and trained Early Head Start staff about these resources. About 600 families were randomly assigned to Enhanced Early Head Start or to a control group whose members could seek other local services.

A study of the outcomes three and a half years after random assignment revealed minimal impacts, with virtually no significant differences between the experimental and control groups for adults' employment, earnings, income, and parenting, or for their children's social and cognitive development. Moreover, parents in the experimental group reported higher levels of psychological distress.⁷⁴

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 children rather than pursuing education and employment.⁷⁵ Another likely reason that Enhanced Early Head Start had little impact is that it offered referrals rather than education and job training itself, so the parental programming was not intensive.

Why Be Optimistic?

If past programs have had little effect on children's 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 basing their programs 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.⁷⁶ Early childhood education centers promote social capital as parents and children participate regularly and get to know one another, program leaders, family support staff, and children's teachers.⁷⁷ These programs are likely to foster trusted, connected communities for parents and to be strong allies that share 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 helping parents stay in job training programs and enhancing their success. For example, 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.⁷⁸ 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 post-secondary level) as well as employment over time than were parents of control group children.⁷⁹ Formalizing an education and job training program in 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.

Table 1. Characteristics of Current Two-Generation 2.0 Programs

Program	People served	Platform	Services	Background of group leaders	Assessment/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	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 and GED prep classes; ESL courses; case management; mental health counseling; financial supports; center-based and home-based early childhood education	Nonprofit 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

Second, the fields of education and workforce development have made considerable progress since the large-scale interventions for teenage mothers on welfare during the 1980s and '90s. One of the most significant advances is the emergence of workforce intermediaries, also called sectoral training, throughout the United States. Robert Giloth, a key leader in this area, writes that workforce intermediaries 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.”⁸⁰ Giloth emphasizes that workforce intermediaries are effective with low-income adults because their central mission is to be “a trusted, valued partner serving the needs of both employers and less-skilled individuals.”⁸¹ Thus early childhood education centers have an untapped role—they can become key partners as workforce intermediaries. In several randomized trials, workforce intermediaries have had strong positive effects on the employment and earnings of low-income

Table 1 (continued)

Program	People served	Platform	Services	Background of group leaders	Assessment/Evaluation
Adult and child programs merged within existing organizations or agencies					
Avance Parent-Child Education Program	Low-income families and their children, ages 0–3	Early education programs and elementary schools	Classes on parenting, toy making, and community resources; volunteer opportunities in early childhood classrooms; home visits; ESL courses, GED prep, and postsecondary education; early childhood education	Nonprofit organization; university graduate students and faculty; early education teachers	Outcomes study
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 child care services	Homeownership education; financial literacy classes; support for savings accounts; access to affordable rental units; case management; Head Start and child care	Nonprofit agency	Implementation and outcomes study
Adult and child programs as residential programs					
Keys to Degrees Program at Endicott College	Single parents and their children	Residential college	Housing in dorms; scholarships and financial support; courses toward a bachelor's degree; mentoring partnerships; life skills; Montessori early education	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; case management; self-sufficiency workshops; 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, MN	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

youth and adults, but these studies haven't focused on parents *per se*.⁸² However, the principles of workforce intermediary programs offer 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 support, coaching, and other enhanced student services.⁸³

What Exists Now?

Table 1 summarizes the emerging Two-Generation 2.0 programs in the United States. We identified nine active human capital two-generation programs, with four types of structure: (1) adding education and job training programs for parents to early childhood education programs; (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. Below, we present an example of each category.

Adding Adult Programs to Child Programs

CareerAdvance is a program of the Community Action Project (CAP) of Tulsa, a model antipoverty agency, directed by Steven Dow, that has received national recognition for innovation. The design of *CareerAdvance* was highly influenced by advances in the field of workforce development, and it is the first fully operating sectoral two-generation program in the United States.⁸⁴ *CareerAdvance* has taken a conservative approach—starting small with an intensive pilot and gradually expanding. Christopher King and Hirokazu

Yoshikawa developed *CareerAdvance* as an education and training program in the health care 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 after a market analysis identified the health care profession as a source of family-supporting wages in Tulsa. *CareerAdvance* offers a sequence of programs in partnership with community colleges so that participants can make concrete progress, exit at various points with certificates, but then return for further advancement. CAP Tulsa and King have developed and maintained partnerships with all 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. The program's innovations to enhance parents' success in school include contextualized GED preparation (that is, GED courses where reading and math lessons use health care terms and concepts), and a number of effective support components—career coaches, financial incentives, and peer group meetings.⁸⁵ The *CareerAdvance* program is expanding to include approximately 200 participants by 2015. It is tuition-free and covers all expenses (such as uniforms, stethoscopes, and textbooks) for participants who also receive an in-kind incentive of \$300 for gas per semester for completing their coursework. Notably, family support staff in CAP Tulsa's early childhood education centers encourage parents to apply to the *CareerAdvance* program, and family support staff and *CareerAdvance* coaches work together to help families make progress. Thus this two-generation program at CAP Tulsa meets both of our guidelines for innovation: (1) the early childhood education

component consists of Head Start centers with strong levels of quality, and (2) the education and workforce components are career-oriented, intensive, linked with employers and other partners, and offered in a highly supportive context.⁸⁶

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 where the children are enrolled in CAP Tulsa's early childhood education centers but the parents did not enroll in CareerAdvance. The study began in 2010 and will continue until 2015; it comprises about 400 parents and their children. King and colleagues are studying the program's implementation, and we are collecting data on parents, children, teachers, and schools at the start of the program and again each year for up to three years, using quantitative and qualitative methods. The variety of measurements in the 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 that might underlie the outcomes we observe.

Adding Child Programs to Adult Programs

This two-generation program's platform is job creation and employment-based training, and it is being implemented through 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 developed sustainable projects that foster employment among low-income families of color in low-income neighborhoods, while also improving the environment. LAANE's core activities involve community organizing, coalition building, policy advocacy, and communications. It has worked effectively with others in Los Angeles to convince the L.A. Department of Water and Power to offer many new jobs that involve energy conservation with built-in training. This successful initiative is called the Utility Pre-Craft Trainee Program (UPCT), and most trainees are men. Ellen Avis and Carol Zabin write that "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."⁸⁷ Its partners include 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. LAANE is also seeking to increase the number of women employees (currently 3 percent) in the Department of Water and Power. The Dual-Generation and Training for Green Jobs Program will include support services such as peer cohorts and career coaches. Because the starting wage for UPCT trainee/workers is \$16 per hour, LAANE is not seeking partnerships with Head Start centers, because parents who earn that much would be ineligible for Head Start. A pilot program for 50 parents and their children began in 2013; no research study has yet been outlined.

Merging Adult and Child Programs

The Atlanta Partnership comprises the Annie E. Casey Foundation's Atlanta Civic Site, Sheltering Arms Early Learning and Resource Center, an elementary school, and the Center for Working Families. These individual programs have achieved national recognition and are located on the same campus in Atlanta. One of the closest links is that between Sheltering Arms and the adjacent Dunbar Elementary School, which ensures that children receive aligned, coordinated, high-quality education from infancy through age 10. The Center for Working Families has a longstanding 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 compete in the workforce. The two-generation program specifically targets parents of children in Sheltering Arms. In 2014, the program hopes to serve about 180 parents and children, combining early childhood education, workforce development, and other support services. An implementation study and a short-term outcomes study are in the works.

Residential Adult and Child Programs

The Jeremiah Program was established in Minneapolis, then expanded to St. Paul, in response to local civic and religious leaders' determination to reduce poverty for single mothers and their children. Although the 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 philanthropies. The core program provides safe housing for low-income mothers and their children near community colleges, with on-site,

high-quality early childhood education, beginning at six weeks through the preschool years. The Jeremiah Program's mission is to build mothers' and children's human capital in a supportive, goal-oriented context. Services include life-skills and personal-empowerment training, as well as guidance and coaching for success in postsecondary education followed by employment in a career. Jeremiah's Minneapolis and St. Paul sites have served more than 300 mothers and children, and the project plans to expand to Austin, Texas, and Fargo, North Dakota. The program's measured outcomes have been quite positive; mothers have achieved very high rates of associate's and bachelor's degrees, as well as stable employment with a family-supportive wage above \$17 per hour, and their children frequently perform at or above grade level. However, no experimental evaluation has been conducted.

Annie E. Casey Programs

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.⁸⁸ The foundation's 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 creative ways to improve implementation. The foundation has selected four sites (the Atlanta Partnership, CAP Tulsa, the Educational Alliance, and the Garrett County Community Action Committee) for funding to implement programs. A national evaluator will study challenges to and best practices in two-generation program implementation, as well as short-term parent and child indicators.

Conclusions and Challenges

Though Two-Generation 2.0 programs are in their infancy, they hold promise for increasing the human capital of low-income parents and children. They draw on lessons from the first wave of such programs in the 1980s and '90s, and they are building on numerous advances in programming for children and adults. We propose several considerations. Ideally, the Two-Generation 2.0 programs we have identified and others that emerge will undergo formal evaluation in the coming years. We need implementation studies that can tell program designers how best to serve parents and children together. Similarly, we need evaluation studies if we are to learn whether Two-Generation 2.0 programs are more effective than single-generation programs.

Second, we have yet to explore the question of how long programs for each generation should last. Moving undereducated mothers to a postsecondary track with appropriate workforce training takes many years. If an early childhood education center is the point of entry for adult programs as well, services for the child will end in a few years, and if the mother is in a cohort originating at the early childhood center, her daily interactions at that center will end as well. One solution has been to start the mothers' programming earlier, when their children are infants or toddlers. 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 when children enroll in prekindergarten, then mothers and children could be integrated into a prekindergarten-to-third grade system, which could coordinate services for both generations over time.

Third, Two-Generation 2.0 programs should consider their target audience, and not just the age of the child. Which subgroups of mothers will benefit the most? Mothers with more education when they enter the program? Older mothers? Mothers with more experience in the workforce? Clearly, we must consider barriers to education and employment such as mental and physical health, substance use, family violence, and housing and transportation.

Finally, programs should be offered to fathers as well as mothers. *CareerAdvance* is serving a few fathers, and they may be an important subgroup in the LAANE program. We don't yet know how and why fathers might be similar to or different from mothers in their levels of participation and degree of success.

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 become more prepared for school and more socially competent, thus expanding life opportunities for both generations over time. The time is ripe for innovation, experimentation, and further study.

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