

BROOKINGS-ROCKEFELLER

Project on State and Metropolitan Innovation

Beyond Bachelor's: The Case for Charter Colleges of Early Childhood Education

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Table of Contents

EXECUTIVE SUMMARY..... 3

I. INTRODUCTION 5

II. EARLY CHILDHOOD EDUCATION FACES QUALITY CHALLENGES 7

III. CONVENTIONAL APPROACHES ARE INADEQUATE FOR DEVELOPING THE EARLY CHILDHOOD EDUCATOR PIPELINE 11

IV. INNOVATIVE PROGRAMS ARE TRAINING EARLY CHILDHOOD EDUCATORS OUTSIDE TRADITIONAL SYSTEMS..... 18

V. STATES SHOULD ENABLE CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION 28

VI. CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION WOULD PROVIDE MORE ADAPTIVE, COST-EFFECTIVE MODELS FOR IMPROVING EDUCATOR SKILLS..... 36

VII. LOCAL AND FEDERAL LEADERS CAN SUPPORT STATES’ MOVEMENT TOWARD CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION..... 39

VIII. CONCLUSION..... 42

ENDNOTES 44

EXECUTIVE SUMMARY

To enhance the quality of early childhood education, and provide better economic opportunities to early childhood educators themselves, states should create *Charter Colleges of Early Childhood Education*. These research-driven, flexible, and accountable institutions would help increase the supply of high-quality early childhood educators, provide those workers and their families with stable, well-paying jobs, and create a new model of higher education and credentialing that can be applied to other fields.

The Challenge

A growing body of research demonstrates that high-quality early childhood education has tremendous potential to improve children's and families' lives. Spurred by this research, as well as growing demand for childcare to enable parents to work, policymakers have seized on early childhood education as a strategy to improve student achievement and break the cycle of intergenerational poverty. Yet despite increasing public investment, only one-third of American preschoolers have access to publicly funded pre-K or the federal Head Start program, and preschool quality is often low.

One contributing factor is that the average preschool teacher in the United States earns only \$23,870 annually, compared to \$51,009 for public elementary and secondary school teachers. To address this disparity and improve early childhood education quality, many advocates have called for extending the umbrella of traditional K-12 teacher policy over early childhood workers, by requiring preschool teachers to earn bachelor's degrees and state certification. But that system is ill-designed for helping early childhood workers get the skills and salaries they need:

- Research offers little evidence that bachelor's degrees improve early childhood educator effectiveness
- Early childhood bachelor's degree programs are not well designed to prepare educators for the classroom
- Bachelor's degree requirements for early childhood educators would drain public and private coffers
- Students similar to those working in early childhood education who pursue bachelor's degrees usually fail to complete them

A New Approach

Building on the early success of promising models in the field, policy makers should create new Charter Colleges of Early Childhood Education, built from the ground up specifically to give early childhood workers the education they need. Like their K-12 counterparts, charter providers would receive increased flexibility in exchange for increased accountability to deliver results. To create and empower these institutions, policy makers should:

- **Set clear expectations** for what early childhood educators need to know and be able to do, based on state early learning standards and current research

- **Define credentials linked to skills and workforce needs**, reflecting the variety of settings in which early childhood educators work and the differentiated roles they take on in those settings
- **Identify metrics of teacher knowledge and skills**, allowing charter colleges to confer credentials when students successfully demonstrate their effectiveness in improving children's learning
- **Create and empower authorizers** to grant charters, enable charter colleges to grant credentials and access public funding, and hold the colleges accountable for their performance and use of taxpayer funds
- **Enforce constructive accountability** by organizing independent evaluations and tracking supporting data to assess early childhood educator preparation programs

The charter concept can be most fully realized in states that have in place other elements of a high-quality early childhood system. The Obama Administration's new Early Learning Challenge Race to the Top Program provides a unique opportunity for states to consider creating charter colleges of early childhood education as part of their strategies to create great early childhood workforces. In doing so, states can address the twin challenges of providing disadvantaged children with better life chances, and giving their parents access to marketable skills and better jobs.

I. INTRODUCTION

At 9:00 a.m. on a Saturday morning in September 2010, 24 women walked into a classroom on the second floor of a nondescript building in Alexandria, Virginia. Twenty were African-American and four Hispanic, ranging in age from the late teens to early fifties. They set down books, notepads, coffee cups, and paper bags from McDonald's on small tables and sat in short chairs that made their knees stick up a little, owing to the fact that the classroom is used during the week to teach small children. This was no coincidence. The women had come to learn about early childhood education.

The building is owned by Hopkins House, a non-profit early learning center that was formed by a group of citizens and schoolteachers in 1939 after the federal government cut funding for a well-regarded Alexandria nursery. The morning's class was being run by Hopkins in collaboration with nearby Northern Virginia Community College. The women were studying for a credential called the child development associate (CDA) that was created nearly 50 years ago to certify basic competence in caring for young children. Hopkins launched the program out of necessity. When it struggled to find an adequate supply of early childhood teachers for its classrooms—and learned that other local childcare centers faced similar challenges—Hopkins House decided to take matters into its own hands.

The subjects covered in class that morning ranged from Dewey and Piaget to brain development and parent/teacher partnerships. Instruction focused on identifying and responding to "mistaken" behaviors, which is how the students were learning to think and talk about actions like hitting and tantrum-throwing that might otherwise be considered "bad." The word choice was deliberate, emphasizing the need to identify the causes of problem behavior and respond productively, rather than with punishment.

Soon the class moved to group discussion. Two women shared stories of their own negative experiences with teachers who seemed at a loss to deal with the high-strung behavior of their young sons. "These teachers coming out of college today," said one, "they have the book learning but they don't really know children. They haven't spent time with children, they don't have their own children. And they don't know what to do when they get in the classroom with children."

She, by contrast, has years of work experience in early childhood. She recounted a recent activity in her classroom, in which she put on a bathing suit and led children in imagining they were on a trip to the beach. As she described the children's dramatic play—"grilling" on a toy grill, attempting to find the best solution to act out swimming at the beach—it was clear that she knew how to engage young children in rich experiences that build their concept knowledge, vocabulary, and self-regulatory skills. Now, she said, smacking an emphatic hand on her textbook, she will have both the book learning and the experience to be a good early childhood teacher.

Hopkins House is doing its best to provide opportunities for the working-class minority women who make up a disproportionate share of the early childhood workforce. And its

CDA program creates a gateway into postsecondary education that many of these women could not otherwise access.

Drawbacks remain, however. The CDA credential, developed in the 1970s, is a widely recognized entry-level credential for early childhood educators. While it may help teachers to become more nurturing and improve their understanding of young children's development, it does not give them the sophisticated knowledge and skills they need to provide high-quality, age appropriate instruction that prepares young children to succeed in school.¹

Nor has the CDA credential substantially increased the earning power of those who receive it. Teachers who complete the CDA program at Hopkins House can expect to earn early \$25,000 plus benefits—a significant improvement for many, but well below what's necessary to support a family in the Washington, D.C. region. Given that many early childhood workers are themselves parents struggling with the cost of childcare, this is a serious problem, particularly in large metropolitan areas.

There is a growing movement in the early childhood advocacy community to address the dual problems of quality and compensation by turning to a credential with a much different track record: the bachelor's degree. The B.A. is already the foundational degree for K-12 educators, after all, and people who have bachelor's degrees earn much more than those who don't. Laws to mandate degrees for pre-K teachers are on the books in a growing number of states.

Unfortunately, the bachelor's degree has its own set of major flaws. It is increasingly expensive and difficult to acquire. There is little research to suggest it actually makes early childhood educators better at their jobs. The colleges that provide the B.A. have an abysmal track record in serving first-generation, working, and minority students—the very students who make up a large share of the early childhood workforce.

An entirely new approach is needed. It would not be a single credential at all, but a constellation of valuable, portable, interlocking credentials created by a whole new set of educational actors. These new institutions would be built from the ground up to provide exactly what early childhood educators need, when and how they need it. They would be flexible, outcomes-focused, and grounded in the latest research. The students who attend these institutions would learn and earn much more. And the children taught by those students would be better prepared to succeed in education and life.

This report describes these new institutions as “charter colleges of early childhood education.” The following sections explain why we need them and how they can be built.

II. EARLY CHILDHOOD EDUCATION FACES QUALITY CHALLENGES

Fifty years ago, the development of young children was considered a private matter, hardly fit for public debate. American society has changed profoundly since then. In the later decades of the 20th century, women's access to education and labor force opportunities expanded dramatically. Tectonic changes in the economy caused middle- and working-class pay to stagnate, forcing many couples to form two-earner households in order to maintain a standard of living.² Social trends also shifted—the percentage of children living in single-parent households rose sharply, from 9 percent in 1960 to 26 percent today.³ Public policy changed as well, with the 1996 welfare reforms pushing millions of poor women with children into work.

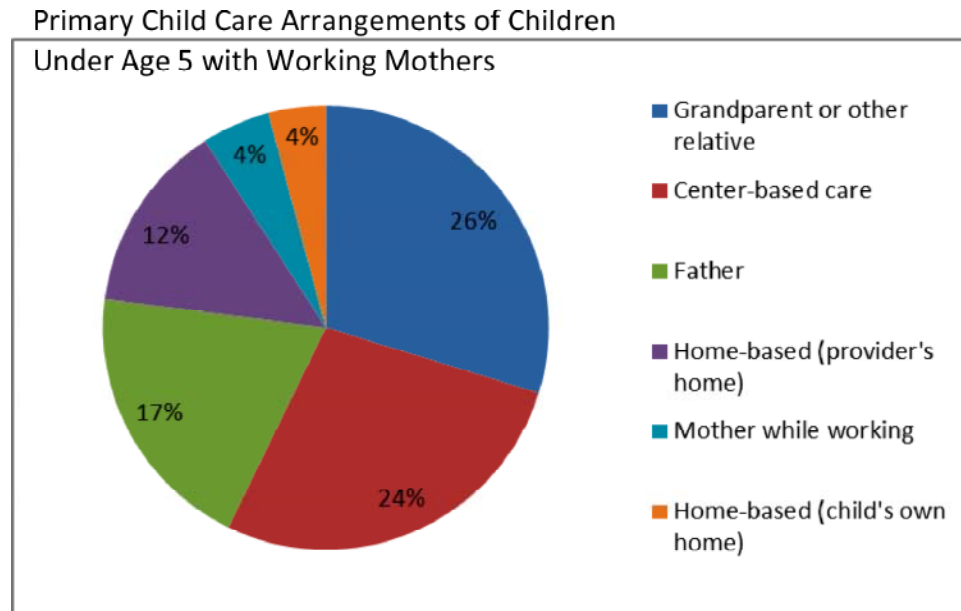
All of these developments moved society in the same direction. Today, nearly two-thirds of mothers with children under age six, and more than half of mothers of infants, work outside the home.⁴ Two-thirds of children under age five regularly spend some time being cared for by adults other than their parents.⁵ In the space of three generations, non-parental early childhood education has gone from being an exception to becoming the normal experience for most children today.

In many ways, this transformation represents a great opportunity. New research findings in cognitive science and child development suggest that children's experiences in the early years can have powerful long-term effects on cognitive development, and that young children are capable of learning much more than previously believed.⁶ High-quality early childhood education, therefore, can have significant and lasting benefits, particularly for children who are most at-risk for struggling in school. Researchers estimate that between one-third and one-half of the academic achievement gap between low-income and affluent children is already in place by the beginning of first grade.⁷ Scholars including Nobel Prize-winning University of Chicago economist James Heckman note that early childhood interventions like the High/Scope Perry Preschool Program, the Abecedarian Project, and Chicago's Child-Parent Centers have improved students' learning, increased their education attainment and income as adults, and produced long-term reductions in unemployment, crime, and out-of-wedlock childbearing.⁸ More recent research has found similar learning gains for youngsters participating in large-scale, publicly funded pre-K programs in Oklahoma, New Jersey, New Mexico, and Tennessee.⁹

Many of these interventions focused specifically on disadvantaged and minority children who were at-risk of education failure. While research shows that high-quality early learning experiences can have positive impacts on all children, disadvantaged and at-risk students make the greatest gains.¹⁰ Investing in early childhood development, Heckman and others argue, can help close yawning class- and race-based disparities and reduce the need for costly social interventions later in life.

But the United States has largely failed to take advantage of this opportunity. Unlike countries that provide comprehensive early childhood education as a matter of national policy, America has met the surge in demand for childcare and early education with a

haphazard combination of federal, state, local, and—primarily—private market responses. A plurality of families, particularly low-income families, rely on informal childcare arrangements with relatives, friends, or neighbors. About one-quarter of children under age 6 are cared for in center-based settings, including day care centers, preschool and Head Start—particularly children ages 3 and older (see Figure below). A smaller percentage of children are cared for in family home care settings (which may be licensed or unlicensed, depending on the state), or by nannies.¹¹ Within any one of these types of settings there is tremendous variation in quality.



The result is a patchwork system of questionable quality that systematically fails to serve the children who need it most:

- Only two-thirds of the poorest 4-year-olds and one-third of the poorest 3-year-olds attend prekindergarten programs, compared to 90 percent and 70 percent, respectively, of children from families earning over \$100,000 per year
- Children from moderate-income families who don't qualify for government subsidies are even *less* likely to get a good early education than children who are poor
- Latino students, who comprise a growing portion of the population and who often have the added challenge of living in non-English speaking families, are much less likely than children from other ethnic and racial backgrounds to attend pre-K¹²
- Many parents simply can't afford pre-kindergarten. For a typical middle-income family, the cost of enrolling two children in high-quality preschool and center-

based childcare consumes 29 percent of income, more than rent, transportation, or any other budget item¹³

The good news is that recent years have seen a major push from lawmakers and philanthropies to expand access to early childhood education. Organizations like the Pew Charitable Trusts, Buffett, and Packard Foundations have spent many millions of dollars advancing the early childhood agenda. Their efforts have paid off, generating big new state investments in early childhood. From 2002 to 2009, state funding for early childhood programs more than doubled, from \$2.4 billion to more than \$5 billion.¹⁴ Today, 38 states and the District of Columbia sponsor state-funded pre-Kindergarten programs. A smaller number of states, including Georgia, Oklahoma, and Florida, make pre-K universally available for all 4-year-old children. Others, including West Virginia and Illinois, have committed to work towards universal access, and were making steady progress towards that goal up until the recent recession decimated state budgets. While the biggest investments have focused on pre-K, states have also pursued strategies to improve quality across a broader range of early care and education providers, including Quality Rating and Improvement Systems (QRIS) that provide parents and the public with uniform and reliable information about the quality of childcare providers.

But the early education quality challenge remains immense. Despite the expansion of public investment, many children continue to be cared for in informal settings where quality is, at best, unknown. And as access to preschool expands, the sector must confront an even more complex problem: Ensuring that pre-K programs are not just safe, healthy environments but also deliver the type of high-quality, developmentally appropriate learning experiences that prepare children for success in school and life. Evidence suggests that many—perhaps most—pre-K programs, whether paid for by parents or the public, fall short of this goal. A California study found that 16 percent of early childhood classrooms fail to meet even “adequate” standards of quality, meaning they may be actively harming child development. Only 22 percent were classified as “good,” and low-income and minority children were less likely than others to be in such classrooms.¹⁵ A 2005 study of state-funded pre-K classes in 11 states found that 57 percent of classrooms ranked in the lowest level of instructional quality and none ranked in the highest level, even though state-funded programs are generally thought to outperform other, less formal options.¹⁶

The truth is that while most preschools offer a nurturing environment for young children, studies find them to be particularly weak in measures of educational content and the teaching of knowledge and skills needed to prepare for school.

This is the central challenge confronting early childhood education today. It is a sector whose rapid growth has been driven primarily by profound economic and social changes that produced a huge new demand for childcare, not education. Parents are understandably concerned first and foremost with safety and well-being, which most childcare settings provide. But nurturing and teaching are not the same thing. And good teaching requires good teachers.

III. CONVENTIONAL APPROACHES ARE INADEQUATE FOR DEVELOPING THE EARLY CHILDHOOD EDUCATOR PIPELINE

At its core, the early childhood education quality problem is a human capital problem. Today's early childhood workforce is chronically under-paid and under-trained. High-quality programs like High/Scope Perry, whose impressive results have played a crucial role in making the case for the expansion of public support for early education, featured highly educated teachers. Many childcare workers, by contrast, lack education beyond a high school diploma. The way we choose to solve this human capital problem will go a long way toward determining the kind of early education future children receive.

If early childhood settings are to offer education, rather than simply babysitting, it makes intuitive sense that early childhood teachers should become more like teachers in grades K-12. And nothing distinguishes the two groups more sharply than education. Virtually 100 percent of America's 3.5 million K-12 teachers have a bachelor's degree, and more than half have a graduate degree.¹⁷ Only 30 percent of teachers and administrators in center-based childcare, by contrast, have a four-year degree. Among childcare providers in less formal settings, educational attainment rates are lower still.¹⁸

Unsurprisingly, early childhood workers are also paid much less than their unionized, better-educated peers. The average teacher salary in America is \$51,009 compared to \$23,870 for preschool teachers and \$18,000 for childcare workers.¹⁹ Early childhood workers also turn over at a faster clip, with 41 percent leaving their job in a given year.²⁰

Many advocates have responded to the need for better teaching by calling for new regulations that would require more early childhood educators—at least those who work with 3- and 4-year-olds in preschool settings—to obtain bachelor's degrees and some form of state certification. In other words, they want to extend the umbrella of mandatory K-12 teacher credentialing over the early childhood field.

Movement in this direction is already well underway. The majority of state-funded pre-K programs now require their teachers to have a bachelor's degree and certification in early childhood. The 2007 reauthorization of the federal Head Start program required half of all Head Start lead teachers to earn a bachelor's degree in an early childhood-related field by 2013. States have also created scholarship and wage enhancement programs to encourage early childhood educators from a variety of settings to pursue higher education coursework and, in some cases, provide increased compensation for doing so.

Linda Darling-Hammond, the well-known Stanford University education professor and the nation's leading advocate for professionalizing teaching through university-based training and state licensure, recently outlined the pro-bachelor's degree agenda in a paper published by the advocacy group Pre-K Now.²¹ Darling-Hammond and her co-authors contend that states should require all teachers in state-funded pre-K programs to hold both a bachelor's degree and teacher certification or specialized training in early childhood education. They also argue that all pre-kindergarten teachers should

complete a mandatory student teaching or induction program. It is, on the surface, a logical argument, grounded in the sensible observation that educators benefit from education. But for several reasons, it is terribly misguided policy for the specific circumstance of early childhood education today:

1. *Research offers little evidence that bachelor's degrees improve early childhood educator effectiveness*

To begin, the research base offers little evidence to support the huge cost and displacement that would result from forcing current preschool teachers to obtain bachelor's degrees. The most comprehensive and sophisticated analysis of early childhood research, published in 2007 by Diane Early and colleagues at the federally funded National Center for Early Development and Learning at the University of North Carolina Chapel Hill, involved a secondary analysis of results from seven major studies of early education.²² They found:

These analyses, taken together, do not provide convincing evidence of an association between teachers' education or major and either classroom quality or children's academic gains. Most of the analyses yielded null findings. Although there were some statistically significant associations, no clear pattern emerged. For instance, two of the studies indicated that quality was higher when the teacher had a Bachelor's degree or more, one study indicated that quality was lower when the teacher had a Bachelor's degree or more, and four studies found no association.

Other researchers have found small benefits associated with bachelor's degrees. A 2007 meta-analysis published by the National Institute for Early Education Research found positive effect sizes of roughly 0.15 standard deviations associated with bachelor's degrees.²³

This is about the most robust pro-bachelor's degree finding available in the recent literature. Yet at 0.15 standard deviations it is not large. Older studies finding small bachelor's degree effects, moreover, tend to focus on populations of early childhood workers where overall educational attainment is low and bachelor's degrees are few and far between.²⁴ The general finding in these and nearly all other studies of educator effectiveness is that there is far more variation in quality *within* the respective populations of graduates and non-graduates than there is between them.

In other words, the fact that a small percentage of bachelor's degree-holders may or may not be, on average, marginally more effective than a much larger population of other early childhood educators does not naturally lead to the conclusion that requiring other early childhood educators to obtain bachelor's degrees would improve quality or child outcomes in preschool settings.

The research consensus ranging from zero effects to small effects for bachelor's degrees is not surprising. Few elements of the typical bachelor's degree curriculum

have anything to do with the specific skills needed to help young children develop and learn. Bachelor's degrees may be nothing more than a loose proxy for the stronger verbal and cognitive singles for which four-year colleges select. If that is the case, new investments in early childhood would be better spent on higher salaries to attract people with those skills directly, rather than diverting billions of dollars in early childhood funds into university coffers.

2. *Early childhood bachelor's degree programs are not equal to the task*

We know very little about the quality of traditional university-based early childhood education programs and nothing about the performance of their graduates in the classroom—a reality that is also true of teacher preparation programs at the K-12 level.

What we do know gives little cause for confidence. Where early childhood bachelor's programs do exist, they are often the neglected stepchildren of schools of education. Early childhood programs rely heavily on adjunct and part-time faculty; have fewer faculty with terminal degrees than other education school programs; and have higher ratios of students to faculty than other programs at their institutions.²⁵ Course requirements and content can vary significantly across and even within programs.²⁶ Many early childhood bachelor's degree programs were designed primarily to prepare students for careers as researchers, not teachers. Faculties in these programs are often disconnected from the realities of the field and the most recent research findings on young children's learning and development.²⁷

3. *Bachelor's degree requirements for early childhood educators would drain public and private coffers*

Bachelor's degrees are very expensive, in terms of both time and money. Four-year degrees take at least four years to acquire—and that's for students who enroll full-time. Many early childhood workers have families of their own and can only attend college part-time. The time cost of college also exacts opportunity costs in foregone work and salary for households that have little financial margin of error.

College itself is pricey and becoming more so by the year. According to the non-profit College Board, the typical public four-year university in 2010 charged in-state students over \$11,000 for tuition, fees, books, transportation, and other related expenses that don't include room and board.²⁸ Private colleges charge several multiples of that. Multiply these prices by four years and the cost of obtaining a bachelor's degree quickly grows beyond the means of many students. College costs are particularly high when compared to the modest wages earned by most early childhood educators. The cost of tuition at a public college or university is nearly two-thirds the annual earnings of the average childcare worker.

In order to pay for bachelor's degree coursework, early childhood educators would need to take out substantial college loans, or state and federal governments would

need to make substantial investments in paying these costs for them. Most college students—a higher percentage than ever before—now take out loans, and the amount they borrow is rapidly growing—to \$24,000 for the typical borrower leaving college in 2009.²⁹ Not surprisingly, many borrowers are unable to pay their loans back; short-term student loan defaults are at a record high and over 20 percent of all loans end up in default. Given relatively low wages in the early childhood field, workers who borrow for college would be at high risk to join their ranks. Since student loans cannot be discharged in bankruptcy, defaults often result in thousands of dollars of additional penalties and fees and years of financial misery.

Early childhood education advocates who press bachelor's degree requirements for pre-K teachers would prefer to see state and federal governments pay these expenses for students. But this would be costly and, given the current fiscal situation, it is unclear where funds would come from. Moreover, alternative uses of public funding—such as increasing compensation or providing targeted training and professional development to early childhood educators—could provide more bang for the buck.

4. *Students similar to those working in early childhood education who pursue bachelor's degrees often fail to complete them*

Many students entering college fail to earn a bachelor's degree in the first place. Only 63 percent of students who start college at four-year institutions intending to earn a bachelor's degree, earn one—from any institution—within six years.³⁰ Results for students who start in community colleges—the likely gateway to higher education for most early childhood educators—are much worse: only 23 percent of those who start at a two-year institution with the intention of earning a four-year degree get one within six years.³¹

Moreover, the early childhood workforce is drawn from populations who are even less likely to successfully complete college than average: they are low-to-middle class economically, overwhelmingly female, substantially more diverse than the teaching profession as whole, and often parents themselves—people like the students at Hopkins House.³² The fact that most early childhood educators are female is a plus: women who enter college are more likely than their male classmates to graduate. But a host of other factors push the odds of graduating in the other direction. Fewer than half of black and Latino students who enroll in four-year colleges graduate within six years. Lower-income students are less likely to finish than their more affluent peers. Single parents, students who work, students who struggled in high school, and those whose parents lack college degrees also have lower odds of earning a bachelor's degree than the already-low national average. The mandatory student teaching requirements that advocates want to tack onto the B.A. would make matters worse. Degrees can be pursued on nights and weekends but student teaching cannot, adding to the burden of those who work full-time to support their families.

The share of bachelor’s degree-seeking students entering college with one of various risk factors who actually earn such a degree within six years is very low (see Table below). Any one of these factors puts the odds of earning a bachelor’s degree at near 10 percent and sometimes less. Combining them—as in the case of a 27-year-old single mother who enrolls in college part-time while working to support her family—makes the picture even worse.

Six-Year Bachelor’s Degree Completion and Dropout Rates by Student Characteristic, Degree-Seeking Students, 1996–2001

Risk Factor	Earned a Bachelor’s Degree	Dropped Out with no Degree
Single parent	7.3%	46.3%
Worked full-time	10.7%	46.4%
Didn’t enroll directly from high school	13.7%	40.7%
No financial support from parents	7.7%	43.2%
Started college as part-time student	12.9%	42.4%

Source: Authors’ analysis of Beginning Postsecondary Survey 1996:01, based on students who entered college intending to earn a bachelor’s degree.

As the chart suggests, many of these students end up in the middle ground between dropout and B.A. after six years—still enrolled in college, or possessing an associate’s degree or certificate. Incremental coursework may yield incremental improvements in early educators’ knowledge, skills, and effectiveness. But the push to mandate bachelor’s degrees for all pre-K teachers disproportionately emphasizes getting teachers across the degree end point, rather than identifying and rewarding incremental gains in skills and effectiveness that they make along the way (and that may make them better teachers even if they never earn a bachelor’s degree). Nor does this approach provide alternative routes to credentials for teachers slogging their way through a higher education system that seems perversely designed to make them fail—regardless of how talented, skilled, or experienced with young children such teachers may be.

Mandatory bachelor’s degree policies for early childhood education could force hundreds of thousands of women, many from ethnically and economically diverse backgrounds, into a deeply flawed and inordinately expensive higher education system, all for a degree that research suggests has little or no impact on how much young children learn. They could homogenize an education workforce that needs to be more diverse, disproportionately hurting the life prospects of minority women.³³ Such policies amount to a regulatory quick fix rather than a comprehensive effort to create educational opportunities that fit the needs of the people who actually care for children age 0 to 4.

We know what the consequences of such policies are likely to be. We can see them in the huge university-based programs dedicated to churning out master's degrees in education, driven by the standard "steps and lanes" system of K-12 teacher compensation that mandates pay raises for master's degrees, regardless of quality. Study after study has found that, with few exceptions, master's degrees have no impact on teachers' ability to help students learn.³⁴ Yet universities continue to produce them by the tens of thousands, at a cost to taxpayers of nearly \$9 billion per year.³⁵

We can also see them in the scandals in the for-profit higher education industry recently documented in Congressional hearings and GAO investigations.³⁶ Regulatory degree mandates create fertile ground for exploitation of vulnerable students, particularly those who, like many early childhood educators, don't come from college-educated families.³⁷ The result is often burdensome debt and low-value degrees.

To be sure, some bachelor's degree advocates have acknowledged the challenges of degree completion. State efforts to raise the educational credentials of pre-kindergarten teachers, as in New Jersey's "Abbott" pre-K program, have included substantial scholarship funding. Advocates have also promoted the creation of cohort bachelor's degree completion programs, in which a small group, or cohort, of early childhood workers take coursework together and receive additional support to help them complete degrees, including advising in planning their courses of study, opportunities to brush up on basic skills, and coursework offered in Spanish.³⁸

But these initiatives have focused on relatively small groups of early childhood educators. It is far from clear whether they can be brought to the scale required to serve a much larger population of early childhood educators, or whether the funds could be better spent elsewhere.

Moreover, the bachelor's degree solution focuses almost entirely on center-based pre-K programs for 3- and 4-year-olds, ignoring both the legions of early childhood workers who care for the development of children age 0 to 2, and the realities of an early childhood marketplace in which there are not always clear divisions between adults who care for preschoolers and those who care for infants and toddlers. It is vitally important that infants and toddlers also grow and learn in environments guided by well-trained workers—but economically infeasible for all or even most teachers working with this age group to have bachelor's degrees. That does not mean, though, that we cannot find more cost-effective ways to enhance both the skills and credentials of teachers working with the youngest children—and consequently, their compensation.

Much of the case for requiring pre-K teachers to have bachelor's degrees boils down to economics: As long as wages for teachers in early childhood settings remain at their current low levels, it will be difficult to attract and retain talented people—of any educational level—to the early childhood field. Bringing people with B.A.'s into the field, advocates say, will raise the average salary of early childhood workers, reducing turnover and increasing the prestige of the field.

But more teachers with bachelor's degrees would not automatically translate into increased wages in the early childhood field. Average salary figures obscure huge variation in earnings of workers with and without degrees—and the fact that many college graduates earn paltry wages. To the extent that people with bachelor's degrees are paid more, that money has to come from somewhere. Given the current economic pressures on federal, state, and family coffers alike, it is not clear where the additional funds would come from, or how mandating a bachelor's degree would make them materialize.

Perhaps the biggest danger of the financial argument for bachelor's degrees is that *it might actually work*. New public funding could be found, existing resources rearranged, present structures reorganized. Salaries and costs would rise. And the result of such massive effort, the research suggests, would be marginal improvement, at best. Early childhood classrooms might improve, but not improve enough. This, in turn, would breed cynicism among policymakers and hurt the long-term cause of expanding early childhood opportunity.

None of this means that policymakers should shy away from the cause of improving the education of early childhood workers. Far from it. To ensure that all children have access to high-quality early learning opportunities, policymakers must invest in building the skills of the early childhood workforce. They just need to create a system that is designed with the needs of those workers in mind.

IV. INNOVATIVE PROGRAMS ARE TRAINING EARLY CHILDHOOD EDUCATORS OUTSIDE TRADITIONAL SYSTEMS

If bachelor's degrees are not the answer to the human capital challenge in early childhood education, what is? To see what a system more attuned to the needs and realities of the early childhood field should look like, it helps to begin with the kind of classroom in which young children truly thrive.

Texas School Ready! Project

Years ago, Sonya Shelby (not her real name) was a cheerleader for a professional football team. She went on to become a high school science teacher before deciding to work with young children, but she hasn't forgotten her days of high kicks and pom-poms. There's a photo of her cheer squad on the wall of her classroom, right next to painted pictures and nursery rhymes. And she hasn't lost her ability to command attention from large, unruly crowds. On an autumn morning in Houston, Texas, 25 pre-kindergartners watched raptly as Shelby pulled pieces of cardboard out of a coffee can.

Each card featured the name of a body part along with a matching picture. "And now we have something you use to digest your food," she told the students as she held up the card for "stomach." "Can you tell me what it is?"

Hands shot up across the carpet. "Tyler."

"Stomach," he said.

"That's right, the stomach. Who can come down and place the stomach on the word wall?" The word wall is a child's eye-level bulletin board displaying the letters of the alphabet. Beneath each letter, a vertical strip of Velcro allows Shelby and her students to secure the new words that students learn beneath the letters the words start with. All the children's names were on the word wall, beneath their appropriate letters, as well as other words the children had learned recently.

Shelby pulled a popsicle stick out of a coffee can and read a child's name off it, "Jaden G." she called out, "Come on down."

Twenty-five children is substantially more than experts recommend for pre-K classes, and Shelby was flying solo that day with no aide to help. But she built a game-show atmosphere of focused enthusiasm with rich and constant verbal patter. She seemed to have no difficulty keeping the children engaged.

Jaden came to the front of the carpet, took the card from Shelby, and deliberately surveyed the word wall. "Ssssstomach," Shelby said, stretching out the first sound of the word. "Where does that go on the word wall, Jaden?"

The little boy turned towards the letter “A” on the wall, then began methodically tracing his finger and eyes along each letter. “That’s right, Jaden,” Shelby said, “You can start at the beginning and keep going until you find the letter. That’s a good strategy we learned. Ssssstomach.” Eventually, Jaden reached the letter “S” on the word wall and triumphantly placed the stomach beneath his classmate Shayna’s name.

Shelby and the children proceeded to work though the skeleton, neck, and other body parts. (“This is a tricky one,” Shelby noted, as a young Latino boy placed “knee” on the word wall). The children were reinforcing new vocabulary and knowledge of the body, while also practicing their phonemic awareness and ability to identify the first letter sounds of words.

Next, Shelby turned on a CD recording of the song “Hip-Hop to the Alphabet.” The children hip-hopped their way to assigned letter spots on a larger carpet near the entrance to the room and danced in place until the song stopped—a good way to burn off some energy in the crowded room.

Then Shelby announced that it was time to go to the “centers,” seven areas marked off within the classroom. With a carnival barker’s enthusiasm, she detailed the exciting activities that awaited children that day in each of the different centers. “Remember,” she said, “In the alphabet center today, we have animal train!” Each center can accommodate only a certain number of children and as the most popular centers—library and dramatic play that day—begin to fill, some children became upset. Shelby defused one set of tears by asking a child who wanted art to help her friend at the science center. Within a few minutes all children were diligently working, whether painting at the art center, writing letters to friends and family in the writing center, or performing a variety of medical procedures on a large stuffed animal in the dramatic play center, which this week was set up as a doctor’s office, reinforcing the body parts theme the children had been learning.

The centers provided the children an opportunity for free-play and exploration—an important part of how children learn and develop in the preschool years—in a structured and educationally rich environment, while also giving Shelby time to focus on smaller groups of students, as she now did with the four children clustered in the science center. There, she used a plastic model frog—complete with skeleton and organs—to help students explore the parts of the body and learn the differences and similarities between their bodies and those of frogs. Over the course of a week, Shelby would work with most students in large groups, small groups, and one-on-one interactions, although she would focus more interaction on students who were struggling or behind in certain ways.

That same day, a 20-minute drive away, Barbara Baker (also a pseudonym) was standing in a Head Start classroom located inside of an elementary school in a Texas exurb south of Houston. While the community the elementary school serves is home to children from a mix of racial, ethnic, and economic backgrounds, children in Head Start are, by definition, poor. The students in Ms. Baker’s class were all African American or

Latino, and most of the Latino students arrived in school with limited English skills. In the dramatic play area, four little girls were diligently raking artificial leaves off the floor, stuffing them into a paper bag, and then dumping them out and starting all over again. At the math center, a group of four boys were sorting small plastic dinosaurs by color and dinosaur type while occasionally testing their ability to toss the dinosaurs into their jar in the middle of the table. At the writing center, a tiny three-year-old girl was using rubber stamps and an ink pad to “write” a “story” (although she knows the names of all the letters, she doesn’t yet know how to write the words).

To a casual observer, it would have looked random and chaotic—fun, perhaps, but hardly educational. Yet there was an important method to the madness. Play and free exploration are a critical part of how young children learn. To be sure, children—particularly low-income children served by Head Start—also need structure and support to realize the benefits of play. That is why the classroom was full of rich materials and “manipulatives” like the dinosaurs and stamps. Baker and her teacher’s aide were far from passive observers. Armed with a box of small plastic figures representing items that rhyme—cat, hat, bat—Baker worked with each child on vocabulary, identifying the items by name along with phonemic awareness concepts like rhymes and identifying the first sound of words.

After center time ended, Baker gathered the children on a mat to read a story about a bear. She spent more time talking with the children about the book—“what do you think happens next?” (the children had many ideas), “what color is the sky?,” “oh, do you think so?”—than actually reading its text. The song “Going on a Bear Hunt” came next. The children had clearly sung it before and performed with such enthusiasm that they were breathless by the end.

Because Baker was so deeply engaged with the children, both in circle time and in their centers, she didn’t need the highly regimented teaching approach that inexperienced and poorly trained teachers often resort to in order to maintain order in a classroom of four-year-olds. Book reading and songs were raucous affairs. Little boys and girls who need to squirm and bounce weren’t admonished, nor were children required to stay in specific spaces on the carpet for the duration of circle time. (In fact, while Mrs. Baker was reading the book about the bear, the children were so engaged that they moved closer and closer until they were nearly on top of her.) The children felt comfortable expressing themselves, sharing their thoughts about the bear book during story time, and also talking about their lives during circle time. When children brought up something inappropriate or off-topic, Baker gently rerouted the conversation, affirming the child’s interest, contribution, or concern, without allowing the entire class to be distracted.

It’s not a coincidence that Shelby and Baker use similar, highly effective methods of supporting the development of young children. Both are participating in the Texas School Ready! Project (TSR), a program operated by the Children’s Learning Institute at the University of Texas Health Sciences Center at Houston. Unlike programs that focus on structural measures like teacher qualifications, class size, or adult/child ratios, TSR zeroes in on instruction designed to support children’s acquisition of early literacy, math,

and social skills. The program is designed to help preschool teachers deliver high-quality instruction regardless of their prior education or the type of setting in which they work.

The Texas School Ready! Project has four core elements: a research-based curriculum and materials; professional development; coaching and mentoring; and progress monitoring (see “Four Core Elements of the Texas School Ready! Project”). TSR explicitly works across the three sectors of preschool programs in Texas: state-funded pre-K delivered primarily by certified teachers in public school settings; Head Start; and center-based childcare. In order to participate in the project, a community must create a partnership engaging educators from all three sectors in the same shared experience. Because the public funding streams for pre-K, Head Start, and subsidized child care are all contingent on family income, TSR focuses on centers serving low-income children.

Research shows that participation in TSR’s training produces meaningful improvement in the quality of early learning experiences that teachers are providing to young children—as well as in children’s early learning outcomes. Children whose teachers participated in all four TSR components made gains in vocabulary, letter knowledge, print awareness, and phonological awareness that were significantly greater than those for children in a control group. Research also shows that it is the combination of four elements—approved curricula, professional development, coaching/mentoring, and progress monitoring—that truly drives student learning. All the elements must be in place. Research also indicates that this approach is effective *regardless of teachers’ prior educational level*. Those with only a high school diploma benefit alongside fully certified teachers with bachelor’s degrees working in public schools. And the size of the gains in student learning associated with TSR were comparable to—and in some instances greater than—those estimated for bachelor’s degree teachers in other research.³⁹

In other words, TSR shows that early educators do not have to be sent on a long march through an indifferent bachelor’s degree system in order to help young children learn. With the right instruction, they can improve right away.

Four Core Elements of the Texas School Ready! Project

- 1) *Research-based curriculum and high-quality instructional materials:* Participating programs must choose from a list of state-approved curricula:
 - "The DLM Early Childhood Express" Texas Package (SRA/McGraw-Hill)
 - "Pebble Soup Explorations/Pebble Soup *Exploraciones*" (Houghton Mifflin Harcourt School Publishers)
 - "Let's Begin with the Letter People" Complete Program (Abrams & Co. Publishers)
 - "Saxon Early Learning" (Saxon Publishers, Inc.)
 - "We Can!" (Sopris West Educational Services)
 - "Ready, Set, Leap!" English and Spanish Edition (LeapFrog SchoolHouse)
 - "Ready, Set, Leap!" School and Home Edition (LeapFrog SchoolHouse)
- 2) *Professional development:* Teachers begin the program by coming together for two days of intensive professional development called CIRCLE, which helps them set up their classrooms and introduces them to effective instructional strategies. Over the following three years, teachers get regular training via eCIRCLE, an online program. All teachers in a community attend bi-weekly eCIRCLE led by a local facilitator. They complete homework between sessions and have online access to course materials at all times. Over their three years in the program, teachers progress through 10 different eCIRCLE professional development modules that address children's social and emotional development, phonological awareness, written expression, language development, letter knowledge, math development, and vocabulary.
- 3) *Coaching and mentoring:* Teachers also receive regular support from a coach or mentor who observes their teaching, provides feedback, and models effective instructional practices. The coaches help teachers implement new instructional techniques and respond to challenges in their classrooms. The mentors/coaches are in teacher's classrooms for four hours a month in the first year, two hours a month in the second, and one hour a month in the third.
- 4) *Progress monitoring:* The final component is regular progress monitoring, which allows teachers to evaluate the progress of their children in real time, identify areas where children are excelling or struggling, organize children for small-group interventions, and modify and improve teachers' instructional practice in response to student learning outcomes. Teachers assess student progress three times a year and use laptop computers and PDAs to record and upload the results to an interactive website where they can analyze results and use data to improve instruction. The data are also uploaded to a central office in Houston, where researchers analyze them and use the results to refine and improve the TSR program.

Other Innovative Models and the Credential Problem

The Texas School Ready Project seems to have it all—a solid research base, state support, and a proven track record across different modes of early childhood education. But it's missing one, crucial thing: credentials. A child care center teacher with only a high school diploma may significantly improve the quality of her teaching as a result of her participation in TSR. But that doesn't mean she can now apply for a much more highly compensated position in a public school pre-K classroom. To do that, she would still need to get a bachelor's degree—even if it does less to make her good at her job. Because the education teachers acquire through TSR happens to be labeled “professional development,” it isn't recognized outside of that context. Nor can teachers who move to other states get hired or paid based on their TSR training. It is the *Texas School Ready Project*, after all.

In contrast, bachelor's degrees from the University of Houston are recognized everywhere, forever. It is the *universality* of the bachelor's degree, not the inherent value, that makes it a tempting object around which to build early childhood policy.

Other innovative approaches for building early educators' skills are emerging. (although none have yet been implemented at the same scale as TSR, which operates statewide in Texas in classrooms serving nearly 80,000 children.) Each faces a similar dilemma. One example is the Classroom Assessment Scoring System (CLASS) developed by researchers at the University of Virginia, and currently being implemented as a measure of quality in Head Start programs nationwide. CLASS focuses on the quality of interactions between adults and children in early childhood settings. Research shows that the quality of these interactions is the strongest predictor of learning outcomes in preschool settings—more so than whether teachers have bachelor's degrees, how pre-K programs score on structural quality measures valued by pre-K advocates, or how classrooms score on a variety of other, more input-focused, environmental quality measures.⁴⁰

CLASS focuses on three primary domains: emotional support (the extent to which teachers create a nurturing environment for young children), instructional support (the extent to which teachers engage in interactions that support children's learning), and classroom organization/management. According to Robert Pianta, Dean of the Curry School of Education at the University of Virginia and the lead developer of CLASS, research has found that students who attend preschools with high CLASS scores make greater gains than students in preschools with low CLASS scores.⁴¹ Those gains were maintained a year later after the children had finished kindergarten. Whether the preschool teachers had a bachelor's or associate's degree had no impact on student gains. What mattered most was the actual nature of the interaction between teacher and student.⁴² And as Pianta takes pains to emphasize, those interactions can be both accurately measured and improved.

These CLASS principles are manifest in MyTeachingPartner, a professional development program that uses CLASS to provide early childhood teachers with

intensive, ongoing professional development focused on effective interactions with children. Teachers record themselves teaching and send the video to a MyTeachingPartner coach, who reviews it and provides personalized feedback that highlights examples of both effective interactions and areas where teachers can improve. Coaches also direct teachers to video of other teachers demonstrating effective practices in areas where they need to improve, drawn from an extensive CLASS video library.

Researchers have only begun to evaluate the effects of MyTeachingPartner and other CLASS-based professional development. Initial studies show that CLASS-based interventions, including core elements of MyTeachingPartner, improve preschool teachers' sensitivity and use of rich language, which supports children's language and early literacy development.⁴³

But again, because MyTeachingPartner is a “professional development program,” not a “degree offered by a college,” it is seen and valued in a very different way. Under many proposed policies, an early childhood educator with a single sheet of paper from any one of thousands of unknown colleges offering bachelor's degrees would be entitled to thousands of dollars in extra compensation, while an educator with extensive, validated, research-backed video evidence of *actual classroom practice* would not.

TSR and CLASS are by no means the only available strategies. All 58 of North Carolina's community colleges offer a “North Carolina Early Childhood Credential,” which can lead to more pay—but only in North Carolina. Some 36 states currently have some kind of formal professional development system in place to connect early childhood educators with training opportunities offered by so-called “research and referral agencies,” community colleges, and other providers.

Meanwhile, charter schools like AppleTree Early Learning Charter School in Washington, D.C., and KIPP are training their own early childhood educators, placing recent college graduates and mid-career changers as “fellows” or “assistant teachers” in classrooms with an experienced pre-K teacher. The charter programs provide opportunities to learn the specific skills to support young children's learning and development without requiring them to complete university-based coursework in child development.

Indeed, one of the beauties of our hopelessly fragmented early childhood non-system is that it provides abundant opportunities for innovative problem-solvers to develop creative strategies to overcome pressing challenges—and developing a skilled workforce is foremost among these challenges. A major risk of efforts to impose greater standardization upon this system—despite the potential benefits of greater uniformity and equity—is the potential to crush both this capacity for nimbleness and some of the valuable solutions it has spawned.

Over the long term, the early childhood sector needs both effective and diverse models for improving the skills of early childhood educators. It also need a way to systematically

recognize diverse models and enable their graduates to earn credentials that provide meaningful information about quality to parents, employers, and policymakers and also translate into improved earnings for teachers. TSR, CLASS, and their ilk have research and classroom practice on their side (see “The Research Base for Innovative Credentialing Models”), but they can't award college degrees. Universities have a stranglehold on the credentialing franchise, but are often isolated from classrooms and research.

The solution is to combine the best of both worlds—and introduce new practices that don't yet exist in any world, but could.

The Research Base for Innovative Credentialing Models

Texas School Ready and CLASS weren't created in a vacuum. Both approaches are based on a significant body of research that shows what high-quality early education entails. A seminal 2001 National Research Council report identified the key areas of knowledge and skills that high-quality teachers of preschool-aged children need:⁴⁴

- Knowledge of teaching, learning and child development and how to integrate them into practice
- Information about how to provide rich conceptual experiences that promote growth in specific content areas, as well as particular areas of development, such as language and cognition
- Knowledge of effective teaching strategies, including organizing environments and routines to promote activities that build social-emotional relationships in the classroom
- Knowledge of subject-matter content appropriate for preschool children and knowledge of professional standards in specific content areas
- Knowledge of assessment procedures that can be used to inform instruction (such as observation/performance records, work sampling, interview methods)
- Knowledge of the variability among children, in terms of teaching methods and strategies that may be required including teaching children who do not speak English, children from various economic and regional contexts, and children with identified disabilities
- Ability to work with teams of professionals
- Appreciation of the role of parents and knowledge of methods of collaboration with parents and families
- Appreciation of the need for appropriate strategies for accountability

When Sonya Shelby organized students in theme-based centers, she was providing rich conceptual experiences. When Barbara Baker worked one-on-one with her students, she was acting on her knowledge of the variability among children. When Shelby asked Jaden to place the word on the word wall, she was acting on research finding that acquiring vocabulary and complex oral language skills in the preschool years is crucial to preparing children to read successfully. When Baker uploaded student learning data from her laptop to the central CLI office, she was using assessment procedures that will inform instruction.

TSR is also strongly rooted in research documenting the importance of specific early academic skills—including phonological awareness, vocabulary, complex early language, and early writing—that children need to acquire in the pre-kindergarten years in order to be prepared for success in kindergarten, as well as the types of instructional strategies that preschool teachers can use to build young children's skills in these areas.⁴⁵ CLASS draws heavily from findings that emphasize the importance of adult-child interactions for student learning, and identifying the characteristics of high-quality interactions. The TSR and CLASS approaches focus on different aspects of effective teaching, but they are both based strongly in research about how young children learn

and what effective teaching looks like in early childhood settings. Because of the strength and depth of the research base around early childhood development and learning, other models could emerge that would look different from both TSR and CLASS but would also be based in research—and effective in building the skills of early childhood educators.

V. STATES SHOULD ENABLE CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION

Charter colleges of early childhood education would be brand-new organizations, built from the ground up specifically to give early childhood workers the education they need. The charter college concept is drawn from the charter school movement in K-12 public education, where chartering has served as a tool to challenge school district monopolies and allow new providers outside the existing system to create new public schools in response to student needs and parent demand.⁴⁶ Analysts have also proposed using chartering as a tool to incorporate diverse early childhood education providers into emerging state-funded public pre-K systems.⁴⁷ Similarly, charter colleges of early education would foster the creation of diverse new educational options for early childhood educators, and would provide a mechanism for incorporating these diverse programs into a system that awards universally recognized transferrable credentials. In doing so, charter colleges of early childhood education would break the existing higher education system's monopoly on the awarding of recognized postsecondary credentials for early childhood educators, and expand opportunities for early childhood educators to succeed in postsecondary education.

At the heart of the charter concept is a simple bargain: Educational providers receive increased flexibility in exchange for increased accountability to deliver results. In the case of charter colleges of early education, this means that these institutions could use a variety of strategies to help early childhood educators acquire necessary knowledge and skills, and could award credentials based on teachers' acquisition of those knowledge and skills, rather than completion of specific seat time, credit hour, or coursework requirements that are currently the basis for most higher education credentials. In exchange, they would be required to demonstrate that their students are actually achieving results in early childhood classrooms.

States hold the keys to realizing charter colleges of early education, and need to take several specific actions to enable their creation:

1. *Set Clear Expectations*

First, states would first have to adopt clear definitions of what early childhood educators need know and be able to do based on current research. Existing university-based teacher training programs suffer from a lack of consensus about what K-12 teachers need to know and be able to do—a problem that stems, in part from similar confusion about what K-12 *students* should learn.

There is, of course, no absolute consensus on the needs of young children, and those needs vary with children themselves. But there is a robust and growing body of research on both how young children learn and the specific skills that early childhood educators need to support early learning, particularly in the areas of social-emotional, language, and literacy development that are most critical for young children's long-term educational success. In fact, we actually know more about the specific things early

childhood educators need to know and be able to do than we do in the K-12 space—even though we have much more stringently defined entry requirements for K-12 teachers.

Twenty-six (26) states have already developed, or are in the process of developing, “core competencies” for early childhood educators based on this research.⁴⁸ But for the most part, these competencies are not linked to training and preparation programs or meaningful credentials for early childhood educators. In creating charter colleges of education, states would take these definitions of early childhood educator competency “off the shelf” and integrate them as the foundation of new systems of early childhood educator training and credentials.

While charter colleges of early childhood education would differ from one another in many ways, they would all work from the same general set of competencies.

2. Define Credentials Linked to Skills and Workforce Needs

Early childhood educators work in diverse settings: state pre-K, nursery schools, Head Start, childcare centers. And because of the low adult-to-child ratios required in early childhood settings, early childhood educators often take on differentiated roles within these settings, including master teachers, lead teachers, and teacher’s aides. One of the problems with the bachelor’s degree agenda is that it focuses narrowly on one class of early childhood educators—lead teachers in public pre-K settings—while ignoring others.

Furthermore, traditional college degrees are remarkably devoid of information. They denote an institution and an extraordinarily broad disciplinary category—“arts” or “science” and perhaps a major concentration. They provide no real information about what degree holders have learned and can do, reducing their effectiveness in matching degree holders with employers who need their specific knowledge and skills. Even among the specific major concentrations typically accepted for early childhood credentials—child development, early childhood education, and elementary education—analysts have identified substantial differences in course requirements and content covered, both between and within specific majors.⁴⁹

Rather than defining a single, undifferentiated set of competencies, states and charter colleges of early education could create lattices of early childhood educator credentials that reflect both the diversity of early childhood educator roles and specific discrete skill sets. This is similar to the “qualifications” or “merit badge” concept recently proposed by UCLA professor and former American Education Research Association president Eva Baker, echoing earlier proposals from American Federation of Teachers founder Al Shanker.⁵⁰

These merit badges, or credentials, would be “stackable”—meaning that teachers could layer different credentials over time to build towards higher levels of knowledge, skills, and—critically—compensation. They would also be “searchable”—students and

employers would be able to electronically query each badge to examine the knowledge and skills it represents and the specific evidence used to support granting the badge to its individual holders. In order to receive a charter, charter colleges of early childhood education would need to agree to make such information available, with the consent of students and under the auspices of education record privacy laws.

This approach would recognize both the diversity of positions within the early childhood field and the reality that, for many early childhood educators, acquiring increasing levels of knowledge and skills must be a long-term process. In theory, such stackable credentials already exist within the early childhood field. The CDA serves as an entry-level credential; many early childhood educators hold associate's degrees that connote a further level of formal training; and bachelor's degrees are required for the most highly-paid early childhood positions, such as those in public schools. "Career Lattice," and professional development registry programs in a number of states, is designed to enable early childhood educators to track their professional development experiences and gain recognition and compensation for increased education over time.⁵¹

But in practice it is often extremely difficult—in some cases impossible—for educators to apply coursework or training from a lower credential to a higher credential. For example, many universities do not allow early childhood educators to apply early childhood coursework completed in a community college associate's degree program towards a four-year degree in early childhood education. And only some types of professional development "count" towards traditional higher education credentials—regardless of their impacts on teacher knowledge and skills.

States should use charter colleges to create seamless pathways into traditional sectors of higher education. Some students may wish to pursue associate's degrees, bachelor's degrees, and go on to graduate or professional education. All public community colleges and four-year universities should be required to accept an established core of early childhood credentials as transfer credits applicable toward a traditional degree. Charter colleges of early education would create more opportunities for early educators to begin—and in some instances, complete a substantial part of—their progress through the postsecondary system in practice-centered educational environments built with their unique needs in mind. This approach would increase the likelihood that more students will eventually succeed in earning bachelor's degrees, versus regulatory bachelor's degree requirements that force students into a system that is ill-prepared to serve them.

3. Identify Metrics of Teacher Knowledge and Skills

After defining specific competencies and stackable credentials for early childhood educators, states would define a set of processes for assessing the proficiency of early childhood educators in obtaining these discrete skills and their effectiveness in helping young children learn. Unlike traditional postsecondary training programs, which confer credentials based on seat time and completion of coursework, charter colleges of early childhood education could confer credentials only when their students successfully

demonstrate their effectiveness in applying new knowledge and skills to improve children’s learning in early childhood classrooms.

There are a number of possible ways to perform these evaluations, but each state’s system for assessing the competency of early childhood educators would need to include two core components: (a) valid and reliable observational measures of teachers’ classroom practice; and (b) consideration of teachers’ measured impacts on student learning.

The greatest weight in evaluation should be given to evidence of what teachers are actually doing in their classrooms—the extent to which they are delivering high-quality instruction and engaging in high-quality interactions with young children. These measures should be based not on observers’ opinions, but on established observational protocols that are *valid*—meaning research shows that teachers’ scores on these measures are predictive of students’ learning and development outcomes—and *reliable*—meaning the protocol produces consistent results across multiple observers. A growing number of such tools have been developed in recent years. The CLASS system described above is one (see “Observational Methods for Evaluating Early Childhood Education”).

Teachers should also demonstrate positive impacts on student learning. Evaluating teacher effectiveness based on student learning gains is controversial in any setting, and is particularly fraught in early childhood settings, where the types of standardized assessments used for K-12 accountability purposes are generally inappropriate for young children. That does not mean, however, that charter schools of early education cannot require teachers to demonstrate impacts on children’s learning as a precondition for receiving credentials. Assessment of children’s progress—through portfolios, work sampling, Texas School Ready’s performance monitoring tools, or other strategies—is an essential component of effective early childhood practice and a core competency for early childhood educators. And many states require publicly funded pre-K programs to collect certain measures of student learning. States, authorizers, and charter colleges of education themselves would all have roles to play in defining exactly how to measure evidence of student achievement for different credentials.

Observational Methods for Evaluating Early Childhood Education

Mrs. Green (not her real name) and her class of preschool students are sitting in a circle on the carpet in their classroom. At the center of the circle sits a small plastic scale—the focus of the day's science experiment. Green begins by asking the class what they remember about the scale, reviewing and reinforcing concepts that they have learned earlier in the week. One little boy responds that you use it to tell if things are heavier.

Mrs. Green affirms his answer and restates it for the group, “So some things we see, if we put them—if we compare them—in those buckets, if they are heavier or lighter than each other. Anybody else remember anything?” Hands go up around the carpet, and Mrs. Green calls on an African American girl named Naya. “You can tell if it’s heavier and lighter,” Naya says.

“How do we know if something’s heavier?” Like many good teachers, Mrs. Green uses questions to drill down on students’ answers, guiding the students to key concepts and information, rather than simply stating them herself. “What happens to this balance scale?”

“It goes down,” Naya says, pointing her hand towards the floor.

“Oooh,” Mrs. Green responds with enthusiasm, “Naya remembers. If it’s heavier, it goes down,” she uses her hands to illustrate. “And the lighter thing,” she pauses and calls on a little boy seated on the opposite side of the circle.

“It stays up,” he says.

“It stays up,” Mrs. Green repeats, raising her other hand to demonstrate. She turns to a bag sitting beside her on the carpet. “Well, this morning I have a few items here. I have two balls that are just about the same size, but they’re made of different things. One is made of rubber,” she holds up a red rubber ball, “and one is made of—do you know what this is made of?” she asks as she taps the ball with her finger.

“Wood!” call out several students. “Wood,” she agrees.

“Now, I want you to think about which one you think will be heavier,” Mrs. Green continues, holding the balls out in her open palm and moving her arm in a slow circle so that all the children can get a good look at them.

“Don’t tell me yet,” she says, as a few children begin to call out their guesses. “I’m going to make a chart.” Making charts to keep track of important data—how many children have birthdays in each month, what are the most popular pets children have at home—is a common preschool math activity that children in Mrs. Green’s class are quite familiar with.

Mrs. Green draws two columns—one for wood and one for rubber. Then she asks the children to make a prediction: Which ball, rubber or wood, will be heavier?—and goes around the circle, asking each child for his or her prediction and recording the responses with a tally mark in the appropriate column.

A little boy named Troy predicts that both balls will weigh the same, “Well, then I guess we’d better make another category here,” Mrs. Green says, adding a third column to her chart. “I didn’t even think of that, but they sure could be the same.”

CLASS identifies this clip of Mrs. Green’s classroom as an example of concept development—activities and strategies that teachers use to build out children’s understanding of a previously introduced concept and help them develop their higher order thinking skills. Green was developing children’s analytical and reasoning skills by asking them to predict which ball will be heavier. This helps them to truly understand the math and science concepts they are learning.

A teacher who is participating in CLASS-based professional development and wants to build her skills in concept development can go on the CLASS Video Library website, view the video of Mrs. Green’s classroom, and read an accompanying text that highlights specific examples of high-quality interaction and explains why the strategies Mrs. Green is using are effective. For example, the text accompanying this video identifies Mrs. Green’s response to Troy—adding a third column to her chart, rather than forcing children to choose one of two options—as a good example of encouraging children’s creativity and ability to generate new ideas. If a teacher is participating in coaching through MyTeachingPartner, her coach might direct her to this video after reviewing video of her own classroom, and discuss the video with her as part of their coaching session.

CLASS isn’t the only observation method available. Another is the Early Childhood Environmental Rating System (ECERS). Research has linked the ECERS subscale that focuses on child-adult interactions to children’s developmental gains.⁵² And the same Texas researchers who developed Texas School Ready also developed the "Teacher Behavior Rating Scale" as an observational measure to evaluate teacher quality in classrooms participating in TSR and the Texas School Ready! Certification System, the state’s QRIS. These and other observational measures can be used to evaluate teachers’ effectiveness in early childhood settings.

4. *Empower the Authorizers*

Next, states would create authorizers—the entities that grant charters, enabling charter colleges of education to grant recognized credentials. These authorizers would also be responsible for holding charter colleges of early childhood education accountable for their performance and use of public funds—similar to the authorizers that oversee public charter schools in K-12 education.

Authorizing entities could take a variety of forms, including existing state agencies responsible for early childhood education, state early childhood advisory councils, existing authorizers of public charter schools, or new entities created for the express purpose of authorizing charter colleges of early childhood education. The specific type of entity selected is less important than its commitment to the work of authorizing and capacity to carry out this work in a high-quality fashion. States would also need to put in place systems for monitoring the effectiveness of authorizers and holding them accountable for the quality of the charter colleges of early education they authorize.

5. *Enforce Constructive Accountability*

Charter colleges of education should be held accountable for the collective impact of their students on young children’s learning.

Crucially, states and authorizers would organize and fund evaluation processes for early childhood educator preparation programs that are, in a number of important respects, *independent of the charter colleges themselves*. Evaluation is another major flaw of traditional university-based K-12 teacher education. As a rule, universities conduct very little reliable, publicly reported self-evaluation. Instead, they rely on non-profit accreditors that are financially dependent on dues-paying member universities. Evaluation based on the observed performance of K-12 teacher education graduates in the classroom, or student learning in those classrooms, is practically non-existent—a design flaw that efforts to create a new system of preparation and training for early childhood educators should explicitly seek to avoid copying.

This will become increasingly feasible as states work to measure outcomes of their early childhood investments and better track data across the K-12, early childhood, and higher education systems. Ultimately, states must create longitudinal data systems that link data on early childhood educators to both the young students they teach and the charter colleges and other postsecondary institutions where they receive training, across the full range of early childhood settings, including licensed child care, subsidized child care (whether licensed or unlicensed), state pre-K, and Head Start. By linking these early childhood data systems to the existing educational data systems that have been created in most states over the past two decades, the state would have the capacity to use powerful analytic tools in overseeing the charter college sector. At the same time, they could also provide information that researchers and practitioners could mine to better understand the types of instructional strategies and environments that work for different kinds of students.

No state currently has all components of such a system in place, but several states—most notably Pennsylvania and Texas—are moving in that direction, and the Obama administration’s Early Learning Challenge Race to the Top program creates an unprecedented opportunity and support for states to further build out their early childhood education systems. While states develop their data, assessment, and quality rating and improvement systems, charter college authorizers would be responsible for defining standards by which charter colleges of early education would demonstrate the collective impacts of their graduates.

VI. CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION WOULD PROVIDE MORE ADAPTIVE, COST-EFFECTIVE MODELS FOR IMPROVING EDUCATOR SKILLS

Charter colleges of early childhood education would agree to teach their students the knowledge and skills defined by the state and to be held accountable for the quality of their graduates based on evaluation processes administered by the state, but would then be free to organize themselves as they see fit. Without specific course requirements, charter colleges of education could deliver training to best fit the needs and existing skill levels of the populations of students they serve. Content and quality would be held constant; inputs and forms would vary.

As a result, charter colleges of early childhood education might take a variety of forms. Some might look like “colleges” in the traditional sense of the word. Texas School Ready’s combination of curriculum, professional development, coaching, and progress monitoring offers another potential model of what this might look like, as does MyTeachingPartner’s approach that utilizes online coaching and a video library of effective teacher practices. Others might employ a version of teacher apprentice or fellowship programs, in which individuals with varying levels of education but limited early childhood experience work alongside experienced early educators, building their skills and knowledge in the classroom, perhaps supplemented by additional professional development or coursework outside the school day. The possibilities for delivery and program design are as varied as the early childhood workforce itself. Programs like Hopkins House might choose to partner with local community colleges or other existing higher education institutions—but only if that made sense on a purely financial and educational basis.

States might also choose to offer an “evaluation” option that allows teachers to demonstrate—and gain credit—for knowledge and skills they already possess. There are nearly two million early educators currently in the field. Many of these workers have valuable experience and skills that are not recognized by existing credentialing regimes. They could pay a fee to go through the credentialing process and have their knowledge, skills, and impacts evaluated either to prove their value or as a diagnostic exercise to guide them toward engaging with charter colleges in a way that makes sense given who they are and what types of settings they work in. (The American Board for Certification of Teacher Excellence (ABCTE) uses an examination process to award teacher certification to K-12 teachers in 16 states.) Rather than starting from scratch as college freshmen, early childhood educators would start from where they are and pay only for the services they need.

Early childhood educators themselves would have access to a variety of pathways through this system. For example:

- A recent high school graduate working in a child care center might participate in entry-level training designed to help her understand the basics of health, safety, and appropriate practice with young children, and receive an entry-level

credential based on her demonstration of knowledge and skills in these areas. Later, she might participate in professional development around building children's language, literacy, and social-emotional skills, and receive coaching designed to improve her ability to provide quality instruction in these areas. Once the coach determines that the teacher has the skills and knowledge to provide effective instruction to young children, she may recommend that the teacher participate in an assessment of knowledge and skills linked to a higher pre-K teacher or teacher's aide credential. Or she may recommend the teacher participate in additional professional development or training.

- A recent college graduate with no previous training in early childhood education might participate in a school-based intern program that allows her to work as a pre-K teacher's aide while observing effective practice, receiving coaching and mentoring, and participating in additional professional development. At the end of the year, this teacher would create a portfolio of children's work and have her classroom practice observed. If she demonstrates knowledge and skills meeting the standard, she might then receive a credential to teach as a lead teacher in public school pre-K programs.
- An experienced early childhood educator with some college coursework but no degree might have her classroom practice observed and create a portfolio of student work and other evidence of her impact on children's learning. Based on this evidence, a trained evaluator might award her credentials she currently lacks, and also work with her to develop a plan (including additional professional development, coaching, or college coursework) to further improve her skills, working towards a B.A.-equivalent credential that would allow her to serve as a lead teacher in public school pre-K programs.

These are only a few examples of the types of pathways and options that might be available to early childhood educators through charter colleges of education. Other pathways and credentials might be available for home-based early childhood educators and those who work with infants and toddlers. The push to mandate bachelor's degrees for early childhood teachers working with 3- and 4-year-olds in publicly funded settings has largely ignored the need to improve the knowledge and skills of early childhood educators in a much larger range of settings, including those who work with infants and toddlers, or in family home care settings. This is despite the fact that research suggests the poorest quality and least skilled early educators are typically found in such settings—as are some of the most disadvantaged youngsters.⁵³ Any serious effort to improve quality and outcomes across the early childhood system, particularly for the most disadvantaged youngsters, needs to include meaningful strategies to raise the skills of these educators.

Moreover, by basing credentials on demonstrated knowledge, skills, and effectiveness, rather than coursework, charter colleges of early childhood—and the accompanying independent assessment and credentialing regime—would unlock the value of under-priced human capital in the early educator workforce. In doing so, they would improve

the economic prospects of hundreds of thousands of workers who are often among the most economically and socially marginalized citizens in our society, and who frequently struggle to provide a sound education and other basic needs for their own children. Bachelor's degree advocates are betting that billions of new dollars are going to appear from somewhere to increase the salaries of early childhood workers despite the lack of any strong link between traditional college credentials and effectiveness in the early childhood classroom. It is more likely that the labor market and public policymakers will respond to *actual evidence of effectiveness* and that the charter college proposal is, as such, a more plausible path to getting early childhood workers the earnings that they need and deserve.

Funding is a key question for any new proposal in the early childhood space. But it is much less of an obstacle to charter colleges of early childhood education than many other proposals to raise early childhood teacher credentials. Charter colleges of early childhood education approved by the authorizers should have access to the same pools of public money that other institutions use to finance their operations. Per-student funding varies substantially among different kinds of colleges, of course—research universities get more money than community colleges. States should benchmark funding against the public universities that provide the bulk of teacher training in the state.

Such funding streams would seem like “new money”—a hard commodity to come by in constrained budget environments. But states are quickly moving to impose some form of educational requirement on early childhood educators and many are choosing four-year universities. It is, therefore, not a question of *whether* states will be providing additional funding to colleges to educate early childhood educators. It is only a question of *which colleges*. And since most B.A. programs include years of coursework that have nothing to do with helping small children learn, it is likely that many charter college students will enroll for less than four years, *reducing* the ultimate cost to the state.

Moreover, states, philanthropy, and employers already make significant investments in professional development for early childhood educators, including both job-embedded professional development and scholarships or subsidies for higher education coursework. Charter colleges of education would leverage these existing investments, by making it possible for job-embedded professional development programs to more directly translate into meaningful postsecondary credentials, and by ensuring that higher education coursework providers are accountable to produce real improvements in teacher skills and effectiveness.

States should work with regional accreditors to ensure that students attending charter colleges are eligible for the same state and federal aid granted to students attending traditional colleges. The nontraditional structure of the charter colleges may present a challenge for accreditors that are used to certifying inputs and forms. But organizations that happily accredit members of a for-profit college industry engaged in fraudulent and deceptive practices can surely be convinced to fairly evaluate public non-profit institutions dedicated to serving young children.

VII. LOCAL AND FEDERAL LEADERS CAN SUPPORT STATES' MOVEMENT TOWARD CHARTER COLLEGES OF EARLY CHILDHOOD EDUCATION

While states have primary responsibility for creating charter colleges of early childhood education, there are a variety of steps that municipal, county, and other local or metro-level leaders could take as well:

- *Reframe the debate:* Local leaders can use the bully pulpit to reframe public understanding of quality early childhood education, and place greater emphasis on the quality of teaching and the experiences children actually have in early childhood settings, rather than structural indicators
- *Become an authorizer:* A number of states allow mayors to authorize charter schools in their jurisdictions; by the same token, states could allow municipal and county authorities to serve as authorizers for charter colleges of early childhood education in their communities. This makes sense because the market for early childhood care and education, and the labor market for early childhood professionals, is a largely local one, and different metropolitan areas might have different labor market conditions and needs. City, county, or metro-level authorities are particularly well-positioned to recognize and respond to those needs and to integrate these efforts with broader city or metro-wide workforce development strategies
- *Use early childhood resources effectively:* Many local jurisdictions, particularly counties in some states, control pools of resources intended to improve quality in early childhood education. Local leaders could use these funds to support charter-like arrangements that enable educators to access diverse and flexible training offerings linked to specific competencies and demonstration of teaching quality
- *Use local workforce development funds to support charter colleges of early childhood education:* Similarly, many workforce investment funds are controlled at the local level. These funds sometimes pay for coursework to enable early childhood educators to acquire CDAs, associate's, or bachelor's degrees. Local officials should ensure that early childhood educators can also access these funds to pay for other types of credentials offered by charter colleges of early education
- *Support innovative local strategies to build early childhood educators' skills and knowledge:* Local officials can also help to seed or support the expansion of innovative strategies that build early childhood educators' skills. For example, local leaders could identify and publicly promote professional development providers who are improving teachers' skills and children's outcomes; recruit high-quality providers from other jurisdictions; and support the expansion of existing quality providers, for example by offering providers use of conference rooms and other municipal facilities that are underutilized at night or on weekends
- *Reward new credentials in city or county childcare facilities:* Many local governments operate child care or preschool facilities for use by their own workers. Local officials

can adopt professional advancement and compensation policies that encourage workers in these facilities to pursue professional development offered by charter colleges of early education and reward them with increased compensation for certain types and combinations of credentials

- *Establish local QRIS:* Local governments in states that do not have statewide Quality Rating and Improvement Systems (QRIS) can develop local-level QRIS to provide parents with information about the quality of different early care and education options and support and encourage quality improvements. Local jurisdictions such as Palm Beach County, Florida, have established QRIS and others can do the same. These systems would provide information on classroom quality that charter colleges of early education and their authorizers could use

Similarly, federal policymakers could support the development of charter colleges of early childhood education in a variety of ways. The Obama administration's Early Learning Challenge Race to the Top program supports the development of comprehensive state early childhood education systems—including common outcome measures for early childhood programs, QRIS, and P-20 state longitudinal data systems—which would in turn support the effective operation of charter colleges. Further, states that create charter colleges would be well-positioned to meet Early Learning Challenge requirements for systemic approaches to develop a great early childhood workforce, across all types of early childhood settings and the entire 0 to 5 continuum. The federal government could further support charter colleges of early childhood education through the following steps:

- *Encourage interstate collaboration.* There is a tradeoff between allowing states—the traditional funders and regulators of education—the flexibility to begin establishing charter colleges of early childhood education on their own timetables, and the need to create credentials that are portable and recognized in different labor markets. Giving charter colleges the state imprimatur and integrating them into existing accreditation systems will help. But the federal government should also coordinate development of these new systems and provide incentives for states to coordinate and collaborate, particularly in parts of the country with large multi-state metropolitan areas
- *Avoid creating barriers:* Federal policies could pose a barrier to the work of charter colleges of early childhood education if they impose bachelor's degree and/or teacher certification mandates on certain teachers or providers—such as Head Start teachers and those in pre-K programs funded with Title I funds—without also creating the option to recognize equivalent types of credentials offered by charter colleges of early childhood education. Alternatively, federal policies could create an incentive for states to establish stackable credentials and charter colleges of early childhood education, by defining a type of alternative credential offered by charter colleges of early education that would be an

acceptable substitute for a bachelor's degree and/or certification in such programs

- *Seed promising models:* Just as the federal government has played a key role in providing seed funding for the creation of new charter schools in K-12, the federal government should also provide start-up funding to seed new charter colleges of early education. Title II of the Higher Education Act, as recently reauthorized, already authorizes a federal program to support the creation of high-quality preparation programs for early childhood educators. But this program has never been funded. Congress should appropriate funding for these programs, which could be done in a budget neutral way by reallocating funding from other, teacher professional development programs (at both the early childhood and K-12 level) that cannot demonstrate evidence of effectiveness. Congress and the administration should ensure that the grant competition is designed to support innovative approaches to training and developing early childhood educators, not the status quo.
- *Support research and dissemination of best practices:* Many of the most promising models for developing early childhood educators—such as TSR and CLASS—have their roots in federal research grants. The federal government should continue to invest in research around improving the quality of early childhood teaching, particularly the development of valid and reliable observational measures as well as best practices for assessment of young children. The federal government should also actively disseminate information on effective strategies and best practices to the states.

VIII. CONCLUSION

Charter colleges of early childhood education ultimately represent an answer to the multi-level human capital dilemma that is most acute in distressed urban, suburban, and rural communities nationwide. Children from disadvantaged households often enter kindergarten with academic and developmental deficits that persist or widen throughout their school careers, greatly diminishing their ability to go onto higher education and productive careers. A major source of economic disadvantage in these communities is a lack of marketable skills and good jobs among heads of household, most of whom are women.

High-quality early childhood education is the solution to both of these problems, providing both education for children and jobs for parents. But that goal cannot be reached without flexible, modern training for the early education workforce, designed from the ground up with educators' needs in mind.

By building such systems, policymakers can go a long way toward solving several pressing problems at once. President Obama and others have made high-profile calls in recent years for the United States to quickly ramp up production of post-secondary credentials in order to regain the international lead in having the most college-educated workforce by 2020. This cannot be accomplished simply by adding more students and more money to the same inefficient and expensive system. Newer and better models are needed.

Several features of the early childhood education challenge present an enormous opportunity to test new approaches. The scale of the problem is large, encompassing hundreds of thousands of adults and millions of children. The people in question—disproportionately working women and mothers from low-income and minority backgrounds—are among those who struggle the most to earn credentials through the current system. Our nation cannot make a dent in the broader college completion challenge by focusing on white middle-class 18 year-olds—most of them already earn degrees. To paraphrase Willie Sutton, we have to go where the degrees aren't. Early childhood educators are low-hanging fruit in this regard. Ironically, this is a much *more* effective strategy for producing additional college degrees than the regulatory bachelor's degree requirement, because it would send the people who are actually educating young children to colleges that are actually designed to serve them.

And once we help them, why stop there? The principles undergirding charter colleges of early childhood education—modular, information-rich credentials; close ties to research and the workplace; flexibility around means combined with rigorous accountability around ends—are equally applicable to many other elements of higher education. Early childhood just happens to be the area where there is particularly pressing need and an active policy conversation in play. Once these charter colleges are established, the ideas behind them could be spread far and wide.

If that happens, there will be one more human capital benefit to this idea. Young children will not only get the kind of high-quality educational environment they need before they start formal schooling. They will grow up in households enriched by the compensation that well-trained early childhood workers should receive. And two decades later, they will have far more and far better options of their own when they choose to start higher education themselves.

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