JFF

The Big Blur

An Argument for Erasing the Boundaries Between High School, College, and Careers—and Creating One New System That Works for Everyone

AT A GLANCE

This paper argues for a radical restructuring of education for grades 11–14—by erasing the arbitrary dividing line between high school and college—to open opportunities for the learners our current systems leave behind. We make the case for an entirely new type of institution—neither high school nor college—designed specifically to better meet the needs of young people after 10th grade and help prepare them to succeed in the world of work.

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About JFF

JFF is a national nonprofit that drives transformation in the American workforce and education systems. For nearly 40 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all. www.jff.org

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Introduction

Not too long ago, many highways had toll booths. Drivers had to slow to a stop, fish around for exact change, and toss it into a metal bucket. If you missed, you were forbidden to climb out and retrieve your money; you just had to find some more and try again. Once you got it right, you waited for a gate to lift and the light to change from red to green. Now electronic systems with catchy names like "FasTrak" or "E-ZPass" collect tolls automatically and move travelers right through under an invisible eye; there are no barriers, no need to slow down. If only there were some kind of "Fast Pass" to smooth the transition from high school to college and careers. But the gates are many and the lights far too often red, especially for young people from low-income backgrounds, and, in particular, those who are Black, Latinx, and Native American and face additional barriers.

This white paper argues that the United States needs something like a "Fast Pass" for public education and training—a way to eliminate the many structural barriers that stop millions of young people in their tracks after high school and derail their efforts to build a better life for themselves and their families. The obstacles prevent them from going to college, earning a postsecondary credential with value in the labor market, and starting a well-paying career. For decades, innovators have tinkered with existing models and come up with good ideas that have created meaningful change, at least in isolated pockets. But attempts to scale solutions that help students from all backgrounds complete college and find good jobs so far have failed. They have not been sufficient to address the problems endemic to our broken—and inequitable—systems.

The Problem

The biggest structural barrier to increasing college completion rates and career success is the enduring and seemingly intractable disconnect between high school, higher education, and our workforce systems. They are misaligned, with incompatible curricula, instruction, expectations, and support services, and difficult to navigate. They work better for those who are financially secure and well connected, but not well enough for the vast majority of young people across the country. It's time to give up tinkering and instead take on a radical rethinking and restructuring of grades 11 through 14—the last two years of high school and the first two years of college—in order to increase success for all.

The Solution

Our solution—which we call "The Big Blur"—erases the arbitrary dividing line between high school and college and opens the opportunity for all 16-year-olds to start on a path toward a postsecondary credential and preparation for a career. Two years of college are free to everyone, just like the 10 years of primary and secondary school that came before. Some may want to think of it as two years of college included in high school or two years of high school included in college. But this vision is far more revolutionary.

We envisage an entirely new type of institution—neither high school nor college—that obliterates the barriers to higher education and stable, family-supporting careers. They'd be designed specifically to better meet the needs of young people after 10th grade and help prepare them to succeed in the world of work.

FIGURE 1A

The Big Blur

The Big Blur is an entirely new type of institution—neither high school nor college—that obliterates the barriers to higher education and stable, family-supporting careers.

The Urgency

This paper outlines what an ideal public education system for grades 11 through 14 would look like and explains why improving existing institutions is not enough—why instead a whole new grade structure is urgently needed. Some people might ask, is the status quo really that bad? Does the nation truly need a wholesale rethinking and restructuring of the transition from high school to college to careers? The answer is a clear yes. Here are some of the key reasons why *(see Appendix A for more detail on each):*

- Almost every young person needs a postsecondary credential and work experience in order to start a career. But far too few learners have access to these experiences. Survey data show that providing "career or job skills" are the areas that young people believe need the most improvement in K-12 education.[1] Top labor market researchers predict that 70 percent of jobs will require postsecondary education and training by 2027, while analysis of online job postings show that many of the fastest-growing jobs will require a bachelor's degree by 2026.[2]
- Despite massive public and private efforts to increase college completion, the rate of growth in attainment is slow and overall attainment remains unacceptably low. The most recent figures, from 2019, show growth of 1 percent per year. Degree attainment is only 43.8 percent overall and 32.4 percent for Black people, 25.5 percent for Hispanics, and 25.1 percent for Native Americans.[3] Children born into our country's lowest two wealth groups—the bottom 40 percent of the U.S. population—graduate from college at a rate of only 11.8 percent.[4]
- Around age 16, adolescents are more adults than children. It's an ideal time for them to explore their interests, start thinking about their futures, and begin to work. But most high school courses have limited relevance to postsecondary study or careers.[5] Between the ages of 15 and 17, young

people's capacity for abstract thought increases, they learn quickly, and they begin to set long-term goals. They're also better suited developmentally to learn from older peers and adult mentors than to remain in classrooms with younger peers.[6]

About This Paper

In this paper, we take a hard look at the obstacles that impede more than half of our nation's young people from making successful transitions from high school to postsecondary education to the labor market despite the best of intentions of the many who support them. We identify the four key areas that need transformation: incentives (in accountability and finance), alignment, governance, and staffing. For each, we provide examples of innovation—existing policies, programs, and networks—that have made strides toward smoothing transitions. Last, we recommend an action agenda of next steps to start pushing us closer to our ideal.

Research Methods

The findings and analysis in this paper are based on desk research as well as interviews with a wide range of innovators and change leaders. The JFF team conducted 40 interviews with innovators working in and thinking about grades 11 through 14 including local, regional, state, and national policymakers, education system leaders, practitioners, funders, and leaders in the nonprofit and startup sectors. Interviewees were from K-12 and higher education sectors including those in business and philanthropic settings, urban and rural contexts as well as large sprawling metro areas that crossed several K-12 school districts or county levels. Individuals hailed from ten states. A number had national perspectives. Interviews were conducted in two rounds between November 2020 and March 2021. *(See Appendix B for a list of interview questions and detailed information about our key research findings; see Appendix C for a list of people interviewed.)*

1. Key Barriers Students Face in Their Transitions to College

At each phase of the transition to college from high school, students are essentially on their own. Despite the best efforts of many adults—a school counselor who helps get a transcript, a friend who helps choose a college, a church employee who helps complete the FAFSA, a nonprofit staffer who helps figure out a monthly budget and a schedule for paid work—students are generally expected to find all of the financial, academic, logistical, and other resources they need and put them together on their own. *The Broken Road*, a recent report from Bellwether Education Partners, describes the disparate supports students must identify and assemble as a "fragmented system."[7] We would argue that "fragmented system" is too positive a term. For most students, there is no system at all. Students constantly fall through the cracks as they try to maneuver from college access and entry to navigation, persistence, and completion. Many students simply cannot manage and finance school, work, and family over the years it takes to complete a degree. They end up "stopping out," never to return.

The problems begin immediately, long before anyone steps on campus. High schools celebrate their college acceptance rates, but up to 20 percent of high school students who were accepted—and up to 40 percent from low-income households—don't show up in the fall.[8] Any procedural obstacles to enrollment, such as finding information to finalize financial aid forms, or changes in personal circumstances that arise in the summer, can feel and prove insurmountable to first-generation college-goers without parents, school counselors, or other adults who know how to help navigate

through them.[9] In addition, 40 percent of those who do show up (including 56 percent of Black students) are required to start college with remedial courses for which they must draw down financial aid but that do not earn college credit.[10] Many get discouraged and never move on to credit-bearing courses.

Surveys show that a majority of teenagers wish their high schools provided more information about the college admissions and entry process, particularly financing.[11] Students and parents worry about loan debt, are leery of disclosing financial information, and know too little about the return on investment of careers in various sectors of the labor market. But limited in-school help is available. The majority of public high schools have counselor caseloads of around 400 students. In rural areas, students receive limited outreach from colleges themselves, exacerbating these challenges.[12] As the Bellwether report notes, only when a single adult shepherds a student through the process does the transition become seamless.[13] That adult is often a college educated parent who makes up with family financial resources and social connections what should happen for all. While free community college removes the tuition burden, "College Promise" programs do not cover living expenses and were not designed to address the full range of barriers described above. More dramatic structural changes are necessary. Rather than creating more programs that help students overcome these barriers, we should remove the barriers altogether.

Survey Data About Young People's Views on K-12 Education and College and Career Preparation

Young people have mixed opinions on K-12 education as it currently stands, with 38% stating K-12 schools are on the "right track," 40% stating they are on the "wrong track," and 22% unsure. The areas they say are in need of greatest improvement are providing "career or jobs skills."[14]

About 84% of high school students report that they want to go to college, but only 68% of students expect to attend.[15] Some of this drop-off may be due to lack of awareness: 63% of students say they wish their high school provided more information about postsecondary education opportunities.[16]

Another key challenge is the significant (and understandable) concern about the cost of postsecondary education: 69% of college students think they will struggle to pay tuition, and these concerns only grew during the COVID-19 pandemic.[17] Some 36% of parents say they tapped their child's college fund to help cover routine expenses during the pandemic and 24% of high school students said the financial impact of the pandemic would make them less likely to pursue further education.[18]

Further, worries about cost are exacerbated by the uncertain return on the investment of a postsecondary education. Survey data shows between 45% and 80% of college students are concerned about getting a job—any job—after graduation.[19]

FIGURE A

K-12 Schools

40% of young people state K-12 schools are on the "wrong track"

38% of young people state K-12 schools are on the "right track"

22% of young people state they are unsure

FIGURE B

College Interest and Awareness

84% of high school students want to go to college

68% of high school students expect to attend college

63% of high school students wish more information was provided

FIGURE C

Financing College

69% of college students think they will struggle to pay tuition

36% of parents tapped college funds to cover expenses

24% of high school students said financial impact means they are less likely to pursue further education

2. The Ideal Vision

As we noted above, our vision calls for an entirely new model. These programs would be neither high schools nor community colleges, but new configurations. They would be specially designed and adaptive institutions for students in grades 11 through 14. They would start to expose youth by age 16 to the knowledge, skills, and credentials needed for careers that meet regional industry demands—and also for further education. They would bring together the foundational course work of 11th and 12th grades with the more specific education and training of community college. Developmentally appropriate sequences of work-based learning, beginning with career exploration and including on-the-job experience, would be a key component. The new institutions would end with postsecondary occupational certifications and associate's degrees that enable a young person to enter the labor market or go on to further postsecondary education or both. And they would be cost free to students.

A key to their effectiveness would be implementing "guided pathways" from the start, from the beginning of 11th grade all the

FIGURE 1B

The Big Blur

- High School
- Postsecondary Education
- Labor Market

The Big Blur is an entirely new type of institution—neither high school nor college—that obliterates the barriers to higher education and stable, family-supporting careers.

way through college graduation. The guided pathways movement, an evidence-based successful trend in community college reform, provides clear step-by-step paths for students to follow to complete an in-demand postsecondary credential in a specific field. One helpful description calls them "default program maps developed by faculty and advisors that show students a clear pathway to completion, further education and employment in fields of importance to the region."[20]

The new entities would also help position young people for college success, with all of the things they need to know beyond the classroom, providing crucial supports as they plan for and apply to college. They would eliminate the default requirement that students put together on their own all the disparate components that constitute the work of applying to, getting into, and showing up in a college classroom—choosing the right high school courses, doing a college search, accessing financial aid, taking a placement test, to say nothing of the skills, knowledge, and self-confidence required to successfully finish the first college semester.

The first two years of college are free so they no longer need to be separated from the last two years of high school. The model takes the inefficiency out of effective but labor-intensive dual enrollment programs—the many hours and staff expertise required to assess high school and college course equivalencies or work on student schedules to include a 14-week college course within a high school semester. The model also works toward greater equity of outcomes by removing the impediments of cost, debt, and bureaucratic requirements—impediments that are minimized for those with family resources.

The new structures also open a more effective and efficient way to a bachelor's degree for 20-year-olds. With the first step in career preparation behind them, they are far better positioned than 17- and 18-year-olds to choose wisely among postsecondary programs and benefit from advanced course offerings.

Building on the Best of U.S. Practices Today

Currently in the United States, the vast majority of young people attend traditional public high schools, which are not optimally structured to ease students' transition to college and careers. A comparatively small number of students attend high schools that have some of the key design elements of our ideal vision. These "college in high school" or early college programs enable students to take college classes and start accumulating

college credits for free, easing the transition from high school to college and shortening the time it takes to earn a degree. Some students earn an associate's degree by high school graduation, while others complete a semester or more from their post-high-school postsecondary education. A partner college typically awards the credits and oversees the program. Many of these schools integrate career pathways as well as career-focused degrees or short-term credentials.

While early colleges have grown in number over the last two decades, scaling these programs has proven challenging. The effort needed to align curriculum across K-12 schools and higher education, to braid funding from distinct systems, and to ensure that students complete applications for aid and admission, take up enormous human resources. Even in Texas, the state with the largest investment in early colleges, only around 65,000 students attend early colleges out of over 1.5 million public high school students.[21]

But while students take college courses, most college-in-high-school models still have the look and feel of high school, not of college and authentic career preparation.

The goals are important and familiar—the elimination of barriers that impede degree completion and the integration of supports that boost economic mobility. And years of gold-standard third-party research confirm that such models achieve these goals. Early colleges, for example, show impressive gains in rates of educational persistence and college completion, especially for youth from low-income households and youth of color.

The number of students attaining associates' degrees prior to or concurrent with high school graduation is growing across states as dual enrollment becomes more accessible and educators design guided pathways that reach back to high school. In most cases, qualified high school teachers or visiting college instructors deliver the courses in the high school. In some models, students take all or most of their courses on the college campus.

State-supported networks of early college high schools, designed so that students can earn up to an associate's degree, exist in California, Massachusetts, New York City, North Carolina, Ohio, and—most prominently—in Texas. Given the number and variety of early college high schools receiving state support and their growing attention to providing career-focused learning and industry-certified credentials, these entities hold promise for transformation into coherent grade 11 through 14 schools.

Our research also yielded innovative ways to design, fund, incentivize, and align models across grades 11 and 14 for the purpose of providing dual enrollment, not just early college. These innovative policies and practices are also promising in that they suggest new mechanisms for expanding integrated programs across the current secondary-postsecondary divide. Finally, career and technical schools and programs provide examples of some integration across grades 11 through 14—frequently serving both young people and adults in the same building, sharing facilities, and enabling students to easily access advanced industry certifications.

While such models and practices embody key parts of our ideal vision, they do not constitute a comprehensive system.

Using the Best of the Swiss Vocational Model

The Swiss and German "dual" vocational education and training (VET) models are closest to the vision proposed here for combining learning in school with learning in workplace settings. While we're arguing for something distinct from the European model of standalone upper secondary schools just for 16-to-19-year-olds, some takeaways from these systems are worth considering. Evidence from extensive research on the Swiss apprenticeship system, arguably the gold standard of international vocational programs, shows that it serves about 70 percent of students ages 16 to 19. Its success demonstrates that young people embrace the opportunity to try out the adult world of work and they very quickly adapt to the environment under the guidance of trained apprentice managers. Lest one worry that Swiss teenagers are tracked for life into their apprenticeship industry, it is important to recognize that the Swiss system prides itself on having "no dead ends." Many VET graduates change careers and often go on to further education.[22]

3. How to Achieve the Ideal Vision

A system that would more effectively support older adolescents' success in college and careers and eliminates many transition barriers is feasible and has the following features:

- **Incentives**
  Incentives are structured to promote new ways of organizing learning and support systems across grades 11-14; system(s) are held accountable for defined outcomes in this period; current funding streams can be braided, used flexibly, and dedicated ones created as needed for systems serving students in these grades.

- **Alignment**
  Systems are aligned so that at 11th grade students enter new institutional structures incorporating high school and college requirements designed for career preparation and incorporating work experience; these structures enable students to take incremental steps on a career pathway, and result in credentials with labor market value by the end of 14th grade as well as the ability to progress in further education.

- **Governance**
  A state cabinet level team and/or empowered secretary or commissioner with decision making authority oversees, ensures funding for, and supports unified grades 11 through 14 institutional structures that are aligned to the state's economic development strategy. The individual or team unifies policies promulgated by the offices of education, higher education, workforce, and economic development as they pertain to and influence the preparation of the state's future talent pipeline. Career-focused curriculum and work-experiences are aligned and seamless; the measure of success is student near- and longer-term labor market outcomes.

- **Staffing**
  Staffing structures are designed to equip specially trained educators and leaders to teach, curate and organize learning and work experiences and support systems for students in grades 11-14.

A number of states have made progress on incentives and alignment but not as much on governance and staffing. In regard to governance, a new decision-making body or empowered senior leader must be in place whose job it is to design and see implement the hybrid new grade configuration. We also propose that a new educator role be established for 11 through 14 educators. These educators would understand the developmental needs and cognitive styles of their teenage students but would also be well-equipped to challenge them with intellectually engaging learning and workplace and other hands-on experiences that respect their budding adulthood and emerging sense of self in the world of work.

FIGURE 2

FEATURES

These four features: incentives, alignment, governance, and staffing, are critical to redesigning our systems and achieving "The Big Blur".

4. Toward a More Effective System: Goals, Reality, and State Efforts Worth Watching

We began our research wanting to understand what innovators in the field were doing to fix the systemic barriers that were impeding student success. What workarounds had they created to manage specific policy, funding, and practice barriers? What creative solutions had they devised that pointed the way to more successful outcomes? While no state, region, or network we reviewed has come up with an approach that combines effective incentives, system alignment, governance, and staffing strategies at the scale needed, we came away encouraged by the creativity and vision evident in many initiatives. In charter networks, in state offices, in districts and regions, at institutions of higher education, educators have developed pragmatic solutions to seemingly intractable system misalignment challenges. And they have done so despite considerable frustration and, in some cases, a sentiment close to despair about changing the system for the better.

Promising Programs Share Key Elements, But Overall Impact Is Limited

At the school and program levels, we saw innovative initiatives designed to help students make progress toward college completion and take steps on a career path at little or no cost to them or their families. These programs all involved strategies to reorganize support systems, instructional delivery, credit-earning options, financing, guidance, and work-based learning across the boundaries of compulsory K-12 education and elective postsecondary studies. Some of the innovations are modeled on and replicate the

approaches of schools and programs, such as early college schools and "career academies," that have demonstrated effectiveness in increasing education and career advancement through rigorous third-party evaluations; others are too new to have such track records.

To varying degrees, they all incorporated elements that have a firm grounding in evidence-based practices, including these:

- **Dual enrollment options** that allow high schoolers to take college courses, which positively correlates to college completion, especially by students from populations traditionally underserved by high schools and colleges
- **Initiatives** such as grade 13 programs through which students receive guidance about college and career paths and academic and socio-emotional support from adults and peers while they complete their first college courses, which are crucial to gaining momentum toward college completion
- **Curricular pathways**, much like guided pathways, to ensure the high school and college courses students complete are aligned to postsecondary credentials with labor market value and prepare students for admission and/or transfer to bachelor's degree programs
- **Work-based learning experiences** that integrate academic instruction and technical training and expose students to new experiences and new social and professional networks

- **Blended courses** that couple in-person coaching and supplementary instruction with accessible, asynchronous online college-level content

Some of the innovations were tied to initiatives that are well known in high school redesign circles, such as those promoted by national networks like Pathways to Prosperity, Linked Learning, P-TECH, and New Skills for Youth. But even collectively, these approaches have hardly made a dent in the typical student experience of the transition from high school to college and careers or changed the American mindset about alternative possibilities. The systems that have been built around our archetypes of high school, college, and career progression reinforce the disjuncture and misalignments between the various levels of education that frustrate students and educators.

One particular point of frustration is work-based learning. While most interviewees said they appreciate the importance of work-based learning and applaud systems that embed industry-recognized credentials in high school and college, relatively few programs had such opportunities in place at any scale. Given the challenges of simply building a talent pipeline from high school through community college, most interviewees said they focused solely on college access, retention, and completion rather than on students' entry-level employment as a metric of success.

A Look at Progress Toward the Four Features of a New System

As noted earlier in this paper, a systems and policy environment that effectively supports older adolescents' success in college and career has four features: incentives, alignment, governance, and staffing. In the following pages, we examine those features one by one and provide a "goal" and "reality" for each—with the "goal" being what we see as the north star of implementation and the "reality" being what we see as the way things stand today.

We illustrate our discussions of the incentives and alignment components with examples of state and regional policies and initiatives that stand out as creative, powerful, new, and sufficiently scaled to be worth a closer look.

However, we found few examples of new approaches to governance and staffing that move toward truly integrated 11 through 14 systems. For the governance feature, we explain the radical steps that would be required to imagine and implement new institutional arrangements for career preparation. And for staffing—where the

biggest roadblock to building streamlined and coordinated pathways from grades 11 to 14 is the rigid disparity between K-12 and postsecondary credentialing requirements—we offer a look at interesting and unique developments that may be worth further exploration.

Incentives

Incentives are structured to promote new ways of organizing learning and support systems across grades 11-14; systems are held accountable for defined outcomes in this period; funding streams can be braided and used flexibly, and dedicated ones can be created as needed for systems serving students in these grades. As we see it, incentives fall into two key categories—those driven by accountability ratings and those driven by financial rewards.

INCENTIVES IN ACCOUNTABILITY SYSTEMS

Goal: State accountability systems emphasize metrics of success for cohorts of students in grades 11-14. Those metrics would include year-to-year persistence, work-based learning experiences and employer partnerships, credits earned, completion of a credential or a degree with labor market value, rates of transfer into bachelor's programs, and employment and career advancement.

The reality: While many K-12 accountability systems recognize college-level work in high school as a metric of success, schools are primarily assessed on their graduation rates and test scores—so that college-level work takes a back seat and work-based learning programs and other experiential activities are seen as detracting from, rather than enhancing, academic achievements. Moreover, higher education accreditation protocols do not include incentives for working with high school students and do not generally require an examination of employment outcomes for graduates.[23]

How to move closer to the goal: Even if we assume that K-12 and postsecondary systems will remain separate, incentives based on accountability metrics could push schools, colleges, and other training and education programs toward more shared responsibility for students in grades 11-14. K-12 schools should receive as much (or more) recognition for the success their students demonstrate in the first steps of college and in work-based learning

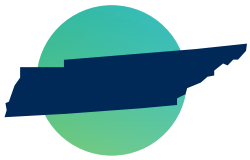
programs as they do for their students' test scores. Colleges should be recognized for students' employment outcomes, not just graduation rates.[24]

ACCOUNTABILITY SYSTEM INCENTIVE EFFORTS WORTH WATCHING

Some states go beyond encouraging high schools to offer college-level work; they provide generous incentives and even mandates to do so, by requiring K-12 systems to provide all students with a menu of postsecondary options and investing resources in efforts to make such college-level courses, certifications, and apprenticeships universally accessible. Indiana has poured significant resources and human capital into efforts to expand dual enrollment and facilitate participation. In 2019-20, nearly two-thirds of Indiana high school students took at least one dual enrollment course.[25] Idaho and Wisconsin also have high participation rates. Tennessee is one of a number of states that has built an array of advanced work options into their accountability systems. Washington, Colorado, and Idaho have unique policies regarding college level work in high school.[26]

- *Washington State: Legislation Mandates Student Acceleration*

After several years of discussion about ways to ensure that more students of color and more students from low-income backgrounds took advanced courses, the Washington legislature in 2019 passed a law requiring districts to automatically enroll eligible students in these programs. Every student "who meets or exceeds the state standard on the eighth grade or high school English language arts, mathematics, [or science] statewide student assessment" would be enrolled in "the next most rigorous level of advanced courses or program offered by the high school that aligns with the student's high school and beyond plan goals."[27] The state budget includes $9 million to fund this unique mandate in two-year increments. An analysis showed that 31 of the 50 participating districts had either reached parity—or made significant progress toward parity—in the demographics of the students in dual-credit courses.[28] Similar legislation is under discussion or in the pilot phase in Colorado, Connecticut, and Illinois.



▸ *Tennessee: Postsecondary Opportunities Rewarded in Accountability System*

Because the federal Every Student Succeeds Act (ESSA) encourages states to include dual and concurrent enrollment in their accountability plans, some 37 states now do so to some degree.[29] One of the more comprehensive examples is Tennessee's Ready Graduate Indicator.[30] Ready Graduate data factor into the state's early postsecondary opportunities (EPSO) framework as an "indicator of school quality and student success." In addition, Tennessee challenges districts to develop "a robust portfolio of early postsecondary opportunities [to help] ensure that college credit and/or a technical credential is accessible to all high school students." The EPSO framework includes eight such opportunities, which are designed to accommodate a range of student interests, needs, postsecondary aspirations, and levels of prior academic performance. After the approval of Tennessee's ESSA plan in August 2017, some quality and alignment issues emerged as districts moved quickly to expand EPSOs. The state put in place a certification process to recognize high-quality pathways that align with the Ready Graduate Indicator.[31] Additional incentives for districts to provide high-quality EPSOs include state subsidies for test fees, course materials, and teacher professional development.

FINANCIALLY DRIVEN INCENTIVE MODELS

Goal: Any state and federal funding that currently supports students from grades 11 through 14—as well as any new funding—is pooled by authorized institutions to support coherent grade 11-14 experiences that are less expensive for students and more cost-effective because their staffing and administrative costs are reduced. Current funding includes state subsidies for higher education, federal and state financial aid, and funds available under the Americans With Disabilities Act (ADA) and the Workforce Innovation and Opportunity Act (WIOA).

The reality: Most funding models are designed for and reinforce existing siloed systems. For example, performance-based higher-education funding only sometimes recognizes dual enrollment of high school students; College Promise programs are typically only available for students who have graduated from high school; students can't draw on Pell Grant funding while in high school, and state scholarship funds are based on Pell; and little, if any, supplemental funding is available for students for early college or career experiences. Moreover, substantial amounts of money are dedicated to an

elaborate administrative and technical machinery—dual enrollment advisors, high school college liaisons, curriculum alignment committees, college application tracking systems—that is in place to make up for the lack of alignment in the K-12 and higher education systems.

How to move closer to the goal: Some states have or could use funding streams to support students across the existing divide between K-12 and postsecondary programs. This includes funding for transitional supports such as per-student grade 13 funding or state higher education scholarship funds for high school dual enrollment. Texas exemplifies a generous funding model: High schools draw down per-pupil funding for dual enrollment courses, community colleges count dual enrollment as contact hours, and the state provides additional funding for AP, early college, and P-TECH models.[32] College Promise programs could be extended to upper high school students through dual enrollment or other avenues. Some states are trying performance-based incentives that, for example, reward K-12 systems for the performance of students taking first successful postsecondary steps or reward colleges for the outcomes of students who start with them as high schoolers.

FINANCIAL INCENTIVE POLICIES WORTH WATCHING

Programs designed to serve grade 13, or first-year college students, are growing. Long a staple of the early college movement—the first middle college founded at New York City's LaGuardia Community College in 1974 was a five-year high school—13th year programs are growing. These programs use per-pupil ADA funding for fifth-year high school programs, staying within the five-year high school graduation timeline used in most accountability systems. The per-pupil allocation is often used to offset the costs of college courses that are integrated with high school curricula. Many of these programs are small-scale grassroots efforts undertaken by enterprising leaders of charter networks and district high schools.

▸ *Colorado: Financing a 13th Year of High School*

Colorado has a grade 13 high school program called ASCENT. Short for "Accelerating Students Through Concurrent Enrollment," ASCENT gives K-12 districts and community colleges an incentive to set up grade 13 programs by allowing them to apply for funds that cover

college tuition—the factor that often discourages schools from offering dual enrollment. To participate, students must have completed 12 college credits before the end of 12th grade and they must be eligible for credit-bearing, nonremedial college coursework. Participation is still low: roughly 3,500 students from 52 of 179 districts took part in the program between the 2010-11 and 2018-19 academic years.[33] However, grade 13 programs could appeal to other states interested in building streamlined and coordinated secondary-to-postsecondary pathways because they offer a financial mechanism that would fund a full college degree in high school.

- *Idaho: Financing Students Directly and Early as an Incentive to Make Postsecondary Plans*

Idaho has created a unique scholarship program, the Advanced Opportunities Scholarship, to encourage students to take advantage of a range of post high school advancement opportunities.[34] When students reach seventh grade, they receive a stipend of $4,125 to use for education-related expenses, including state-approved college courses, Advanced Placement tests, International Baccalaureate programs, professional certification fees, and career and technical education (CTE) courses and apprenticeships. Most students use the money to pay for college courses that are taught by qualified high school teachers and cost $75 per credit.[35] As the program grew in popularity, the state legislature empowered students to create their own Advanced Opportunities accounts and learning plans (which are required for participation). The scholarship is set up to hold students accountable for outcomes. If a student fails to earn credit in a course, they must pay for a "like" course before being permitted to use further scholarship dollars.

Alignment

Goal: Systems are aligned so that, when students reach the 11th grade, they enter new institutional structures that incorporate high school and college programs designed to prepare them for careers and provide work experience. This model enables students to take incremental

steps on a career pathway, and it leads to credentials with labor market value by the end of grade 14. It also provides students with the opportunity to pursue further education.

The reality: Attempts to align systems encounter well-known impediments: differences in the way high school credits and college credits are calculated and tallied; a lack of coordination between high school and college academic schedules; college admission requirements that disregard standardized statewide high school assessments; differences in high school and college instructor qualifications; and most important, college programs in specific career pathways that do not have a foundation in the high school curriculum.

How to move closer to the goal: Alignment is most advanced in high school CTE programs offered jointly by high schools and community colleges. Another model avoids alignment entirely; students move directly to community college after 10th grade to complete an associate's degree or occupational certification. And initiatives in Indiana, Texas, and Delaware align traditional high school and college programs with the workforce system.

ALIGNMENT EFFORTS WORTH WATCHING

Alignment in CTE Programs

A growing number of CTE programs, schools, and technical education centers align and integrate CTE across K-12 education, postsecondary education, and the workforce, effectively preparing young people for in-demand careers. Alignment is less complex in CTE programs than it is in traditional high schools because CTE courses teach technical skills sequentially; these are reinforced by workplace experiences; and end in occupational certifications for which there are industry assessments. This eliminates disagreement about what constitutes competency and enables students to progress more rapidly to the next step. In addition, because these programs include employer partnerships, schools can easily ask for feedback about how well skills taught in school align with those required on the job. This is especially the case when employers see partnering with work-based learning programs as a way to build their talent pools.

Most promising is that many CTE programs already serve both secondary and postsecondary learners—often in the same facility—and already are close to full alignment of grades 11-14. Many CTE high schools offer late-afternoon and evening classes for adults, giving high school students an opportunity to take advanced

courses in their own buildings and without complicated preparation and admission requirements. Moreover, CTE schools and programs draw and braid funding from multiple sources that allow them to serve both secondary and postsecondary learners.

CTE programs have grown in popularity over the past decade because they now offer coursework not only in the traditional trades, but also in high-demand fields such as cybersecurity, engineering technology, environmental science, robotics, and graphic design. With growing waiting lists in a number of states, and with increased resources, CTE programs could fully blur the line between high school and postsecondary experiences. On top of that, students in many CTE programs go to college at higher-than-average rates.

Programs in Massachusetts and Tennessee provide two of the many illustrations of how CTE programs are modernizing to meet employer demands and becoming increasingly attractive to high school students as a way to either prepare for immediate entry into a career or gain skills that make it possible to support themselves while they pursue further education.

- *Massachusetts: Vocational Schools Excel as On-Ramps to Careers and College*

Massachusetts' regional vocational schools offer in-demand career education, work-based learning, AP and dual enrollment courses, and postsecondary certifications. There are long waiting lists for spots in these schools, and graduates enroll in college at rates that surpass the state average. One example is Montachusett Regional Vocational Technical School. Located in rural Fitchburg, it serves 1,400 high school students during the day and 1,700 adults in late-afternoon and evening programs. Students in the high school can move seamlessly into evening classes to complete more advanced credentials.

Most students participate in co-ops and/or staff the school's various business enterprises.[36]

- *Tennessee: Teens Study Alongside Adults at Technical Colleges*

All of Tennessee's 27 Colleges of Applied Technology, known as TCATs, educate both young high school graduates and

adults. Many also offer dual enrollment, providing high school students in grades 11-12 the option of earning a postsecondary workforce credential alongside adults—sometimes in a TCAT adjacent to the high school the students attend. These high-value credentials enable immediate entry into the labor market in fields such as nursing, automotive repair, mechatronics engineering, truck driving, and medical office administration. In 2017-18, 5,000 high school students enrolled.[37] Scholarship funds are available to cover high school dual enrollment costs for students who meet eligibility requirements. One particularly lively example is the Clarksville-Montgomery School System's Early Technical College at TCAT, a technical early college where classes for the high school diploma are taken online while the technical courses leading to certifications are provided in person.[38]

Beyond CTE, a number of initiatives reveal promising approaches to aligning high schools with college programs and even the workforce at increasing scale.

- *Indiana: Students Can Earn 30 Hours of Transferable College Credit in High School*

An Indiana program called "College Core" offers high school students a block of 30 hours of general education credits that transfer to public colleges and universities. College Core students participate in dual-credit courses taught at a high school by high school teachers through a formal partnership between the high school and a college. The number of high school students earning the College Core credits grew from 11 in 2013 to more than 1,600 in 2019. However, while the program is promising, Indiana is now addressing capacity and implementation challenges. Only 20 percent of the state's high schools are offering the College Core, and a majority of the participants in the program are white students from households with higher incomes.

- *Texas: Thousands Earn Associate's Degrees in High School*

More than 7,100 Texas high school students earned associate's degrees in the 2018-19 academic year, and many of those credentials included industry certifications. For example, Dallas College supports 27 early college high schools in the Dallas Independent School District. College faculty members offer 9th- and 10th-grade students their first college courses in high school buildings. Students in grades 11 and 12 take all of their early college classes on a Dallas College campus and meet both high school and college requirements simultaneously. The program was originally designed to lead to an associate of applied science degree (an AAS), but now a pilot is underway to provide the associate of arts (AA) or associate of science degree (AS), which are more valuable in Texas because they not only can lead to employment opportunities but also can enable transfer to a bachelor's degree program.

- *Indiana: Education and Workforce Systems Move Toward Alignment*

In addition to offering high school students an opportunity to earn college credit through the College Core program, Indiana has launched a number of initiatives that promote education and workforce alignment and is a leader in standardizing the process of transferring credits across all public institutions of higher education. The state's TransferIN initiative, led by the Indiana Commission for Higher Education, has created digital transcripts that make it possible to transfer college credits easily via the Credential Engine platform. Indiana has created close collaborative links between the state departments of education and workforce development and the Governor's workforce cabinet, which is chaired by the head of the Commission on Higher Education. One workforce education collaboration is exemplified by the city of Elkhart's youth apprenticeship program, adapted from Colorado's CareerWise model. In addition, the state's largest city, Indianapolis, is working with five other U.S. cities as part of the newly formed New Skills Network to find ways to better prepare young people for careers.

▸ *Delaware: A Leader in Career Pathways*

Delaware is arguably farthest along of states enrolling students in career pathways—more than half of the state's high school students now participate. The next step is to better align labor market preparation opportunities with programs and curriculum at Delaware Technical Community College, the state's lone community college. The goal is for all short-term credentials offered by community-based organizations (CBOs), boot camps, and training providers statewide to be recognized by Delaware Tech. For its part, Delaware Tech is exploring making its noncredit courses stackable to lead to credit and all of its credentials and degrees (including those offered by CBOs and other third-party training providers) will articulate to the public four-year institutions.

Governance

Goal: A state cabinet level team and/or empowered secretary or commissioner with decision-making authority oversees, ensures funding for, and supports unified grade 11-14 institutional structures that are aligned to the state's economic development strategy. The individual or team unifies policies promulgated by state education, higher education, workforce, and economic development agencies that pertain to the preparation of the state's talent pipeline. Career-focused curricula and work experiences are aligned and seamless; the measure of success is student labor market outcomes.

The reality: Departments of education, higher education, and workforce or economic development have separate and discrete missions. The first two are responsible for teaching and learning and the others are focused on jobs and the labor market. This disjunction exists from the federal government down through

state agencies and regional and local workforce boards that operate at a remove from the education system. Some high-level leaders and state cabinet members have attempted to foster collaboration across systems—sometimes hoping to unify workforce and education interests, sometimes K-12 and higher education, rarely both. Those attempts fail to go far enough to support a clear and unified governance of grades 11-14 to permanently align education with workforce demands.

Without unification of goals and structures, efforts to prepare young talent for careers are very labor intensive. Most attempts at integration, most importantly through PK-16/20 councils and dual enrollment programs, have not significantly fostered stronger connections between disparate systems or eliminated barriers that limit movement between levels. Since dual enrollment is arguably the foundation for what integration exists today, we provide additional thoughts about it below.

How to move closer to the goal: When it comes to integration of high school and college, dual enrollment is our most scaled system—but remains an opportunity offered to relatively few. Between 1995 and 2015, the number of dual enrollees in community colleges increased by more than a factor of four—from 163,000 to 745,000, according to a 2017 report.[39] But even with this growth, only 10 percent of high school students took at least one dual enrollment course in the 2017-18 academic year, and white high school students enrolled in dual enrollment coursework at about twice the rate of Black students. The report also notes wide equity discrepancies in participation among schools in the same district—a finding that indicates educators can make a difference in promoting dual enrollment opportunities.

STATES ORGANIZE CROSS-SYSTEM DUAL ENROLLMENT ADVISORY BOARDS

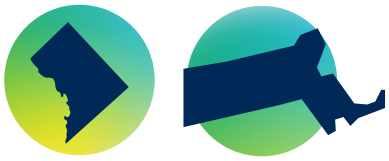
Some states have organized cross-system collaboration through dual or concurrent enrollment advisory boards or task forces that include representatives from K-12 systems and higher education. These boards are generally limited to solving problems that arise as a result of the disjunctions that make programs for grades 11-14 so labor intensive. They don't have the power to attack the root problems preventing the development of streamlined and coordinated secondary-to-postsecondary pathways.

The structure that should hold promise is a unified state board of regents like the one in New York, whose mission is "general supervision of all educational activities within the state, presiding over the [state university system] and the New York State Education Department." The New York

Board of Regents is a P-20 council on steroids, but institutions in that state are no more integrated than they are anywhere else.

- *Texas: Early College Development Shows Potential for Stronger Governance*

A state that stands out for the scale at which it has implemented early college programs, Texas could move toward a decision-making governance structure for grades 11-14. Early college development began in Texas in 2003, and nearly 65,000 students were enrolled in 182 designated early college high schools as of the 2019-20 academic year and similar programs were in the planning stages at other campuses.[40] In addition, nearly 6,500 students are served by 62 state Pathways in Technology (P-TECH) Early College High School programs, and more of those are in planning stages as well. The Texas Education Agency (TEA) has established regional pathways networks as a component of the state's membership in JFF's Pathways to Prosperity Network, encouraging exchanges across early colleges. A tripartite leadership body—the TEA, the Texas Higher Education Coordinating Board, and the Texas Workforce Commission—guides early college initiatives, with the TEA in the lead. Under a state statute, the P-TECH program is guided by an advisory council appointed jointly by the governor, lieutenant governor, and the state house speaker.



- *Washington, DC, and Massachusetts: Interesting Attempts to Improve Unified Governance*

Other interesting attempts to govern education and workforce systems synchronously are in place in Washington, DC. and Massachusetts. In Washington, a deputy mayor is designated to support education- and workforce-related agencies.[41] In Massachusetts, a line item in the state budget set up during the School-to-Work initiative of the 1990s, called "Connecting Activities," establishes public-private partnerships through the state's 16 MassHire State Workforce Boards. Connecting Activities makes it possible for state officials to use WIOA funds to support collaboration between the workforce and education systems; the funds pay for staffing at the workforce boards to establish and support employer-funded work-based learning experiences for high school students. In 2019, more than 12,000 students and 3,200 employers participated in work-based learning activities. Such arrangements have been in place for so long that collaborative governance between the education and workforce agencies has become routinized. Other states could adapt that model and build similar workforce-education collaboration.

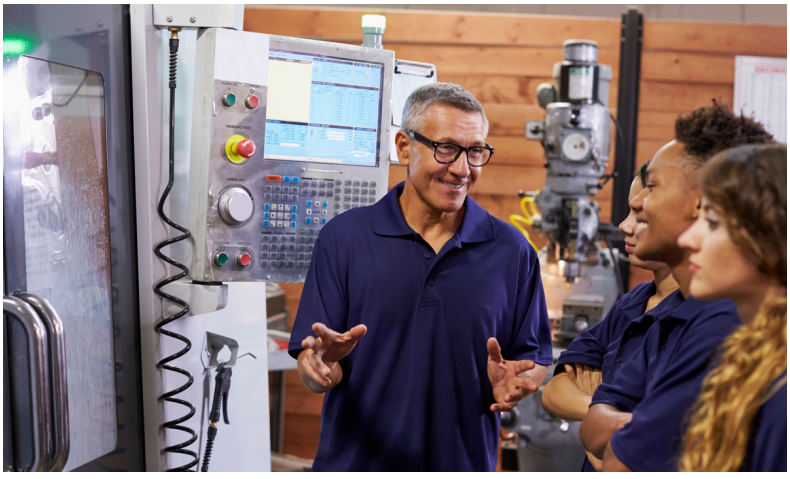
Laying the Groundwork: Six Radical Steps States Could Take to Foster Unified Governance

Even if no state is willing to merge high schools and public institutions of higher education, here are six changes state education and workforce policymakers could make to foster a more unified approach to governance:

- Standardize high school and postsecondary credits
- Ensure that high schools and community colleges have similar schedules
- Make a passing score on statewide high school assessments a trigger for admission to public community colleges without remediation
- Adopt comparable per-student funding models for K-12 schools and higher education
- Provide funding for internships for 16-to-20-year-old students
- Require guided pathways to reach back to the 11th grade

Staffing

Goal: Staffing structures are designed to equip specially trained educators and leaders to teach, curate, and organize learning and work experiences and support systems for students in grades 11-14. Faculty members, administrators, and other school personnel are trained and certified based on their demonstrated ability to provide developmentally appropriate instruction and socio-emotional support for middle and late adolescents. Training and qualification systems for teachers emphasize a proper blend of pedagogical methods and content expertise, and guidance professionals and school leaders must show that they understand how to work with employers, community partners, intermediaries, and transfer and articulation systems to design programming that connects students to work-based learning, systems of support, employment opportunities upon graduation, and continued education.



Even if we don't set up a specialized grade 11-14 educator corps, our currently separate K-12 and postsecondary systems could expand and enhance roles for teachers and other education professionals. We could align and combine teacher qualification systems and certifications to allow high school teachers to teach college-level material and vice versa—college instructors could learn to work with high school students. Likewise, we could train high school and college administrators, including guidance and career counselors, to understand and facilitate shared responsibility in their respective institutions for students in grades 11-14. Instructors and other school-based and community mentors could use online college course content and other technology tools to provide more individualized coaching, support, and guidance.

The reality: We have distinct certification and training processes for high school and college faculty. Programs that prepare people to be college instructors emphasize graduate level work in specific subjects, while programs for prospective K-12 teachers include subject area as well as pedagogical expertise. Experiences with dual enrollment programs show that finding teachers qualified to teach both high school and college courses is the biggest concern many communities have about offering programs that combine high school and postsecondary curricula. Moreover, college instructors and high school teachers have differing views about their work with students. College instructors are hired primarily to convey the content of their disciplines while high school teachers are expected to provide student support along with content.

How to move closer to the goal: As noted in the opening of this section, our research identified few creative redesigns of the qualifications of instructors for grade 11-14 programs. A number of states provide stipends for high school teachers to become qualified as community college instructors, but the qualification is simply a number of subject-specific graduate-level credits. We did find that many college and high school teachers work together informally, generally to align coursework in a single discipline. This is all to the good, but alignment is rarely standardized, so such initiatives are generally labor-intensive one-off exercises. On a more optimistic note, the National Alliance of Concurrent Enrollment Programs does promulgate standards for training instructors involved in high schools and college collaboration.[42]

Moving forward, local education agencies and their partner community colleges could experiment by substituting competency assessments for degree requirements, relying primarily on high school teacher qualifications regarding support for student development, and prioritizing college qualifications for the depth of an instructor's expertise in a specific content area. Additionally, they could ask guidance counselors and support staff to build more in-depth knowledge of postsecondary pathways and workforce connections, and perhaps serve as social capital brokers for young people.

SMALL BUT INNOVATIVE STAFFING EFFORTS WORTH WATCHING

We found two innovative approaches to staffing that could play a role in effective implementation of programs for grades 11 to 14. A community college in Massachusetts has developed a special job description for new faculty members who teach in early college programs, and Texas has an extensive professional development program for dual enrollment teachers.

- *Massachusetts: A Teaching Position Specifically for Dual Enrollment Programs*

Northern Essex Community College in Haverhill has developed a special teaching position for its early college high school initiatives. Applicants interested in teaching early college courses are interviewed by both the dean of the academic division offering the course and the college's executive director of PK-12 partnerships. The applicants must also agree to pursue early college professional development opportunities each semester and use frequent alerts and progress reports to help ensure that high school students don't fall behind in postsecondary coursework.

- *Texas: Professional Development for Dual Enrollment Teachers*

Texas has implemented a handful of initiatives to support instructors and education leaders who work in programs for students at the transition points between high school, college, and career. One interesting example is the University of Texas at Austin's OnRamps initiative, which offers dual enrollment courses for high school students and professional development supports for the instructors who teach those classes. Established in 2011, OnRamps prepares high school dual enrollment teachers to teach college classes to high school students. Instructors teaching their first OnRamps courses can participate in intensive summer training programs, take part in mentoring programs, and attend virtual conferences and learning institutes.[43]

5. An Effective Grade 11-14 System is a Public Responsibility

We argue in the introduction to this paper that almost every young person needs a postsecondary credential and work experiences in order to launch a career and that adolescents ages 15 to 17 are developmentally ready to set long term goals and begin career preparation. We also detail the deeply entrenched structural barriers that perpetuate the unacceptably low increases in college attainment because our nation's secondary, postsecondary, and workforce systems are misaligned and difficult to navigate. These conditions result in deep and persistent inequities in access to information, opportunity, and support critical to economic and career advancement.

The long arc of efforts to reform or reimagine educational systems in the United States suggests that we should resign ourselves to just "tinkering toward utopia."[44] But perhaps we have focused for too long on trying to fix too much that is inherently broken, rather than ask harder questions about the underlying assumptions we hold about our public responsibility for education, and in particular, for postsecondary degree attainment. Here we step back from our discussion about how to address these realities to consider why it is an urgent national priority to do so—and why the country needs to act swiftly and take bold action.

The Value and Affordability Issues Are Complicated

Over the last decades, as higher education costs have risen and access and completion have stalled, most dramatically for youth from low-income households, public perception of higher education has shifted, as has the policy debate. Gallup polls show a negative trend in confidence in higher education in the United States.[45] Public support decreased significantly between 2015 and 2019— "more so than for any other U.S. institution that Gallup measures." Gallup argues that cost is a main driver of this perception; higher education "is not available to those who need it most."[46] This suggests that the American public is thinking of higher education not as something that the country, the economy, or society needs. Rather, it is increasingly seen as an individual or private good for which the price is set too high for the purported value. This is a small, individualistic mindset that must change for the well-being and success of our economy, our employers, our communities, and individuals.

There are many explanations for the rise in costs of higher education, but the key driver, as a 2016 National Science Board publication argues, is disinvestment of public dollars at the state and federal levels.[47] The call for free community college and the forgiving of student debt respond to these perceptions of cost as the main problem. College Promise, the umbrella organization making the case for free community college, recognizes both the individual *and* societal benefits

of free college, but their driving argument is primarily one about opening access by eliminating tuition. This speaks directly to the challenge of affordability, but less clearly to societal value. It biases and centers the individual over the collective. This is not surprising. If families can't afford something for their own children, it's understandable that their focus would be on the good that is denied to them personally rather than on public policy and investment to serve society at large.

Higher Education Is a Public Responsibility

We take the view that two years of higher education should be seen not just as a public good as free tuition programs intend, but as a public *responsibility*. A public good is defined as a "nonexcludable" service or a service that is open to all who want to partake.[48] Theoretically, community colleges are open access, but they cannot be used by all who wish to partake and are not accessed by all who could. When community college is free, rates of enrollment and degree attainment do rise, generally by percentages in the single digits.[49] But that means from an already low completion rate—just 32 percent of learners entering in 2014 completed within six years—the increase still leaves far too many with some college and no degree.[50] Several researchers point out that the opportunity costs of failing to complete a degree are greatest for the lowest-income students as they are left with skills that are difficult to sell in the labor market and loans they can't repay.[51] It's also important to note that free college does not mean that all who wish to attend can do so. Costs not associated with tuition—including housing, food, books, transportation, child care—still present intractable problems. As we have argued here, barriers to participation are many and complex.

By public *responsibility*, we mean a service that the government provides with the expectation that it will cost public dollars because it serves a public need and it cannot be done in a discriminatory way. It is necessary to the nation and the core functioning

of society. Take the example of national defense, or more mundane things like roads and bridges or fire departments. While policymakers work to make such services cost efficient and available to all, their need is not generally questioned and their use is not restricted. If we can adopt a view that two years of college is not a public good but a *public responsibility*, then how we approach solving the challenges we face in college access and completion clearly must be bigger and bolder.

While it's true that higher education provides many private benefits to individuals, we argue that public benefits are equally or even more important.[52] For example, the same community college career program that trains a young person to become a cybersecurity expert and assures her an entry-level job at $75,000 per year also contributes to the digital safety of her company or public agency, a critical need for the country's economic prosperity and competitiveness. On a broader level, the ability of public higher education to improve individual preparation for the labor market is critical to our nation's economic strength and security.

That's why this paper argues that we must advance and yet go beyond College Promise programs to offer a vision of a structural, and therefore systemic, solution to the completion problem rather than one that addresses cost alone. As this white paper has argued, the biggest structural barrier to greater completion rates is the enduring and seeming intractable disconnect between public high school education and public higher education. This is what a public responsibility demands. If we want to see the new vision outlined in this paper become a reality, we will need to accept public responsibility as our *why*. Let's take stock of what we've learned, be done with our tinkering, and take some bold steps forward to fundamentally change existing systems. It's time to reimagine new ways for how youth and young adults experience and move through education systems to ensure they access the knowledge, skills, credentials, and capital critical to launch and advance in a career and realize their best possible futures.

6. Next Steps

As described above, a system that would more effectively support older adolescents' success in college and careers and eliminate many of the barriers that complicate postsecondary transitions is feasible and has the following characteristics: incentives, alignment, and effective approaches to governance and staffing. Achieving that goal will involve a long-term, multistep effort to transform two disconnected systems and create a new model that enables all stakeholders in the education and workforce ecosystem to join together to build a future that works for everyone.

It's heartening that some states and regions are beginning to institute important changes that are harbingers of effective ways to shift the configuration of grades 11-14 and connect students more directly to career pathways, as described in the previous section. But these pockets of innovation, while powerful examples that positive change is possible, are not sufficient to create the *systemic renewal* we need. Our theory of change therefore focuses on elevating the argument for an 11-14 system and building public will to move forward, while advancing and supporting work in states, regions, and/or networks that meet threshold conditions for further alignment across K-12 and higher education.

Here are several near-term action steps for investment and field engagement that can catalyze such efforts:

Activate Public Campaigns

Students, parents, and community leaders need to see the benefits of breaking the mold of the traditional high school-to-college and career transition and demand that local and state education leaders and policymakers take action. This calls for building in-state communication campaigns and coalitions to unify and elevate messaging around state-sought outcomes and advocate for systems-level changes in line with those that we call for in this paper. Such a campaign would support and draw attention to states where incentives—such as accountability and funding—and cross-agency and cross-sector partnerships have enacted bolder changes in policy and practice that are leading to more effective integration of programs in grades 11-14.

Inform State Policy Agendas

State leaders need encouragement to undertake the changes we envision, and they will be more successful if they can point constituents to proven examples and strategies that they can incorporate into their own policy agendas. We can provide state policymakers with the support they need if we educate them about barriers in existing policy that impede seamless access to postsecondary credentials and promote opportunities, best practices, and innovative systems-level solutions that can be further developed and used as evidence-based proof points.

Mount Regional Competitions Within States

Even in states that have made promising systems and policy pushes toward alignment, local practitioners need encouragement and support to capitalize on these advances to activate changes improving student outcomes. This could include issuing challenges to regional practitioners and communities in such states to build new structures for

transitions from high school to college and careers, or create new standalone institutions or reimagine existing ones. (Examples could include reimagining of CTE programs and regional vocational centers to build out and scale programs and partnerships and inform system changes). These types of efforts would involve key steps like these:

- Defining the configuration of partnerships that must be in place, including employers and local governments
- Defining system change goals applicants will pursue to make structures sustainable, such as new models of instructional design, roles, and qualification systems, facilitated by technology and new teacher training pipelines to increase the supply of teachers for programs designed for students on the pathway from grades 11 to 14 on to careers
- Calling on winners of the competitions to act as learning labs and providing them with support to advance their work

Additional Action Steps to Catalyze Innovation

Solutions can originate in unlikely places and among organizations or enterprises that have labored with little attention. Here are a few ways to unearth such programs.

SUPPORT INTERMEDIARIES TO LEAD SYSTEMS CHANGE

Intermediary organizations hold unique expertise because they are so often called on to forge connections between disparate systems—for example, by organizing work-based learning experiences linking employers, community colleges, school districts, and community-based organizations. These organizations would be well positioned to advance a comprehensive systems-change vision if they were appropriately funded and supported. Unlike organizations constrained within a traditional system, third-party intermediaries can often more effectively serve as neutral conveners, advocates, and facilitators. Here are steps we can take to advance the work of intermediaries:

- Invest in new or existing intermediaries that have a range of capabilities (such as expertise in visioning, postsecondary change, policymaking and advocacy, and employer engagement) to be central

cross-sector liaisons that support partnerships in key districts, regions, and states.

- Help work-based learning intermediaries expand their capabilities so they can operate like staffing agencies. Some intermediaries serving adults, like Hope Builders in California and Parker Dewey, have organized, professionalized, and delivered training and internships that employers pay them to provide because they demonstrate value to the bottom line not just corporate responsibility.
- Regional intermediaries with sufficient capacity and funding may also be able to play a role in identifying "employer teachers" making them available on an as-needed basis for short term assignments in schools' vocational and career-based courses. This approach would be preferable to having individual school districts compete with each other as they search for instructors on their own.

CREATE NEXT-GENERATION CTE PROGRAMS AND REGIONAL VOCATIONAL CENTERS

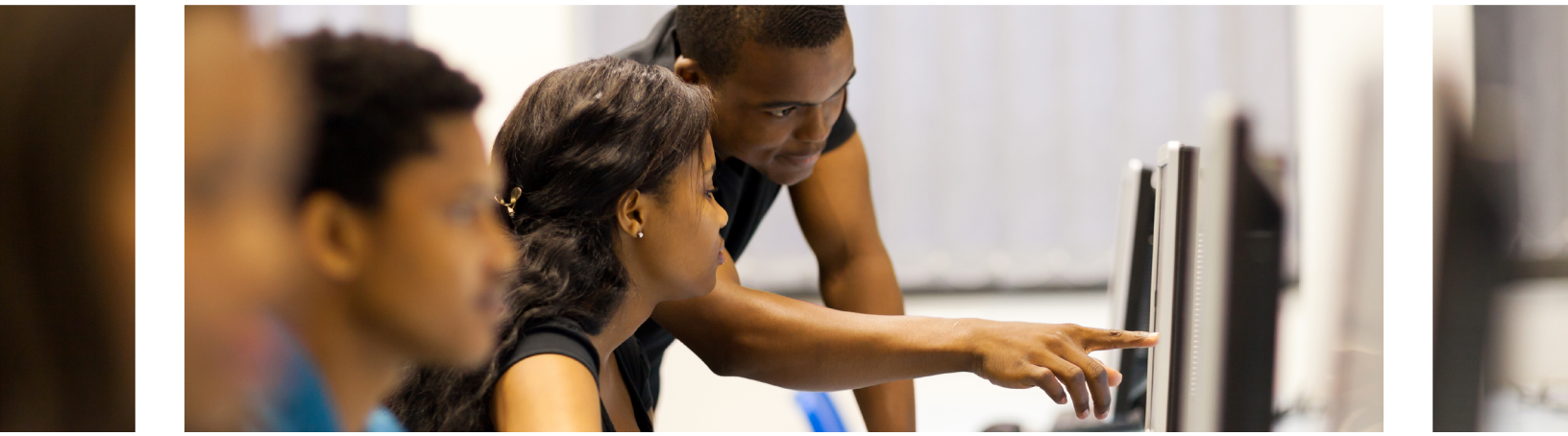
While districts have struggled to meet the demands of the 21st century labor market, many career and technical education programs and systems have leaped ahead to add in-demand career training and certification courses, work-based learning experiences that serve employer needs, and programs that help both youth and adults develop the skills needed for in-demand jobs. Here are a few ways to help advance such efforts:

- Support "bright spots" in states and regions' vocational systems and technical service centers where 11-14 courses, work-based learning activities, and coop programs are the norm
- Create learning laboratories in CTE schools and vocational centers to transform traditional public schools
- Offer community colleges, CTE programs, and vocational centers incentives to work together to offer programs that are aligned with employer needs

EXTEND THE REACH OF ONLINE GRADE 11-14 INNOVATORS

Online providers of postsecondary education, such as Southern New Hampshire University and Arizona State University, are creating new, affordable opportunities for schools (often charter schools) and community-based organizations to offer college courses along with in-person support and coaching provided by adults that students trust. These types of programs can and should be expanded and enhanced. Here are a few ways to do that:

- Fund a competitive design studio for providers of online education that adapts their offerings to larger public systems and rural locales
- Encourage online education providers to collaborate (rather than compete) with community colleges to provide certification programs and other learning activities that are embedded into credit-bearing courses and programs for dual enrollment credit
- Fund the development of physical spaces where students in online 11-14 programs can meet with fellow members of their teams and cohorts and receive in-person support, tutoring, and internet-enabled study rooms



Conclusion

At the opening of this white paper, we tried out a metaphor—that the country needs a "Fast Pass" system to eliminate barriers in the way of a smooth transition to postsecondary education and high-value credentials. We return to this analogy to underscore not just that it's time to give up tinkering and restructure grades 11 through 14, but that fast change to a better system is urgently required.

As the last several years have underscored, we live in an imperfect and fragile democracy—one with growing rather than shrinking income inequality and wealth inequality and increased polarization around the recognition of systemic racism. These trends threaten social cohesion. The consequences of inequality and systemic racism show up starkly in educational outcomes. Despite attempts to persuade employers to hire based on skills, credentials still matter a great deal—in fact, they have greater signaling power to employers for candidates lacking the social networks and connections needed to find a good job.

We argue here that the country has an obligation to provide not just access to higher education, but systems that ensure the education and training needed for those experiencing poverty and racism to truly prosper in the labor market. That obligation requires creative leaders taking on bold initiatives who believe—along with JFF—that people come before systems. In a human-centered approach, systems serve all people and that should be the immediate goal in fixing the system the nation employs to educate its young people.

The Big Blur

High School

Postsecondary Education

Labor Market

The Big Blur is an entirely new type of institution—neither high school nor college—that obliterates the barriers to higher education and stable, family-supporting careers.

APPENDIX A

The Urgency of Radical Change—It's a Matter of Equity

A transformed system is critical to achieving the equity goals we all have for our country—to be a place where all people, regardless of the racial or ethnic background of their family or the zip code where they grew up, can support themselves and move into the middle class.

The Evidence That All Young People Should Complete Grade 14

In 2013, the Georgetown Center on Education and the Workforce made a prediction that captured the attention of anyone who cares about the future of the U.S. workforce: 63 percent of jobs would require postsecondary education and training by 2020.[53] And since then, U.S. workers have become more educated, albeit slowly. Today 43% of Americans hold an associate's degree, bachelor's degree or above, with significantly lower percentages for people of color.[54]

One important point remains too complicated to unravel: do jobs truly demand the skills and knowledge that students learn in college or are employers increasingly treating postsecondary credentials as a convenient signal of competence for jobs that previously were filled by people without degrees.[55] Nonetheless, during the Great Recession of 2008 and the COVID-19 recession, employers were empowered to hire candidates they considered most qualified and that correlated with people with the most education. At the height of pandemic unemployment—in April 2020—about 8.5 percent of people with a bachelor's degree were unemployed, compared with 13.9 percent associate's degree holders, 18.6 percent of people with some college, and 19.2 percent of people with high school or less.[56] If two recessions taught workers any lessons, the most important one was that more education was a reliable insulation against unemployment.

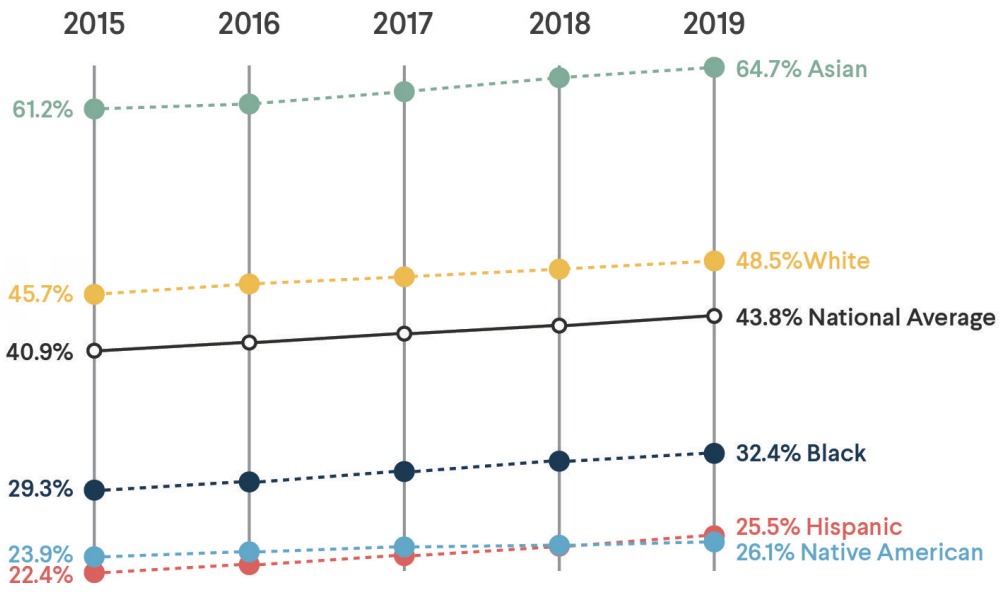
The labor market analytics company Burning Glass Technologies predicts even greater demand for education and training in the coming years. Using its database of a billion job postings, Burning Glass identifies categories of well-paying jobs that will comprise one in six jobs by 2026. Almost all require a bachelor's degree.[57] The occupations are not surprising; they include cybersecurity, renewable energy, logistics, and automation. Burning Glass also identifies technical expertise and other skills employers are seeking now that are likely to pay off best in the future; they're attained through postsecondary study.

The Unacceptably Slow Increase in Postsecondary Credential Attainment

With these predictions in mind, we assert that the slow pace of growth in degree and credential attainment puts far too many young people in danger of being left behind in the post-pandemic economy. In 2008, Lumina Foundation set a stretch goal for increasing degree attainment in the United States to 60 percent by 2025. By 2015, national attainment was just under 41 percent with progress of less than 1 percent per year (*see Figure 3*).[58] These increases cast serious doubt on whether the nation will achieve Lumina's goal. And as Figure 3 suggests, the likelihood of Black, Hispanic, or Native American populations meeting that goal by 2025 is almost nil.

FIGURE 3

Growth in Educational Attainment by Race and Ethnicity, 2015-2019



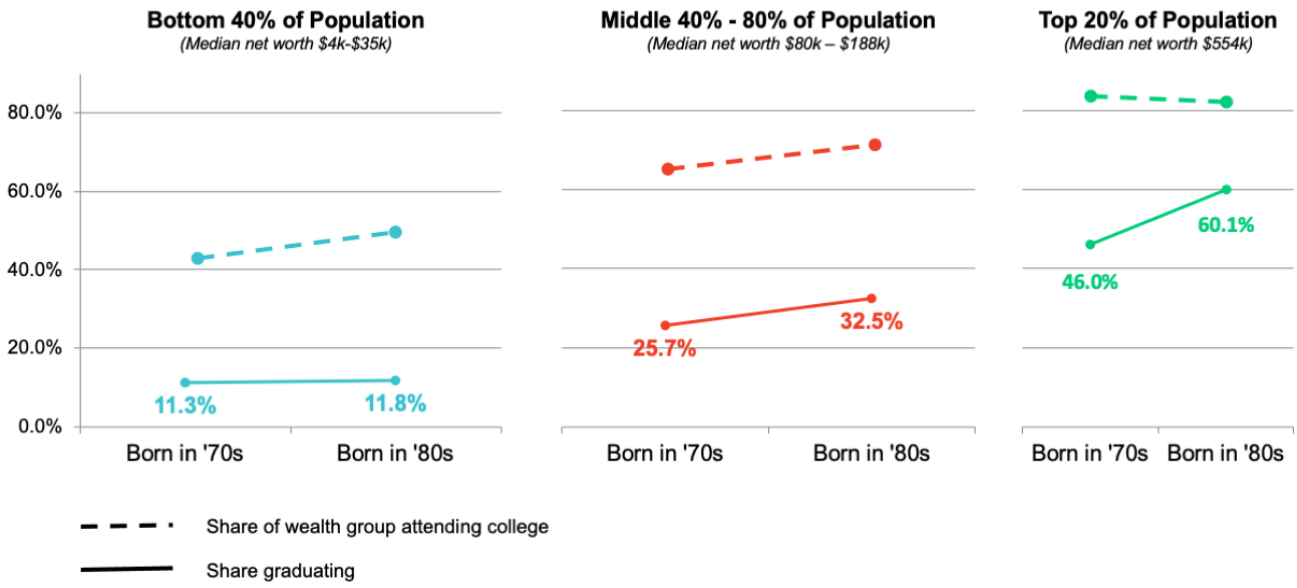
Values above do not include short-term credentials, only achievement of an associate's degree or higher.

Source: Lumina Foundation, A Stronger Nation: Learning Beyond High School Builds American Talent, 2019.

Gaps in college credential completion in relation to wealth are even more stark than race (or income).[59] Only 11.8 percent of children born in 1980 into the lowest two wealth groups (40 percent of the population) graduate from college (*see Figure 4*).

FIGURE 4

More Low-Wealth Students Go to College, But Few Graduate



Sources: The New York Times (with data from Fabian Pfeffer, "*Growing Wealth Gaps in Education*," in the journal Demography); United States Census (Wealth, Asset Ownerships, and Debt of Households Detailed Tables: 2017)

It is not wealth in itself that contributes to disparities in educational outcomes. But wealth can buy academic success; greater financial resources "allow parents to invest in the experiences, materials, and resources that foster the development and subsequent achievement of their children."[60] This can include choosing housing where schools are filled with so-called high achievers, paying for enrichment experiences, intervening with tutors and psychologists as soon as a child falls behind, and, of course, starting preparation for college in kindergarten.

At 16, Adolescents Are More Adults Than Children

Adolescents are often capable of more than we give them credit for, especially "middle adolescents," who are ages 15 to 17. Puberty typically begins at some point in early adolescence and

largely ends during middle adolescence. Along with physical and hormonal changes, teens undergo cognitive changes during this time. Middle adolescents increasingly think about their identity and how it relates to the larger world. They have a growing capacity for abstract thought, logic, and moral reasoning, which often manifests in a desire for independence and a search for personal and academic purpose, including considerations for their future. They learn quickly and are excited and willing to take positive risks, such as leadership, public speaking, volunteering, trying new things, in addition to negative risks.[61]

The developmental psychologist Robert Halpern has written extensively on the need for schools to nurture the vocational identities of teenagers. He notes that traditional, regimented high schools often constrain post-pubescent 16- and 17-year-olds who are ready for something new. "Most high schools provide only limited opportunities for students to explore their interests, including work and career opportunities. Instead, the typical high school curriculum mandates . . . English, social studies, science, math that often do not significantly differ from the versions of these classes that students have been in for the last ten years and that have limited applications to postsecondary study and the world of work," Halpern writes. "Maintaining these structures limits the capacity and potential of young people to develop their interests and take the first steps toward adulthood through career exploration. Their developmental growth makes them better suited to learn from older students and adult mentors, rather than remain in classrooms with pre-pubescent peers."[62]

While Generation Zers are unlikely to have read the latest research on adolescent development, they say loud and clear that they're not getting what they need from high school and the early years of college. They intuitively recognize the mismatch between what they're learning and the demands of employers whose approval they seek. Survey data (*see Figures A, B, and C*) tell a consistent story: Young people go to college to prepare for a career, but complete their programs feeling unprepared. Increasingly, they are interested in starting their own businesses, even while still in high school, and have big dreams for satisfying and balanced work lives. Most still aspire to a college degree, even though they are highly concerned with college costs. Seventy percent of students believe they will struggle to pay tuition and 93 percent are concerned with rising student loan debt.[63] They take on these burdens in the hope that using their own ingenuity, they can find the internships and other experiences that will position them for good jobs. These Gen Zers may envy the youth in Switzerland who become apprentices at age 16 and earn around $800 a month as they learn and build relationships with future employers. Money in one's pocket and valuable skills are strong motivational tools we have at our disposal, but we do not leverage at scale.

APPENDIX B

Research Methods and Findings From the Field

The JFF team conducted 40 interviews with innovators working in and thinking about grades 11 through 14. We asked respondents to consider radical solutions to our broken system for supporting young people to college and career success. We started with a preliminary round of interviews to test our assumptions about the issues of greatest importance and then landed on the following questions for the second round, which covered both policy and practice:

- What would it take to build a new kind of institution that covered grades 11-14?
- How might more flexible funding models be created to ease transitions from high school to postsecondary learning?
- What new or different accountability metrics or systems need to be put into place at both the secondary and postsecondary level?
- How might state leaders mobilize partnerships between public and business leaders at the regional level to create work-based learning and integrated high-school-to-college pathways?
- Do innovators and trailblazers on the ground need communities of practice or other spaces to connect and problem-solve together?
- How might multistate efforts led by governors spur more of a national movement?
- What new spaces has the COVID-19 pandemic opened for doing something radically different?

We began our research with the hypothesis that we would find innovators in the field creating workarounds to manage specific policy barriers and putting in place or revising existing policies in their attempts to build a more seamless transition from grade 11 through grade 14. That turned out to be true and is cause for optimism about the potential for significant innovation. But we also hypothesized that we would not find a coherent policy set that touched all four of our policy requirements: incentives, alignment, governance, and staffing. And unfortunately, we were correct about that, too. No state or region we reviewed has managed to line up all the policies needed to create an environment that effectively supports older adolescents' success in college and career at

the scale needed. While interviewees identified the systemic problems they were trying to solve, and expressed frustration that their recourse was to tinker with policy as it existed, there was almost universal agreement that strikingly different policies are needed.

One significant and almost universal finding is that while most interviewees appreciate the importance of work-based learning and applaud systems that embed industry-recognized credentials in high school and college, relatively few had such opportunities in place. Given the challenges of ensuring that students move from high school through community college, most interviewees focused solely on college access, retention, and completion, rather than on preparing students for the labor market and using students' entry-level employment as a metric of success.

Almost all interviewees immediately understood the vision we put before them of a grade 11-14 system and even new institutions. Several were prompted to consider the work they were already doing in a new light; that is, rather than simply accept that given the mindset and policy barriers they had encountered they had gone as far as they could go, they could entertain the notion that their own work constituted the initial steps in moving to an 11 through 14 system. The most provocative ideas came when we asked: If you had a magic wand and could make anything happen—including suspending and changing assumptions about where boundaries between high school end and college and career begin that are now codified—what would you want to see happen next? Is that vision achievable? If so, what would it take? What has kept those things from being seen already? What is a modest first step?

Below we summarize the high-level structural and policy barriers that interviewees most frequently cited. Most prefaced their comments with references to a pervasive anti-change mindset—the inability of leaders to envision possible future states, as well as simple inertia to change and custom of default to the status quo. The main paper identifies the many bright spots that exist and have the potential to be the foundation for a restructured system.

System Fragmentation: The entire system is plagued by fragmentation among and within institutions from the local level on up. At the state level, oversight of K-12, higher education, and workforce development sit within different departments and under different authorizing bodies. Funds flow in from different sources and are controlled under different domains. Even within institutions there are silos. Academic course taking and CTE are separated, often tracking or designating students toward one option or the other. In higher education, tensions between the credit and non-credit sides of the house created by differing financial incentive structures make integration challenging. These divides are enforced by financing sources and the inability

to understand what is working. Long-term outcomes are hampered by data systems that are also siloed and incomplete.

Policy Disincentives: Fragmentation is enshrined in policy, symbolized most visibly by the absence of connection between education-related agencies at the state level, thus leaving governance taking place in isolated silos. Other policy barriers big and small, but all significant include constraints within funding formulas; disconnected data systems leading to inconsistent outcome tracking; tensions between competency assessments and credits as well as lack of transparency around credit transfer; and finally, resistance to work-based learning as a legitimate or even necessary component of degree attainment. All these add up to a logic that institutions move toward where the incentives are. Said one interviewee, speaking for several, "If you want K-12 and higher ed to work with employers, then provide incentives or make it part of the funding formula—pay for success. Similarly for credential completion, college completion, or work-based learning opportunities."

Lack of Deep Understanding of What Achieving Equity Requires: Interviewees raised issues suggesting that they had questions about how deeply their colleagues and others understood the impact of systemic racism. Interviewees expressed concerns ranging from too little attention paid to student centeredness and family engagement to a more concrete understating of the evidence of who gets left out by a so-called meritocratic culture. Interviewees also noted that high school counseling often fails to unlock student interests, skills, and strengths and pays far too little attention to helping students understand and develop the social capital needed to negotiate college entry, completion, and the transition to the labor market. Finally, interviewees made very strong statements about the impact of poverty on students' lives, noting that until we address issues of poverty, equity gaps in access to opportunity will remain as they are today or grow worse in terms of access to training and education and good jobs.

APPENDIX C

Education and Workforce Leaders Interviewed for Our Research

Name	Title	Organization
Michale McComis	Executive Director	Accrediting Commission of Career Schools and Colleges
Russell Lowry-Hart	President	Amarillo College
Mike Matsuda	Superintendent	Anaheim Unified School District
Patrick Rossol-Allison	Head of ASU Local	Arizona State University
Mark Martin	Founder and CEO	Build UP
Eloy Oakley	Chancellor	California Community Colleges
Lande Ajose	Senior Policy Advisor for Higher Education	California Governor's Office
Beth Bean	Policy Director	Colorado Governor's Office
Sarah Hughes	Commissioner	Colorado Commission for Higher Education
Alejandro Leza	Director of Corporate Work Study	Cristo Rey Network
Matthew Wunder **Jennifer Hawn**	CEO/Superintendent COO/Deputy Superintendent	DaVinci Schools
Seth Andrews **Chandell Stone**	Founder CEO/Founder	Degrees of Freedom

Luke Rhine	Director, Career & Technical Education and STEM Initiatives	Delaware Department of Education
Jonathan Furr	Founder and Executive Director	Education Systems Center at NIU
Mike Johnston	President & CEO	Gary Community Investments / Piton Foundation
Scot McLemore --- **Mary Miller**	Manager of Talent Acquisition --- Deployment & Assistant Manager, Corporate Communications	Honda
Grace Suh --- **Charlotte Lysohir**	Vice President, Education, Corporate Citizenship (former) --- Manager, Education Strategy and Insights	IBM P-Tech
Brock Astle --- **Dana Kelly**	Coordinator --- Student Affairs Program Manager	Idaho Advanced Opportunity
Tina Polishchuk	Coordinator (former)	Idaho Advanced Opportunity
Tari Lambert --- **Ken Sauer**	Director of Transfer Indiana --- Senior Associate Commissioner and Chief Academic Officer	Indiana Commission on Higher Education
Amy Smith --- **Cindy Bater**	Executive Director of Educational Partnerships for the Advancing Linked Learning Innovation Network --- Program Administrator, Linked Learning	Long Beach Unified School District
Amy Williams	Executive Director	National Alliance of Concurrent Enrollment Partnerships
Miho Kubagawa	Partner	NewSchools Venture Fund
Jennie Soler-McIntosh	VP for Community Engagement and Postsecondary Pathways	New Visions for Public Schools
Michael Sorrell	President	Paul Quinn College

Dan Greenstein **Hope Lineman** **Randy A. Goin Jr.**	Chancellor Strategic Advisor to the Chancellor for Workforce Innovation Deputy Chancellor	Pennsylvania State System of Higher Education
Julian Cohen	Senior Director of Career Pathways (former)	Per Scholas
Cass Conrad	Executive Director	Petrie Foundation
John White	Co-Founder and Board Chair, Louisiana Superintendent of Education (former)	Propel America
Scott Bess	Head of School	Purdue Polytechnic High Schools
Don Shalvey	CEO	San Joaquin A+
Tim Taylor	Executive Director	Small School Districts Association (California)
Lauren Starks **Brian Vas**	Associate General Counsel & Director of Government Affairs Associate Vice President, Partner Solutions Group	Southern New Hampshire University
Jerre Maynor	Senior Director of Career Pathways (former)	Tennessee Department of Education
Lily Laux **Jarrad Toussant**	Deputy Commissioner of School Programs Division Director, College Career and Military Preparation	Texas Education Agency
Harrison Keller	Commissioner	Texas Higher Education Commission
Jeff Wetzler	Co-Founder	Transcend
Megan Healy	Secretary of Labor	Virginia Governor's Office
Cate Swinburn	President	Youth Force NOLA

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