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A Launchpad for Life:

A Vision for Purposeful Pathways for All Students

PUBLISHED BY
THE COMMISSION ON
PURPOSEFUL PATHWAYS

LETTER FROM THE CO-CHAIRS

Dear Colleagues,

This report offers a new vision for pathways at a pivotal moment for our nation's youth. The landscape of education and work is rapidly transforming, shaped by families' changing perceptions of the value of college, the tremendous disruption of emerging technologies, and shifts in education and workforce policy. Leaders across sectors are already coming together to reimagine what young people need to succeed and thrive—this report seeks to unify and amplify that progress to deepen and broaden impact.

Since March 2025, the Commission on Purposeful Pathways—supported by the Gates Foundation and led by Education First—has brought together 21 national experts and three young adult commissioners to envision and advocate for a future where every young person is equipped not only for a job but also for a fulfilling life, meaningful career, and economic mobility. During our work, the Commission often returned to a shared goal as a foundation for our vision—by high school graduation, all students should be able to say, with confidence: **I know who I am, I know where I'm going, and I know who can help me get there.**

Unfortunately, high-quality pathways remain out of reach for too many students: An estimated 15 million young adults in America are "unemployed, churning through low-wage jobs, or working in roles beneath their educational attainment."[1]

This report contains a conceptual framework and a call to action for communities to implement what we define as purposeful pathways, which begin in high school and continue after graduation.

Our vision: *All* students should experience high-quality advising, accelerated coursework, and career-connected learning that cultivate purpose, belonging, and social capital—ensuring that they graduate high school with agency and momentum on purposeful pathways toward economic mobility.

Some of these components are very familiar and backed by decades of research; others are newer but proven contributors to student success. Over the last year, we wrestled with how integrating these evidence-based practices could transform high school into a launchpad rather than a finish line. Right now, for too many students, fragmented systems produce fragmented experiences that fail to help students build and sustain momentum. In designing this vision for interconnected systems that deliver purposeful pathways, we grappled with several questions:

- When the return on higher education is in question, how can we give all students a head start on earning credits that will count toward credentials of value?
- When employers are concerned about their new employees lacking career skills and real-world experience, how can we connect all students to relevant work experience before leaving high school?

- How can we provide all students with high-quality advising to support navigating a range of postsecondary credentials in a sea of information?
- In a world where too many young people feel unmoored, how can systems build their sense of purpose and connection within their communities?

This vision depends on leaders and educators working across K–12, higher education, and workforce systems to provide all learners with momentum-building opportunities. We have four recommendations for implementing this vision.

1. **Provide *all* students with purposeful pathways.**
2. **Hardwire purpose, belonging, and social capital into every pathway.**
3. **Move the goalposts beyond the high school diploma to economic mobility.**
4. **Make student transitions a shared responsibility.**

This work has been informed by our commissioners, who include leaders, practitioners, and researchers from K–12, higher education, and the workforce, alongside three current or recently graduated college students; field-leading partners who conduct research and provide direct support to students, families, and educators to navigate the transition between high school, college, and careers; and research that provides insight into which experiences and supports open up the most impactful opportunities for students, both in high school and beyond.

The journey ahead is not without its challenges. Entrenched silos, fragmented systems, and the vision's sheer scale can feel daunting. However, the efforts of a determined network of partners in the field have built significant momentum, a strong evidence base, and abundant resources to support the implementation of purposeful pathways. We are energized by growing bipartisan support and new resources, including the **Pathways Impact Fund**, to expand pathways approaches.

We hope you will join us in a shared commitment to transforming educational systems and practices to ensure every young person can navigate a purposeful path to their future.

In partnership,

Melissa Connelly, *CEO of OneGoal*
John Garcia III, *Executive Director of the Pathways Impact Fund*
Paul Herdman, *President and CEO of Rodel*

Contents

Learn more and explore action guides from the Commission, developed with support from Education First, to help leaders across K-12, higher education, workforce systems, and intermediary organizations advance the vision and recommendations in this report:

- High-Impact Practices Action Guide
- Enabling Conditions Action Guide
- Measurement Action Guide

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Four recommendations to achieve a vision for pathways for our nation's youth

1 **Provide *all* students with purposeful pathways.**

2 **Hardwire purpose, belonging, and social capital into every pathway.**

3 **Move the goalposts beyond the high school diploma to economic mobility.**

4 **Make student transitions a shared responsibility.**

1

Making High School a Launchpad for Life

> "At first I thought, 'What is this for?' Graduation isn't until years from now; I wasn't thinking about the future at all. I still have the letter [that an advisor asked me to write to my future self when I was in my junior year], and it's so interesting to read it now; I can tell this was maybe the first time I pictured what life could be like for me someday.
>
> —JORDY, A ONEGOAL FELLOW AND FIRST-GENERATION COLLEGE GRADUATE IN TEXAS[2]

More students of all backgrounds are graduating from high school, but the days when a high school diploma provided a ticket to the middle class in America are long gone. In just five years, experts predict that 85% of "good jobs"—or professions that position earners in the middle class—will require a bachelor's degree or other industry-recognized credential.[3] This reality is well understood by education and workforce leaders, yet young people continue to face uncertainty about which pathways are worth pursuing and how to prepare for them.

A growing body of evidence points to the challenges young people face as they launch into their adult lives:

- A large percentage of Gen Z students—78%—believe it is important to determine career plans before high school graduation, but only 13% feel fully prepared to do so.[4]
- Over half of young adults are "suffering or struggling" after their high school graduation, according to an annual survey of Gen Z attitudes. And just 39% of young adults report a positive outlook on their prospects over the next five years.[5]
- Perceptions of the value of a college education have steadily declined, with just 35% of Americans today reporting that college is "very important"—a drop of 40 percentage points over the last 15 years.[6]

Together, these trends underscore a reality that education advocates have been signaling for years: High school can no longer function as a finish line. Too many students graduate unsure about their futures—and lacking clarity on which postsecondary credentials provide value and open doors to their careers. The individual and economic risks are too high to leave this to chance. Building pathways that connect educational opportunities to in-demand, family-sustaining jobs is imperative.

While it's hard to predict exactly how AI will change credential requirements and workforce needs, students undoubtedly will need durable, flexible skills and connections—within their communities and

78%

While **78%** of Gen Z students believe it is important to determine career plans before high school graduation ...

13%

... only **13%** of Gen Z students feel fully prepared to do so.[4]

beyond—to support them as they launch their careers. Over the last few decades, education leaders and advocates have championed a range of strategies to solve this challenge. The pendulum has swung from calls for expanding vocational education to "college for all" and efforts to overhaul the high school experience. **But increasingly, the field is embracing what should have been the goal all along: preparing all students for *both* college and careers. K-12, higher education, and workforce leaders should take the best parts of past efforts and combine them into a system that delivers on this promise.**

Important lessons about what does and does not work at both extremes accompanied the pendulum swings. When vocational education tracks young people into low-wage, low-growth work and robs them of academic experience, it fails. But when young people are supported to explore economically viable and interest-aligned careers, they can find new purpose and relevance for their coursework. On the flip side, when all students are pushed onto a "BA or bust" track, many fall off—as underscored by the 43 million "some college, no credential" Americans.[7] This isn't to say college shouldn't still be a goal. Gaining a college degree remains the most reliable path to a job with good wages and growth potential. Students' postsecondary attainment in the decade after high school is especially important in unlocking access to good-paying jobs,[8] and when students lose momentum, getting it back can be difficult. But students should be shown the many forms of college, from the liberal arts bachelor's degree to the applied associate degree—and they should know the economic returns on those various options.

Lessons From Abroad

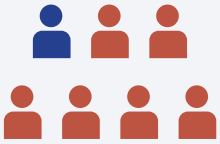
Strong models have emerged from other countries, including the Swiss model for apprenticeship that informed and inspired the Commission's vision. To learn more about how global leaders in four Commonwealth Countries, from Australia to Canada, are modernizing school-to-work transitions, please refer to Rodel's report, Global Lessons: Career Pathways in a Rapidly Changing World. This study, conducted in partnership with the Organisation for Economic Co-operation and Development (OECD), offers ten key lessons for developing systemic career pathways that improve long-term employment outcomes for students.[9]

The cost of inaction extends far beyond individual students. Four in five hiring managers found high school graduates were not adequately prepared for entry-level roles, according to a recent report.[10] Nearly one in seven—or about 14%—of young adults between the ages of 18 and 24 across the U.S. are not working or enrolled in school, reflecting a staggering disconnect between education and career.[11]

Pathways bridge the gap between learning and work and build the talent that's required to meet the evolving demands of the modern workforce. Researchers estimate that a failure to address the worker skills shortage could lead to $8.5 trillion in annual unrealized revenue for the U.S. economy by 2030.[12] Economists and other advocates argue that left unaddressed, the skills gap can drive broader impacts, including the United States losing its standing as a global economic leader and increased national security risks.[13]

Purposeful pathways offer a way forward that addresses both lessons learned and pressing contemporary realities. At the core of this vision is the interconnection between academics and work to give students a stronger sense of purpose as they study and learn. Advising helps students make sense of accelerated coursework; accelerated coursework gives substance to career exploration; career-connected learning gives purpose and relevance to both. When intentionally designed together, these experiences cultivate agency and reduce the likelihood that students stall, backtrack, or disengage at key transition points.

> "When I understand why I'm doing something and how it connects to what I care about, it makes everything more worthwhile."
>
> —DONOVAN, AN EARLY COLLEGE STUDENT IN VERMONT[14]



Nearly **one in seven—**or about 14%—of young adults between the ages of 18 and 24 across the U.S. are not working or enrolled in school, reflecting a staggering disconnect between education and career. [11]

Defining key terms

Pathways

This term has many definitions. Sometimes "pathways" refers to industry-specific programs that include prescribed coursework. The term "college and career pathways" has emerged in recent years to begin to address the history of bifurcated pathways that track some students into college, others directly into careers. The term "pathways" is used broadly in this report to refer to the holistic set of student experiences in high school and directly post-graduation. This Commission believes all pathways should include education and training in high school and beyond that lead to work with family-sustaining wages.

Credentials of Value

While definitions vary by context, this report uses the term to refer to traditional college degrees, industry-recognized credentials, and other non-degree credentials that lead to jobs that pay more than individuals would make with just a high school diploma.[15] States should have processes for identifying and validating credentials[16] that align with those most requested by employers in a specific field or industry.[17]

Durable Skills

Durable skills are the indispensable skills, mindsets, and competencies that every young person needs to succeed. Sometimes referred to as "soft skills" or "employability skills," research indicates that employers value these core competencies that translate across sectors and opportunities: leadership, character, collaboration, communication, creativity, critical thinking, metacognition, mindfulness, growth mindset, and fortitude.[18]

Pathmaking Teams

These cross-sector partnerships, ideally backed by governance structures, empower practitioner-leaders in K-12, higher education, workforce, and intermediary organizations to design, implement, assess, and scale purposeful pathways. Pathmaking teams should be composed of mid-level organization leaders—senior enough to direct teams and make decisions but close enough to the work that it remains a central part of their responsibilities and they are knowledgeable about its progress. Pathmaking teams are championed by executive leaders who can build alignment and bring visibility to their work.

Pathways Intermediaries

These members of pathmaking teams play a pivotal role. Their work is an indispensable part of creating capacity at the local and state levels, strengthening reporting and accountability infrastructure through data-sharing agreements and helping structure internships and apprenticeship programs that connect students to employers. Research shows that various organization types, from independent nonprofits to colleges, schools, or chambers of commerce, can all play this role well.[19] Recognizing the importance of these intermediaries, the Pathways Impact Fund seeks to support their work, specifically through funding, convening, and technical assistance.[20]

The Mandate Is Clear

With a high school diploma no longer a sufficient outcome, all students must have experiences that begin in high school and connect them to postsecondary pathways that provide essential training and durable skills while also building agency to move forward with purpose. If pathways can be redesigned to deliver on this vision, young people will be equipped to thrive.

All students should experience high-quality advising, accelerated coursework, and career-connected learning

These are not optional or isolated programs but a coherent set of experiences that every student encounters—early enough and consistently enough to shape real choices.

that cultivate purpose, belonging, and social capital

These mindsets and skills allow students to connect their learning to future aspirations; persist when challenges arise; feel a sense of support and trust; take risks and "try on" new opportunities; and open doors through relationships and networks.

ensuring students graduate high school with the agency and momentum

Graduates leave high school with the durable skills, confidence, and concrete progress (such as earned credit and work experience) needed to make informed decisions and keep moving forward.

on purposeful pathways to achieve economic mobility.

With clear plans and reduced barriers, students are better positioned to complete credentials of value and translate education into lasting economic opportunity.

Challenges to scaling high-quality pathways

Across the country, pathways approaches are gaining attention, with bipartisan support at the state and federal levels.[21] This awareness includes an increased focus on cross-sector education and workforce partnerships that help students explore different careers and start planning for life after high school graduation.[22] However, even as momentum grows, persistent challenges remain.

1. **Lack of shared accountability**
   K-12, higher education, and workforce leaders do not share the same measures, which leaves leaders without clear accountability for results beyond their own institutions and organizations. Even as the majority of states have adopted college, career, and civic readiness indicators, they differ widely and no standardized process exists to measure graduates' readiness for life after high school, according to a recent 50-state analysis conducted by All4Ed and the Urban Institute.[23]

2. **Legacy of tracking**
   For decades, vocational education was seen as a lesser track, which led to stigmatized and often underfunded programs. Partly in response, many leaders and educators swung toward a "college for all" agenda. This shift expanded conceptions about which students received support in preparing and applying for college—but it also sidelined high-quality career preparation. That created a gap in options both specifically for students seeking technical training or direct entry into skilled work and broadly for all students, who can benefit from career-connected learning woven into their academic experience.

3. **Funding limitations**
   While demand for skilled workers is growing, state and federal funding for Career and Technical Education (CTE) has been flat or in decline for more than a decade,[24] and funding for dual enrollment varies substantially by state.[25] Federal funding comes with eligibility criteria and specific allowable use of funds, which can limit the integration of key programs, such as layering CTE with college credit-bearing coursework.[26] Funding for other programmatic experiences has additional limitations. For example, dual enrollment funding models are varied across the country in terms of whether the state, school district, postsecondary institution, or student/family assumes financial responsibility for program costs.[27]

4. **Insufficient infrastructure for career exploration**
   Scaling career-connected learning takes time and strong workforce partnerships. Building and sustaining these partnerships requires coordinated infrastructure such as aligned course sequencing, employer engagement structures, and intermediary capacity to support cross-sector collaboration. When this infrastructure is lacking, career exposure opportunities are often fragmented or unavailable. Without career exposure activities, students report that their knowledge about career options is limited to the jobs they have learned about from their families and the media.[28] While CTE is offered nearly universally, only 30% of rural districts and 42% of urban ones reported that their programs align with postsecondary programs, according to research published through the New Skills for Youth Initiative.[29]

Photo by Allison Shelley/Complete College Photo Library/Altered

5. **Bureaucratic and structural barriers**

Even when components of purposeful pathways exist, they can be tangled in red tape. Course credit systems, scheduling conflicts, and eligibility rules limit who can participate, while misalignment across K-12, higher education, and workforce partners means students can complete a pathway only to find that credits don't fully transfer or institutions don't recognize their credentials. Although many communities are attempting to put in place evidence-based practices related to pathways, implementation is often messy and uneven. A lack of shared definitions, quality benchmarks, and scalable models adds to the challenge.

6. **Access and success gaps**

Access gaps begin early. Students from lower-income households are significantly less likely to enroll in postsecondary education than their higher-income peers.[30] Participation in dual enrollment has expanded nationally, yet Black and Hispanic students, English learners, and students with disabilities remain underrepresented in many advanced coursework opportunities.[31] Geographic disparities also persist: rural communities account for the majority of "education deserts," limiting students' proximity to postsecondary institutions and training providers.[32]

Even when students participate in pathway programs, disparities in field of study and economic returns remain. One example: young women are underrepresented in CTE programs that lead to higher-paying jobs,[33] and gender wage gaps persist in early-career outcomes.[34] These patterns suggest that expanding pathways alone is insufficient; ensuring equitable access to high-quality, high-value pathways—and supporting successful transitions into postsecondary education and employment—is equally critical.

Envisioning a more purposeful pathway

This report will repeatedly return to a fictionalized young woman named Ari and her experience on a purposeful pathway. Ari's portrait is grounded in federal, state, and local data to reflect the reality of many of today's high school students. Her story is set in the Phoenix metro area because it reflects a common American context: a large, diverse community made up of a mix of suburban and urban areas, where most families fall within the broad middle of the income distribution, even as economic insecurity and opportunity coexist. In Phoenix, about 14% of residents live below the federal poverty line, and roughly one-third of adults hold a bachelor's degree or higher. In addition, Phoenix's education and workforce systems look a lot like those found in many regions across the country.

Although a fictionalized composite, Ari's journey is informed by the stories of real practitioners and young people and reflects both the reality of today's high school students and, most importantly, what's possible. Ari's story represents a reality that's attainable for all students with this new vision of what high school, career preparation, and learning can and should be.

Ari lives in Phoenix, Arizona. She's Hispanic, like more than four in 10 residents in the city. She attends a high school of about 2,000 students, where a majority qualify for free or reduced-price lunch. Ari's mother works as a patient services coordinator, and her father is an HVAC technician. Outside of school, Ari has played soccer since she was 10, and she loves spending time with her younger siblings.

At the start of her freshman year, Ari, like many of her classmates, wasn't totally sure what she wanted out of high school. In her first meeting with an advisor, Ms. Alvarez, Ari acknowledged that uncertainty—and Ms. Alvarez told Ari that her concern was normal.

Ari knew she wanted to help people. Knowing that, her parents encouraged her to consider nursing, for the stability and good pay. But hospitals and blood made Ari feel uneasy. Ms. Alvarez assured her she could give back to her community in many other ways, like teaching or social work. She encouraged Ari to keep exploring.

Sophomore year, Ari enrolled in "Future Lab," a course dedicated to exploring and understanding options for school and life after high school. In her Future Lab period, the teacher, Mr. Patel, asked the class to answer in writing: What problem do you want to help solve? Ari recalled how helpless she had felt when her aunt's business had been hit with ransomware earlier that year. She knew her answer: keeping people safe from hackers. As she reflected and wrote about the incident, Ari's interest grew and grew.

But she had no idea how to proceed with concrete steps. At the suggestion of Mr. Patel, Ari shared the prompt and her initial thoughts with Ms. Alvarez, who fired off

several open-ended questions in response: What makes you feel most alive? What lights you up? Ari described her love of puzzles, her desire to help others, and her growing interest in cybersecurity. Ms. Alvarez then went to work, searching for opportunities for Ari to develop those emerging interests.

Not long after, she told Ari about a week-long summer cybersecurity challenge sponsored by Cisco and dual-credit IT classes at the local community college. Ms. Alvarez kept pragmatic concerns in mind, making sure everything fit around Ari's soccer practices. She also helped secure Ari a bus pass to the local community college.

Ari felt terrified the next semester when she started taking Foundations of Cybersecurity at the college. She didn't see any other kids from her high school, and her stomach was in knots. But then she learned she'd be paired with Meena, a recent graduate of her high school who had also taken college classes through dual enrollment. Meena helped with everything from tech questions to talking through Ari's insecurities and goals—describing the "imposter syndrome" that she, too, had felt in her early days.

During her junior year, Ari started a paid internship in her city's IT security office, helping update software patches and learning about the realities of the career path. Having some income meant that Ari could help out financially at home and didn't need to feel guilty, selfish, or like she was wasting time. The best part of the internship for Ari, however, was a digital safety workshop. Her supervisor invited her to help translate between Spanish and English, and Ari got to see and experience the meaning behind her work: She wasn't just addressing tech needs; she was gaining the tools to make people feel safer.

As Ari prepared for high school graduation, Ms. Alvarez checked in with her and helped her connect with the right people at the college to explore her options. Thanks to her dual credit courses, Ari had 15 credits in hand that counted toward an associate degree of applied science in cybersecurity. Financial aid counselors at the college showed her how a scholarship for dual credit students would take care of the bulk of the cost for her first year of college, and thanks to clear program maps, Ari knew she could finish her degree in a year and a half. She even learned how, later down the road, she could build on her associate degree and earn a bachelor's degree.

When Ari walked across the high school graduation stage, she still had doubts and insecurities; those didn't magically disappear. But she also had a head start and a network to draw on. Meena would text her back if she needed some support or advice, and Ms. Alvarez had told her to reach out anytime, even after she left high school. Fortunately for Ari, that writing prompt in sophomore Future Lab wasn't simply an academic exercise. With the support of the right people, experiences, and opportunities, it helped provide a roadmap to a future career.

The shifts represented in this new vision

While Ari's story may currently be the exception, similar opportunities are within reach for countless students—with some fundamental changes:

From disjointed, siloed approaches ...	... to purposeful pathways for all students
College and career readiness treated as separate, disconnected tracks, focusing exclusively or mostly on one	Coherent high school experiences that connect students to a **menu of college and career opportunities**, including two- and four-year college, apprenticeships, military training, and other postsecondary education that provides industry-aligned credentials of value
Fragmented experiences that are difficult for high school students to navigate and disconnected from their longer-term goals	**Integrated, coherent programmatic experiences** that are thoughtfully sequenced and easier to navigate, helping students connect learning to purpose, goals, and real opportunities
Narrow pathways that focus solely on preparing students for specific destinations after high school, rather than focusing on student mindsets, skills, and networks	**Student-centered approaches that cultivate purpose, belonging, and social capital—**empowering young people to explore opportunities that speak to their strengths and interests while building skills and relationships that will support them through postsecondary transitions
Success defined by high school graduation alone, with limited shared accountability across systems	**Shared responsibility for student transitions and long-term success,** with outcomes tracked beyond graduation into postsecondary progress and early career mobility

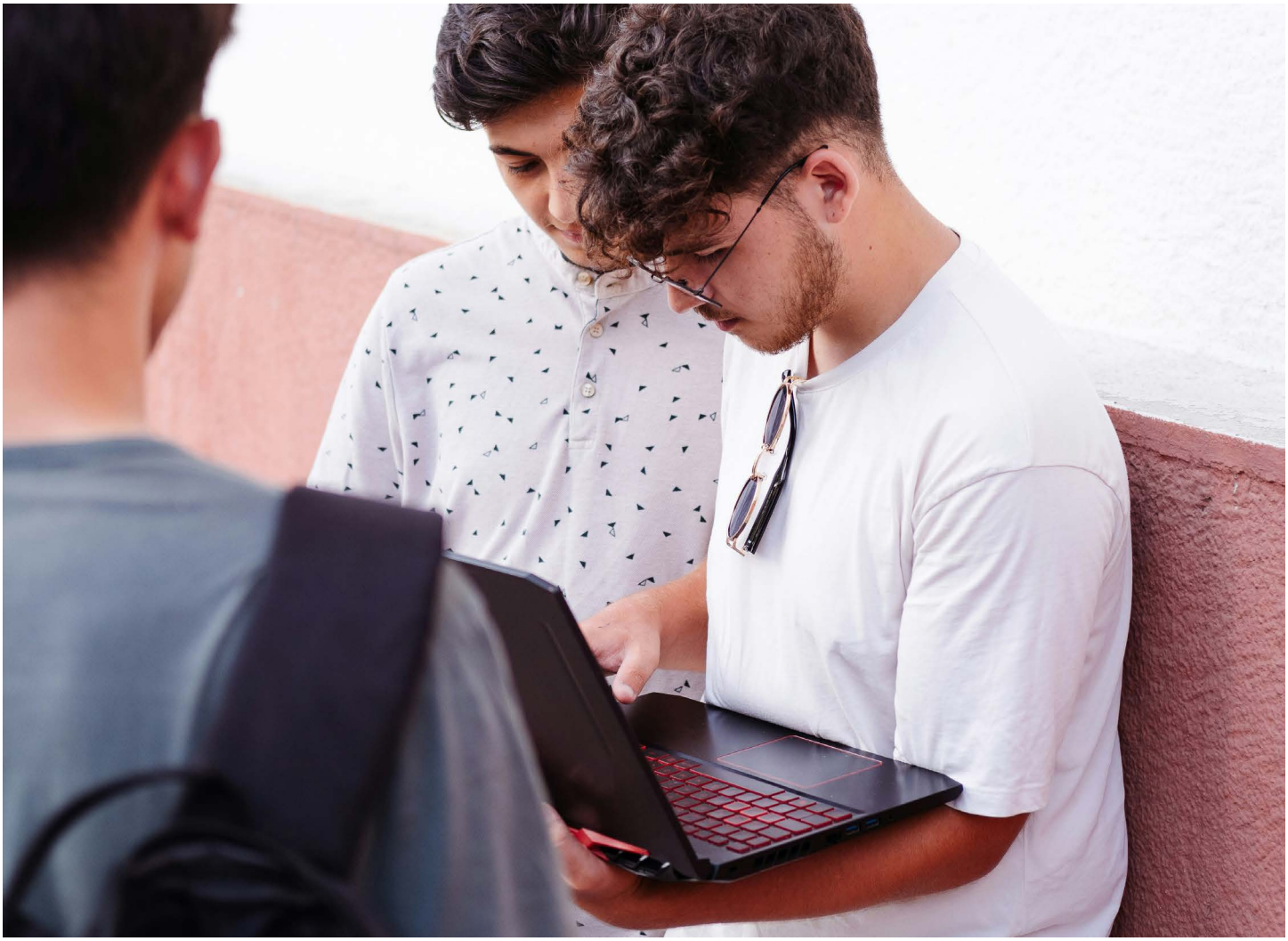


Photo by Beytullah Citlik

Resources to implement purposeful pathways

All high school students should have access to purposeful pathways. To realize this vision, communities will need to address the systemic and structural challenges to scaling high-quality experiences for all students, which includes forging stronger regional partnerships across sectors to redesign their accountability, funding, and collaboration approaches.

This report and companion resources will:

- Introduce the conceptual framework and the evidence behind the programmatic experiences and cultivation of agency.
- Provide four galvanizing recommendations for K-12, higher education and workforce leaders, community partners, and policymakers to begin implementing purposeful pathways in their communities.
- Explore the high-impact practices, measures, and enabling conditions that support the implementation and continuous improvement of the conceptual framework.
- Equip school and system leaders with strategies to co-design with youth to ensure pathways are relevant and responsive to students' needs.

2

Introducing a Vision for Purposeful Pathways

The Commission's framework calls for all communities to offer coherent pathways that incorporate high-quality advising, accelerated coursework, and career-connected learning for every student. These experiences are most effective when they intentionally cultivate purpose, belonging, and social capital, **ensuring students graduate high school with credits banked, goals clarified, and networks formed—in other words, real momentum toward economic mobility.**

The risks of disjointed experiences

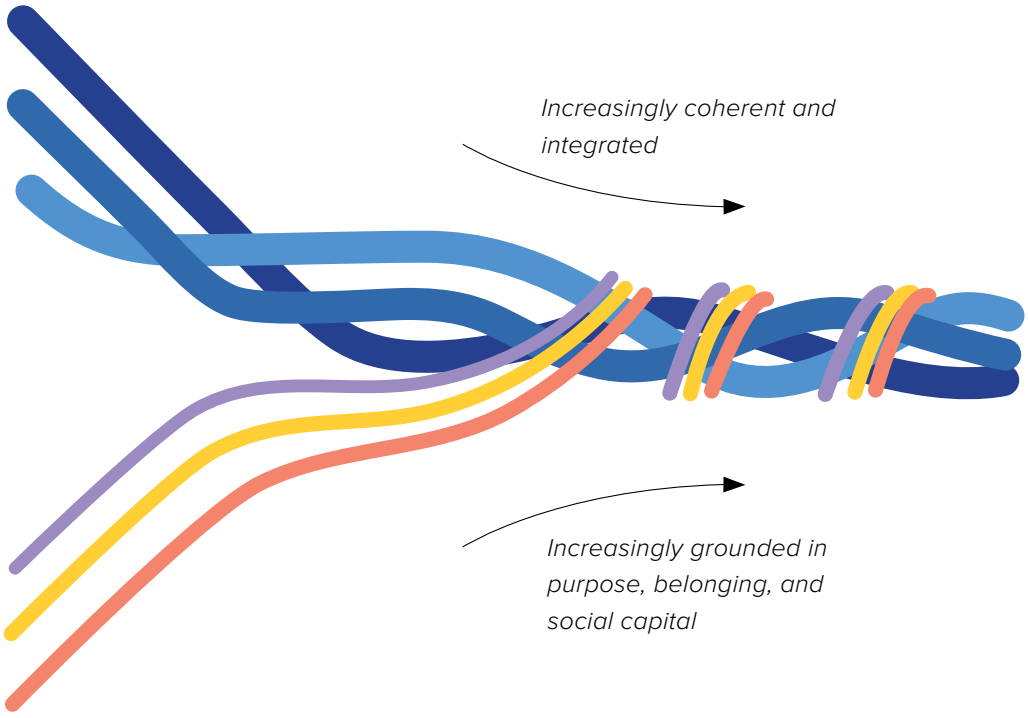
Too many students experience pathways as a patchwork: a dual enrollment course here, a job shadow there, advising if they seek it out. And while each of the programmatic experiences carries individual power, none is sufficient on its own. A student who participates in work-based learning without high-quality advising may miss opportunities to earn the credentials needed for their chosen path. A student who is able to take college courses but not given appropriate advising may not think about choosing courses strategically and wind up with credits that don't build toward a credential.

Without a sense of belonging in school, students may disengage or doubt whether postsecondary education is meant for them, undermining the benefits of accelerated coursework.[35] Without the intentional cultivation of purpose, students often struggle to see the relevance of continued learning after high school; without robust social networks, the doors to some careers and opportunities can remain closed for too many students.

The Commission's framework builds on the robust evidence base behind each of the components. While research is still catching up to practice in documenting how these components work together, evidence from comprehensive models like Early College High Schools[36] and the City University of New York's (CUNY) Accelerated Study in Associate Programs (ASAP)—which provides structured pathways and direct support to community college students pursuing their associate degree[37] —show that coordinated implementation amplifies each component's impact.

This chapter will highlight key research and evidence for each component alongside examples of integration in action. Embedded throughout the chapter are real student stories from across the country, sourced from a range of communities and models to bring the research to life.

All students should experience high-quality advising, accelerated coursework, and career-connected learning that cultivate purpose, belonging, and social capital.



Young people graduate high school with agency and momentum on purposeful pathways to achieve economic mobility.

PROGRAMMATIC EXPERIENCES

- High-Quality Advising
- Accelerated Coursework Sequences
- Career-Connected Learning

CULTIVATION OF AGENCY

- Purpose
- Belonging
- Social Capital

Defining the components of purposeful pathways

Below are definitions of all the components of purposeful pathways. The remainder of this chapter will introduce the evidence behind each component as well as examples of how communities have implemented them.

High-Quality Advising

High-quality advising should include:

- Consistent support in developing college-going and/or occupational aspirations and goals.
- Reliance on a range of strategies, such as one-to-one formal advising, mentorship, and/or the use of AI/tech-enabled tools, to assist with exploration and goal setting.
- Processes and guidance that support students in navigating personal circumstances and their goals to make informed decisions about program affordability and other considerations.
- Strong connections with trusted adults, possibly including their families, educators, college advisors, career navigators, formal or informal mentors, near-peers, and others.

*See detail for **High-Quality Advising** on page **21**.*

Accelerated Coursework Sequences

Accelerated coursework sequences are defined as a sequence of coherent college and career acceleration courses culminating in transferable college credits and/or industry-recognized credentials at little or no cost to students. Examples include:

- Dual enrollment (DE) courses organized into coherent sequences aligned to postsecondary degree pathways.
- Progressive sequence of career technical education (CTE) courses with related dual enrollment coursework and industry-recognized credentials embedded into the default course plan.
- Structured dual enrollment programs like Early College High Schools (ECHSs) and Pathways in Technology Early College High Schools (P-TECHs).
- Rigorous coursework that yields college credit, such as Advanced Placement (AP) and International Baccalaureate (IB) coursework.

No matter the type, accelerated coursework sequences should allow students to make progress toward credentials of value that are aligned with high-wage, high-demand careers and be supported by outreach, advising, academic support, and high-quality instruction.

*See detail for **Accelerated Coursework Sequences** on page **23**.*

Career-Connected Learning

Career-connected learning is a continuum of experiences that broadens student access to jobs and opportunities within their communities and beyond, through:

- Career awareness (learning about work, including field trips, career talks, and career days).
- Career exploration (learning for work, including job shadowing, informational and mock interviews).
- Career preparation (learning through work, including career development/professional learning, training programs, and simulated experiences).
- Career training (learning at work, including work-based learning experiences such as internships and youth apprenticeships).

While related to similar terms like work-based learning and CTE, this Commission uses career-connected learning as an umbrella term, referring to a spectrum of experiences that bridge the gap between classroom instruction and real-world application.

*See detail for **Career-Connected Learning** on page **27.***

Purpose

Purpose refers to students feeling empowered on their learning journeys in ways that sustain their connection to a "self-organizing life aim that organizes and stimulates goals, manages behaviors, and provides a sense of meaning."[38]

Purpose matters because it represents students' personal motivation that must be maintained through their transitions between high school, postsecondary learning, and their careers.

*See detail for **Purpose** on page **31.***

Belonging

Belonging refers to students' sense of being supported by adults and encouraged to seek help to explore their aspirations as well as being able to trust peers and adults in their communities when navigating challenges and making decisions about their futures.

Belonging matters because it empowers young people to see themselves on different college and career pathways and supports persistence and success as students "try on" new opportunities.

*See detail for **Belonging** on page **34.***

Social Capital

Social capital refers to students' access to and ability to mobilize relationships that help further their potential and goals. Developing networking skills as well as building students' networks can support and reinforce belonging and purpose.

Social capital matters because it provides students with critical skills and networks to activate their plans for their futures, opening doors to connect young people to a broader set of opportunities.

*See detail for **Social Capital** on page **37.***

Programmatic experiences

High-Quality Advising

> **Our students who are struggling the most … are really not just needing more information. They're needing help taking steps, and they're needing that connection with someone to say, 'Hey, I see your eyes light up when you talk about this.'**
>
> —HIGH SCHOOL COUNSELOR[39]

Research shows that high-quality advising can boost GPA, attendance, and college enrollment and help students identify career interests.[40] Strong advising has also been shown to help young people build motivation, self-efficacy, ambition, and a "college-going and occupational identity."[41] Without quality advising, students are more likely to miss career opportunities or hit dead ends in their journeys. Effective advising weaves together key programmatic experiences; supports students and their families in preparing for the costs and next steps associated with postsecondary education and training; and provides guidance and ongoing reflection on students' skills, interests, and purpose.[42]

While a cornerstone of purposeful pathways, today's systems often fall short of delivering effective advising to all students. A 2022 poll conducted by the Data Quality Campaign found that 80% of students reported they would feel more confident about their futures if they "had better access to information for college and career planning."[43]

Nationwide, high schools employ an average of one counselor for every 385 students, far higher than the recommended ratio of 1 to 250.[44] Not surprisingly, advisors are limited in their ability to reach out proactively to share timely information with all the students they support. In fact, 53% of navigators said that "they provide support only after a young adult asks for help," and even fewer reported that they engage students' families, educators, or employers.[45] Advising gaps compound inequities, putting students whose families attended college or are working in higher-wage careers at a steep advantage.[46]

With limited staff capacity, effective advising must occur both within and outside the school counselor's office.[47] Examples of high-quality advising beyond the traditional one-on-one school counselor advising relationship include:

- **Dual enrollment coordination.** Dedicated dual enrollment staff, such as community college advisors embedded on high school campuses, coordinate programming and support students in identifying and accessing accelerated coursework.
- **Supportive near-peer mentors who provide personalized guidance.** Organizations like College Advising Corps, College Access: Research & Action (CARA), and others have modeled how college students and recent graduates can effectively support current high school students with navigating the college application and onboarding processes.[48]

STUDENT SPOTLIGHT

Qamar, *Kettering City Schools, Ohio*

Qamar has long been drawn to healthcare and helping others. "Sometimes when you're working in this field, you might be the first face someone sees or the last face they see," she said. Early on, adults in her school helped her turn that instinct into direction. Qamar began structured conversations with school staff and advisors in middle school about her interests and aptitudes—conversations designed not to lock her into a single path but to help her understand herself better and build a clear "why" behind her learning.

In Qamar's community, this experience is not unique: All of her classmates also experience monthly career conversations—starting in elementary school all the way through high school graduation—as part of the suburban district's comprehensive K–12 career development model.[53]

Those conversations shaped the choices Qamar made in high school. With guidance, she began taking college classes and exploring healthcare careers firsthand. "Taking college classes was such a huge step," she said. Those courses helped her learn how college works and how to manage her time; field trips and hands-on experiences allowed her to test whether the field was the right fit before committing. "You just get to see aspects of the job," she explained. Advising didn't give Qamar simple answers—it helped her ask better questions and leave high school with a plan.

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> **Sometimes when you're working in this field, you might be the first face someone sees or the last face they see.**

Qamar's story was first told in a series of videos produced by Accelerate ED. [54]

- **Advisory programs and curricula.** These can take different forms, but one example, OneGoal's three-year model, follows student cohorts from their junior year through one year after high school graduation. In this model, teachers are trained to help students explore their strengths and interests, develop a postsecondary plan, and navigate course selection and financial aid decisions.[49]
- **AI-enabled technology that provides accurate, timely information.** While human assistance is necessary, automation can support some aspects of the advising process, particularly in referring students to well-vetted resources to answer their questions.[50] Hybrid advising models can leverage various tech solutions to personalize information and nudge students on key tasks; AI chat bots can respond to questions about upcoming college or career fairs or financial aid deadlines, or they can help students explore different credentials. For example, Bottom Line's chat bot, Blu, connects incoming college students with answers from a robust knowledge base of frequently asked questions and is accessible 24/7 via text.[51]
- **Postsecondary planning as a graduation requirement.** As of 2021, at least 38 states have implemented policies related to high school students' completion of a postsecondary plan (21 of them have mandated it for students to be eligible for their diploma). Sometimes referred to as an Individual Career and Academic Plan (ICAP), these requirements can be effective in underscoring the importance of planning for life after graduation. But impact varies based on whether schools and their partners provide high-quality advising that helps students design and execute their plans.[52]

→ *Learn more in the High-Impact Practices Action Guide.*

Accelerated Coursework Sequences

Analysis of National Student Clearinghouse data found that 81% of dual enrollment students enrolled in college within one year of high school graduation. That's nearly 20 percentage points above the national average for those who did not participate in accelerated courses.[55]

—BY THE NUMBERS

While curricula and approaches vary, the different models for accelerated coursework sequences have a shared objective of allowing high school students to earn college credit or credentials. When done well, accelerated coursework also builds confidence and college-going momentum. Unfortunately, accelerated courses are often implemented in ways that lack coherence or sequencing, leading to disjointed student experiences that do not yield usable credits or credentials—commonly referred to as "random acts of dual enrollment." Additionally, these courses are often inaccessible to many students due to GPA and testing requirements, as well as cost, which can keep them stuck as "programs of privilege."[56] Studies show that when these barriers are removed, participation in dual enrollment improves outcomes for academically underperforming students, increasing their likelihood to enroll into postsecondary education.[57]

Accelerated course offerings take many shapes, including whole-school models that provide all students with access to such coursework. The following tables describe different approaches to offering accelerated coursework.

Photo by Allison Shelley/Complete College Photo Library

Distinguishing between different types of accelerated course offerings …

Accelerated course type	Prevalance/Reach	How college credits are awarded
Dual enrollment (DE) allows students to take college courses before they complete high school. DE course modality can vary significantly. It can be offered in the high school by a qualified educator, or students might travel to a local community college; it can also be offered synchronously or asynchronously online. DE is also referred to as dual credit and concurrent enrollment.	2.8M high school students took at least one DE course in the 2023–24 academic year.[58] More than 80% of public high schools across the country offer dual enrollment.[59]	Passing grade in the course
Advanced Placement (AP) provides students with opportunities to take challenging, college-level courses that culminate in standardized exams. Students can earn college credit based on their AP exam scores, typically for introductory college courses.	Over 1.2M high school students took AP exams in 2024.[60] 48% of public high schools offer 5 or more AP classes.[61]	Receiving a qualifying score on an end-of-course exam
International Baccalaureate (IB) coursework can be offered piecemeal to students with culminating exams or as a well-structured course sequence that provides students with an alternate credential at high school graduation. Students can earn college credit based on their IB exam scores, typically for introductory college courses.	Over 100K students took IB exams in 2025.[62] Roughly 7% of high schools (mostly public) offer IB programs. [63]	Receiving a qualifying score on an end-of-course exam

… and whole-school models of accelerated coursework sequences

Examples of whole-school models with accelerated coursework sequences	Prevalance	What a student earns in addition to a high school diploma	What a high school must do to implement this model
Early College High Schools (ECHS) are designed for students to simultaneously earn a high school diploma and an associate degree or up to two years of transferable college credit. *Schools using this model are sometimes referred to as Middle or Early Colleges.*[64]	Over 1,000 Early Colleges exist across the country.[65]	College credit or an associate degree	Implement a whole-school model
The **P-TECH model** is a grade 9–14 school model that combines high school, college, and career readiness. Students earn an associate degree in a STEM field and are first in line for jobs with industry partners.	P-TECH programs operate in 229 sites across the country.[66]	Credential of value and/or priority job placement	Implement as a whole-school model or create a designated program within a traditional HS Recruit committed industry partner(s)

Photo by Allison Shelley/The Verbatim Agency for EDUimages

Additional models designed around accelerated coursework sequences include:

- **Career Academies.** Career Academy programming, such as those organized around the National Academy Foundation (NAF)[67] or National Career Academy Coalition (NCAC)[68] frameworks, operate as a "school-within-a-school" model whereby students join a career-themed academy (such as Finance, Health Sciences, or Engineering) and follow a multi-year sequence of industry-aligned courses. As a result, in addition to earning a high school diploma, students may also earn college credits through accelerated coursework and dual enrollment.
- **Linked Learning Pathways.** Originating in California, this approach redesigns high schools to provide students with on-ramps to career pathways by integrating rigorous academics with technical education and work-based learning. Students graduate with a high school diploma, industry-recognized certifications, and college credits earned through dual enrollment or articulated CTE courses.[69]
- **State-Designated STEM Schools.** In a growing number of states, schools can design a 9–12 STEM curriculum, collaborating with higher education partners, and earn a formal designation. In these models, students often earn industry-aligned certifications and college credit in math, science, and engineering fields.[70]

Across this range of programs and models, strong evidence indicates that rigorous, relevant accelerated coursework keeps students engaged and sets them up for postsecondary education and career success.

- Decades of research have shown that taking dual enrollment courses can increase high school graduation rates, proficiency on state assessments, attendance, student engagement, and college enrollment and completion after high school.[71] [72]
- Dual Enrollment students are more likely to report a positive student-teacher relationship and believe they are in a caring and supportive community.[73]
- A study of Black and Hispanic student outcomes in Florida found that taking a dual enrollment course was associated with a 12 percentage point increase in the rate of university enrollment after high school and a 12 to 15 percentage point increase in bachelor's degree completion rates within six years of high school.[74]
- When CTE programs are structured to include dual enrollment (i.e., college credit-bearing) their students are more likely to graduate from high school and enroll in postsecondary programs.[75] Students participating in North Carolina's statewide CTE Pathway in Career and College Promise initiative saw a 10% increase in college enrollment.[76]

STUDENT SPOTLIGHT

Roniel, *Lawrence, Massachusetts*

As a teenager, Roniel wanted to build a future that would allow him to support himself and his family, but college didn't always feel certain. Through an early college program, he began taking college courses while still in high school, earning credits at no cost. Balancing school, college coursework, and a job was challenging, but support made the difference. "I knew that they were always there for me," Roniel said, referring to the early college staff and advisors who supported him. "I just had to reach out."

That sense of support helped Roniel feel he belonged in college spaces in a way that just taking college-level coursework could not. Program leaders focused not just on credits but on community—helping students like Roniel immerse themselves in the culture of being college students. For Roniel, that mattered a lot. "I am the first in my family to go to college," he said.

With supportive adults, access to accelerated coursework, and peers who shared the journey, Roniel gained confidence that he could succeed—and by high school graduation, he had also earned 15 college credits.

> "I knew that they were always there for me … I just had to reach out.

Roniel's story was first told in a series of videos produced by Accelerate ED.[82]

- A recent study conducted by the Community College Research Center (CCRC) analyzed how different combinations of accelerated coursework shape postsecondary attainment and early career earnings for Texas high school students. Researchers found that students who combined dual enrollment with AP, IB, or CTE coursework had the highest rates of credential completion and the strongest earnings trajectories, underscoring the value of combining multiple forms of accelerated coursework and experiences in a robust pathway.[77]

The impact of accelerated coursework is amplified when coupled with strong advising and career-connected learning to ensure that students are not only sequencing their courses effectively but also aligning those courses with a future program of study and viable career skills.[78]

Credit Mobility

Educators need to stay attuned to whether credits are transferable and relevant. In many respects, the challenge of dual enrollment credit transfer mimics the challenges community college students encounter with credit transfer and application to bachelor's degree programs at four-year institutions.[79] Both require strong cross-system communication, collaboration, and, quite often, formal agreements.[80] State or regional policy is often part of the solution. North Texas offers a strong example of how partners used credit articulations and other strategies so that students can more seamlessly transfer credits from Dallas College, a two-year institution, to regional four-year universities, ensuring that credits earned early count toward a bachelor's degree.[81]

→ *Learn more in the High-Impact Practices Action Guide.*

Career-Connected Learning

> "I really don't know what I want my ideal job to look like. I thought I knew what I wanted to do … but ever since realizing what careers turn out to be, I don't really know … Maybe people need to start narrowing down their ideas before they graduate [high school].[55]
>
> —RECENT HIGH SCHOOL GRADUATE[83]

While Gen Z students are generally optimistic about their futures, **only 35% of K-12 students feel that their learning will support them in developing skills they need to succeed, and only 23% say they've had opportunities to work on projects related to the jobs they want.**[84] When done right, career-connected learning bridges that gap between classroom instruction and real-world application, igniting motivation by adding relevance and imparting practical skills demanded by employers.

In recent years, growing interest in youth apprenticeships has led to notable shifts in policy and funding for these programs.[85] Across the country, states are using different definitions for apprenticeships,[86] but recent efforts led by New America and the National Governors Association created some consensus on four core elements: paid on-the-job learning under the supervision of skilled employee mentors; related classroom-based instruction; ongoing assessment against skills and competency standards; and culmination in a portable, industry-recognized credential and postsecondary credit.[87] Apprenticeships can benefit both the employee and employer and have strong bipartisan support, but they are challenging to implement at scale without strong industry partnerships and sustainable program funding.[88]

Engaging workforce partners in lighter touch partnerships can be a great way to introduce young people to different careers without requiring extensive resourcing. For example, the U.S. Chamber of Commerce Foundation is piloting the Employer Provided Innovation Challenges (EPIC) initiative, in which employers develop projects around real business problems, leverage workforce partners to connect with students, build relationships, and then jump into collaborative "hands-on" problem solving.[89]

Scaling high-quality career-connected learning to reach all students can be challenging for many reasons. Many schools and districts rely on workforce organizations or regional intermediaries that can connect young people to employers for job shadowing, onsite experiences, internships, and other opportunities. However, the existence and strength of these types of partners varies across geographies and contexts, and workforce entities may be more focused on engaging adults, less so youth. Work-based learning coordinators can also struggle to match students to relevant opportunities that align with their desired career paths. Funding poses another challenge: Schools often rely on a small number of career navigators and coordinators to provide programmatic experiences and support students in securing work-based learning opportunities. Simple logistical barriers like rigid school schedules and transportation issues also add complexity.

STUDENT SPOTLIGHT

Holli, *Tahlequah, Oklahoma*

Inspired by her mother and two aunts who had jobs in the field, Holli knew early on that she wanted to work in healthcare. But she worried that financial barriers would get in her way. "I always knew I wanted to become a registered nurse," she reflected. "But I don't know [if] I could have, because nursing school is very expensive." To bring down the cost, Holli participated in CTE courses at the Indian Capital Technology Center—a CTE district serving students across seven counties in eastern Oklahoma. Taking these CTE courses while in high school provided free access to certified nursing assistant and phlebotomy training.

Immediately after high school graduation, Holli secured a scholarship for the final year of training needed to become a Licensed Practical Nurse (LPN). Earning college credit for high school anatomy and physiology ensured she didn't have to repeat—and pay for—courses she had already taken. This head start gave her responsibility and financial independence early in her career.

Holli credits the accelerated track to the LPN designation with giving her the momentum to land a strong first job and to advance in the profession. Holli currently works as a Registered Nurse and is pursuing a master's degree to become a nurse practitioner.

> "I always knew I wanted to become a registered nurse … but I don't know [if] I could have, because nursing school is very expensive.

Holli's story was first told in an article by Work Shift on investing in pathways to the nursing profession.[94]

Overcoming these challenges is worth the effort. Research finds compelling, positive impacts on students across the spectrum of career-connected learning experiences:

- Career exploration and preparation activities can support students in building social capital through goal setting, relationship mapping, mentorship, and additional activities that support communication and other social skills.[90]
- Career preparation and training that integrate hands-on or onsite work experiences with classroom learning are proven to support personal and professional development through positive relationships with adults and growth in technical and durable skills.[91]
- Career readiness activities increase social capital (personal and professional networks), human capital (technical skills development for a stronger workforce), and cultural capital (young peoples' navigational skills), according to a study that spanned five countries.[92]
- Career-connected learning can increase student motivation overall. A study of over 9,600 students in New Hampshire found that those who participated in this learning were more deeply engaged in school and more likely to express hope about their futures than students with less exposure to it.[93]

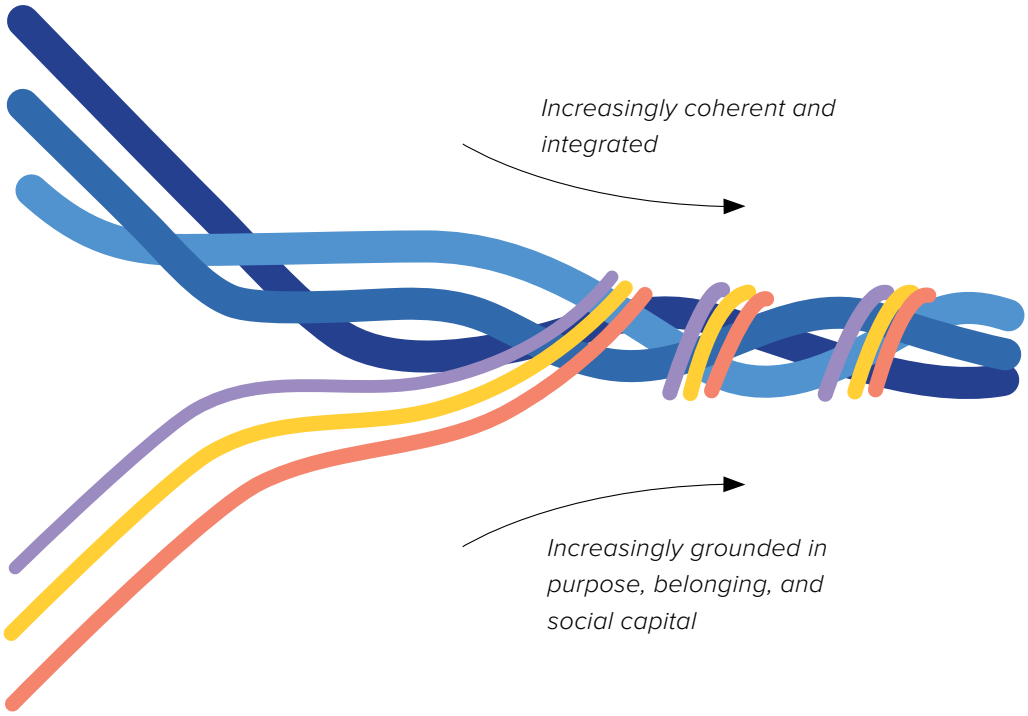
Cultivation of agency

Implementing all three programmatic experiences is a key step toward building more purposeful pathways. But for pathways to deliver for both students and employers, systems must also support the cultivation of agency by building these experiences around the "hidden variables" that shape young people's identities and sense of future possible selves: purpose, belonging, and social capital.

Cultivating a strong sense of purpose, a steady sense of belonging, and a deep and diverse network all serve to ground the programmatic experiences in who students are *and* who they can become.

Photo by Christian Agbede

All students should experience high-quality advising, accelerated coursework, and career-connected learning that cultivate purpose, belonging, and social capital.



Young people graduate high school with agency and momentum on purposeful pathways to achieve economic mobility.

PROGRAMMATIC EXPERIENCES

- High-Quality Advising
- Accelerated Coursework Sequences
- Career-Connected Learning

CULTIVATION OF AGENCY

- Purpose
- Belonging
- Social Capital

To support educators and system leaders in designing pathways to intentionally cultivate agency, this section will:

- Introduce a growing body of research that validates the importance of helping students explore their motivations and interests while they are still in high school—fueling attendance, learning, and progress.
- Provide examples of how communities can design programmatic experiences to help students cultivate agency.

Purpose

> “As a teenager, there’s so much I’m learning about myself every day. It feels overwhelming. But when I understand why I’m doing something and why I’m doing what I love to do, it makes it so much more worthwhile.
>
> —CURRENT HIGH SCHOOL STUDENT[95]

Helping young people cultivate and maintain a sense of purpose is vital. In a 2023 report from the National Scientific Council on Adolescence, the authors explain, “Just like any other resource (such as financial security, an abundance of food and rest, access to housing and healthcare, or a strong support system), purpose is a significant asset for anyone who has it, and many youth lack adequate resources to explore or develop this asset.”

A growing body of evidence points to purpose as a key developmental asset, underscoring the importance of opportunities in schools, colleges, and workplaces that help young people cultivate it.[96]

In a study conducted by Purpose Commons and Cornell University’s Purpose Science and Innovation Exchange, researchers found that the way adults talk about purpose strongly shapes how young people engage with it. “The prevailing *‘find your purpose’* narrative often leaves youth and adults feeling lost or behind … questions like *‘What’s your purpose?’* can feel heavy or evaluative. Reframing the conversation around curiosity—*‘What matters to you right now?’* Or *‘When have you felt most alive?’*—creates openness and authenticity.”[97]

A good way to start reframing is to understand how purpose is closely linked to relevance. When students can connect their learning to their interests, values, and experiences, purpose becomes something they practice—not something they are expected to declare. When educators, advisors, and employers consider the ability to connect with purpose as a skill, they can better help students learn that skill and build from “I see the purpose of this class” to “I have a vision for my future.” Even brief, well-designed opportunities for reflection make a difference: Research shows that prompting ninth-grade students to reflect on the purpose of their learning led to increased GPAs in math and science courses.[98]

Purpose is most effectively cultivated when it is embedded in everyday learning experiences rather than treated as an abstract or one-time exercise—this is true of all three student agency components. Fortunately, much synergy exists between the three programmatic experiences and nurturing a sense of purpose. **High-quality advising and conversations with educators, supervisors, and mentors can provide opportunities to reflect on aspirations, values, and the contributions that young people hope to make. Accelerated coursework enables students to test their strengths in challenging, future-oriented settings while helping them build confidence and clarify what kinds of learning and work feel meaningful to them. Career-connected learning allows students to envision themselves in different occupations.**

Young people need opportunities both to explore their interests and connect academic work to real-world problems. Examples of weaving purpose building into pathways include:

- **Designing high school advising to include ongoing purpose reflection.** Regular time for students to reflect on their interests, motivations, and strengths can support stronger college and career planning. The education nonprofit nXu has developed a curriculum that features evidence-based purpose development activities for middle- and high school classrooms. The average student reported their sense of purpose had grown three-fold while they deepened key mindsets and strengthened durable skills linked to academic and career success.[99]

- **Embedding values-reflection into student success programming in college.** In their first year of college, students often struggle with connection and purpose—the "why" of being there.[100] A small but growing number of programs are trying to address this. For example, working in partnership with the University of Virginia's Motivate Lab, Nashville State Community College implemented an evidence-based first-year experience (FYE) to boost student engagement and success. The FYE includes a series of activities that help the campus's diverse students reflect on their values and how they connect to their purpose for attending college. The faculty modeled this reflection, sharing their personal values and their motivation behind their careers in higher education.[101]

- **Putting purpose into practice with project-based learning.** Students want relevant, real-world opportunities to apply their strengths and skills. One example, the GripTape Challenge, shifts high school learners from a passive learning role to the driver's seat, giving students 8–10 weeks, a modest stipend, and a mentor to explore their interests. Projects ranged from coding and building a tech-enabled "smart jacket" to addressing health equity by stocking local food pantries with menstrual products.[102] Participants in the GripTape Challenge reported increased confidence, clarity about their interests, improved self-esteem, and a stronger sense of purpose.[103]

By high school, students feel they are less able to explore their interests; instead, they feel like "passengers" being shuttled through their education with minimal engagement.[104]

The challenge is that these opportunities are still too rare. A 2025 study conducted by the Brookings Institute and Transcend found that students' engagement with school declines as they get older: By high school, students feel they are less able to explore their interests; instead, they feel like "passengers" being shuttled through their education with minimal engagement.[104]

This sense of purpose will remain important long past high school. Research found that high school students who understand the relevance of their STEM courses to their future educational and career pursuits are more motivated, perform better in high school, and are more likely to pursue STEM majors in college.[105] Employers recognize that purpose supports employee engagement and retention: A study of 1,000 employees found that those who feel a sense of purpose were more likely to report greater satisfaction in their day-to-day work.[106]

→ *Learn more in the High-Impact Practices Action Guide.*

STUDENT SPOTLIGHT

Lovell, *Bronx, New York*

Lovell began his freshman year at Fannie Lou Hamer Freedom High School with a lot of energy and ambition. He had a strong interest in pursuing communications, possibly a career in TV. That year, he also had the chance to join student government, an activity that prompted him to think more deeply about what he was good at and what he liked to do. Increasingly, Lovell realized how much he thrived when facilitating conversations with fellow students and how much he wanted to understand, and solve, community problems.

Fortunately, in the coming years, Lovell had access to several experiences that helped him cultivate and refine that sense of purpose. In high school, he was able to explore his longstanding interest in television through Madison Square Garden Entertainment's youth mentorship program, which gave him hands-on learning opportunities. And in college, the Student Diplomacy Corps enabled him to study abroad.

Lovell is now in his first year as a high school teacher in New York City Public Schools, pursuing a second master's degree in Educational Leadership.

Reflecting on what helped direct him toward a career in service, Lovell shared, "The best thing about school and internships is having opportunities and experiences that motivate you in what you want your career to be."

> "
>
> **The best thing about school and internships is having opportunities and experiences that motivate you in what you want your career to be.**

Lovell's story was first told in *Pursuing Purpose: A Playbook for Meaningful Student Engagement*, a companion resource to this report that explores strategies to co-design with youth.[107]

A study of 1,000 employees found that those who feel a sense of purpose were more likely to report greater satisfaction in their day-to-day work.[106]

Belonging

> **Without other people, when you are just depending on yourself, and you are trying to be completely self-sufficient and blocking others out, you are just surviving. If you reach out and have this diverse support system for everything you need, you can have all your needs met, and you can be really thriving and be able to reach all of your goals rather than just surviving.**
>
> —RECENT HIGH SCHOOL GRADUATE[108]

In a recent national survey, fewer than half of high school students reported feeling that they "belong" in their school communities.[109] Yet that sense of belonging within a school environment is fundamental to student learning and well-being: When students genuinely feel accepted, valued, and connected to their peers and educators, they are more likely to actively participate in class, seek help when needed, and persevere through challenges.[110] Moreover, to successfully transition into postsecondary education or the workforce, young people must first build their college-going and occupational identities in high school, envisioning possible futures and taking steps toward realizing their goals.[111] A sense of belonging gives students the confidence to "try on" different pathways.[112]

A sense of belonging matters in college too. Researchers find that providing culturally responsive or targeted support to historically underrepresented students—including but not limited to students of color, first-generation college students, and women in STEM—can drive stronger academic achievement and progression in college programs.[113] A recent study surveyed more than 21,000 college students and found that a student's sense of belonging is a predictor of degree attainment. Even a one-point increase on a five-point survey scale significantly boosts the likelihood of graduating within four years.[114]

Likewise, a sense of belonging can be a driver of career outcomes and economic mobility. A report published by TNTP in 2024 analyzing longitudinal data found that academic experiences alone were insufficient to outweigh the effects of poverty: The highest-achieving students experiencing poverty saw little difference in wages by age 30, as compared to average students from wealthier households.[115] To understand what made the difference outside of academics, researchers also reviewed qualitative data from the experiences of students, families, and educators across the country. They identified three aspects of belonging that can alter trajectories: 1) recognizing students as individuals, 2) understanding their needs, and 3) focusing on their personal growth over time.[116]

Educators, employers, peers, and other community members all contribute to an individual's belief or perception that they are supported and respected in their learning environment or workplace.[117] Cultivating belonging requires intentionality, sustained effort, and shared ownership across K–12, higher education, and workforce partners.

Photo by Allison Shelley/Complete College Photo Library

A community in rural southern California provides a strong example of how to increase students' sense of belonging by collaborating across systems. Imperial Valley College's strategic partnership with the local district provides high schoolers with onsite counseling, FAFSA completion support, and personalized educational planning. Students receive multiple in-person touchpoints with college staff, building a relationship and a sense of belonging at the college long before they enroll. As a result, over 60–70% of high school students matriculate to Imperial Valley. Support doesn't end there: Robust tutoring, responsive support to meet students' basic needs, and student-centered approaches to course scheduling drive higher retention rates for students.[118]

Other colleges see the value in this approach: A recent study found that 85% of colleges have designed their high school dual enrollment offerings to serve as a recruitment tool, allowing them to welcome students to their campuses before they even apply.[119]

Another aspect: young people form their occupational identities through key experiences that begin long before they apply to a job. Those experiences need to be designed in ways that allow them to see themselves in a range of fields and roles, which also requires cross-sector communication and partnership. The Urban Institute's WorkRise initiative identified several promising practices that cultivate the formation of occupational identity in young adults:[120]

- Programs using formal and informal settings for career exploration
- Work-based learning experiences, including apprenticeships and hands-on vocational learning
- Increased investment in youth volunteerism and civic action
- Mentorship and other opportunities for young people to build their professional network

Employers and industry partners play an important role in ensuring young people feel supported and welcomed into the workforce. ElevateEdAZ, a workforce intermediary in Phoenix, Arizona, recognizes that for interns, employers and supervisors act as critical mentors who provide the bridge between classroom theory and real-world application. ElevateEdAZ partners with employers to ensure that work-based learning supervisors are prepared to provide this mentorship. Their onboarding resources emphasize how best to support students' holistic growth, monitor progress through formal evaluations, and foster a caring, emotional connection that helps young people feel connected to the professional community.[121]

STUDENT SPOTLIGHT

Mercy, *Greater Chicago Metro, Illinois*

Mercy's dream of becoming a pilot was sparked when she first saw a woman of color in a pilot's uniform while traveling from Nigeria as a child. She recalled asking her parents, "Who is that? What does she do?" During high school, a week-long career intensive program with a commercial airline solidified her ambition. Despite skepticism from a private flight instructor who told her that she didn't belong in the program, Mercy remained resilient. "If I really want something, and I'm really adamant about getting it, I never give up," she recalled.

Different members of Mercy's community supported her in navigating the financial and social barriers of flight training. She participated in OneGoal, which provides three years of advising and mentoring to students during the bridge years across high school and college. Her advisor helped her apply to 13 schools and manage her finances. Working together, they were able to secure a grant to help cover training expenses.

To counter the lack of representation in a field of predominantly white male students, Mercy found strength in mentorship through Sisters of the Skies. She highlighted the importance of these connections, noting, "It's amazing for me to meet with different women around the country and know how they navigated the same struggles I've had." Now, she pays that support forward by assisting other aspiring pilots.

> "
>
> **If I really want something, and I'm really adamant about getting it, I never give up.**

Mercy's story was first told in a series from the OneGoal program spotlighting the impacts on alumni fellows.[122]

A recent study surveyed more than 21,000 college students and found that a sense of belonging is a predictor of degree attainment, with even a one-point increase on a five-point survey scale significantly boosting the likelihood of graduating within four years.[114]

Social Capital

> "When you make connections with the right people, you'll be supported by them, and sooner or later they'll make you be ready for whatever is next … you know you have that support [and] everything ties back."
>
> —YOUNG ADULT[123]

Who you know matters. Research shows that an estimated 50% of jobs and internships are obtained through personal connections, and networks can unlock access to a hidden job market, as some estimates suggest that up to 70% of jobs are never publicly posted.[124] But social capital's benefits extend beyond job access. Relationships and networks can shape students' aspirations and engagement by making school feel connected to a meaningful adult life—and by helping young people believe that opportunity is within reach.[125]

Social capital is also a key variable in the opportunity equation. Widely discussed research conducted by Raj Chetty and colleagues on economic connectedness found that cross-class connections are one of the strongest community-level predictors of economic mobility.[126] In other words, networks are not just a reflection of opportunity; they are often a mechanism that produces it, especially when they bridge class lines and open access to information, advocacy, and concrete opportunities.

Networks can lead to transformative mentoring, internships, and information about postsecondary pathways that might otherwise remain unseen.

But social capital goes beyond simply access to relationships; the skills and confidence to tap into networks also matter.

"Doing social capital" cannot become a box-checking, single worksheet activity. New tools are emerging to support system leaders in evaluating how well pathways are developing students' social capital and in making continuous improvements. For example, the Search Institute's Youth Opportunity Navigator can help systems diagnose how well students and staff are supported in developing social capital;[127] Education Strategy Group's (ESG) Cultivating Connections site offers a step-by-step guide to integrating social capital into pathways programs and tools.[128]

To transition from being passive information providers to active relationship brokers, education leaders must prioritize social capital as a core institutional outcome and implement ongoing network-building activities, such as:

- **Relationship mapping.** By helping students map their existing networks, institutions can ensure that career pathways do more than just transfer knowledge—they build webs of support[129] necessary to turn academic potential into professional success. This activity can help students surface and reflect on their existing connections, making connections more visible to students and educators alike.[130]
- **Networking events that promote dialogue.** Students benefit from both "career chats" (guest speaker-style, informational sessions) and deeper "career conversations" (two-way, trust-based discussions about aspirations and anxieties). Research shows that these dialogues are especially impactful when adults affirm students' anxieties, celebrate their existing skills, and share their own career experiences, regardless of field.[131]

STUDENT SPOTLIGHT

Hadler and Brad, *New York City, NY*

Hadler, a first-generation college student at John Jay College of Criminal Justice in New York City, built a strong network through the Basta Fellowship. "I've learned that it's not just about what you know, but who you know and how you present yourself to them," he said.[137]

The Basta Fellowship supports first-generation college students through a free 11-week career readiness program followed by weekly career coaching for up to a year. The program builds networking skills, supports job searches, and provides young people with connections to a vast network of program alumni and employers. By focusing on social capital as a tangible asset, students say they shift from uncertainty about their futures toward actively pursuing desired careers. As a result, 80% of Basta fellows are connected to jobs that pay family-sustaining wages within one year of their participation in the program.

For Brad, another fellowship alum, the emphasis on social capital building was invaluable, saying that it "elevated me above the competitive job market pool. It's giving me the tools, the platform, and most importantly the confidence to put myself into the job market."

Hadler and Brad's stories were first shared as testimonies spotlighting the impact of the Basta Fellowship program. [138]

- **Community and near-peer engagement.** The cultivation of students' networks can start closer to home, building connections with members in their communities and near-peers. While building connections to senior-level staff and hiring managers may open doors for young people, research has also shown the benefit of peer networks, especially among young adults with similar backgrounds.[132] Many students prioritize these connections: A 2020 study found that young adults felt near-peer mentors were exceptionally caring and able to provide timely, relevant support.[133]

K-12 and higher education systems cannot—and should not—be responsible for developing social capital activities for young people on their own. Doing this well requires employers and community partners to serve as true co-designers and relationship builders, not just occasional guest speakers. For example, the Delaware Pathways program links students statewide to mentors and career experiences across industries; students begin exploring careers in middle school and complete a 240-hour paid internship with a local employer by senior year. A crucial cross-sector network—schools, businesses, philanthropies, and community organizations—build and sustain the program so students form relationships beyond their usual circles and get structured chances to prove themselves in real workplaces.[134] In addition, many state and local chambers of commerce host networking events that can expose participants to industries and career paths and help them expand their networks. The point is to add contacts and surround young people with relationships that help them see pathways, set goals, and pursue them.

The rapid adoption of AI is making networks even more valuable. As more employers use AI to automate or replace many entry-level opportunities[135] and human resource departments increasingly rely on automated screening of candidate resumes, it can be harder for young adults to showcase their passion, talents, and skills.[136] Given these labor-market dynamics, helping students understand who they know and how to develop their networks is more important than ever. As the future of work evolves, the ability to activate those networks with confidence may matter as much as the networks themselves.

How to get started with the integration of these components

No two student journeys look alike. Similarly, no communities will take the exact same approach to designing and implementing purposeful pathways that suit their local context and communities.

The experiences of students, families, and practitioners tell us what happens when system leaders get this wrong. When these core experiences are implemented as standalone programs:

- Accelerated courses without high-quality advising lead to "random acts" of dual credit that fail to set students up to earn credentials or degrees.
- Career-connected learning without accelerated coursework upholds an unnecessary divide between "career-bound" and "college-bound" students.
- Without career-connected learning or accelerated courses, advising conversations are limited to hypothetical exploration of life after high school graduation, rather than a space for young adults to reflect on opportunities they have a chance to "try on."

When advising, accelerated coursework, and career-connected learning are explicitly designed to build purpose, belonging, and social capital, their collective impact multiplies. Students don't just participate, they persist, fueled by purpose and connected to networks that open doors to economic mobility.

To support leaders seeking to shift from disjointed, siloed approaches toward purposeful pathways for all students, the Commission created three resources:

- High-Impact Practices Action Guide
- Enabling Conditions Action Guide
- Measurement Action Guide

3

Realizing Our Vision for Purposeful Pathways

Today's students require more than a traditional high school education to be successful in college and careers. They need opportunities to develop skills, mindsets, and networks that they can build upon throughout their adult lives. They need experiences that allow them to see the connection between their academic work and their future careers.

To realize this vision, communities must work together to design and deliver purposeful pathways that build agency. This chapter distills the big changes communities and systems must make—fundamental shifts that will set all young people up to graduate from high school on the path to achieve economic mobility.

Think again about Ari, who has now graduated high school and is at her regional community college preparing for a career in cybersecurity. Consider the systemic shifts that made this possible.

Rather than prescribing a preset path or leaving things to chance, the adults in Ari's ecosystem worked with her to co-create a purposeful journey. This began early in high school, when she first met her advisor, Ms. Alvarez, who reassured Ari that it was normal not to know exactly what her future looked like and encouraged her to explore. Throughout high school, Ms. Alvarez acted as an architect, not a scheduler, helping Ari access relevant experiences, such as dual-credit classes and the internship in IT with city government.

This personalized, flexible approach was made possible by policies that provided practical support (such as free bus passes and peer mentors) and by committed, bold leadership. Though the district superintendent never met Ari, she had students like her in mind when she adjusted the master schedules to make way for dual credit courses and work-based learning for high schoolers. Likewise, the community college president prioritized making dual enrollment an effective on-ramp to college and career and set a vision that every student enrolled in the college completes a credential that leads to a good job in the Phoenix area. An innovative local chamber got the city IT office—as well as other employers from the private sector—on board with the idea of young interns and made sure high school advisors like Ms. Alvarez were in the know about the options available for work-based learning.

Through these commitments and the partnership across sectors, the boundaries between high school, college, and the workplace were made porous: Ari wasn't just preparing for a career; she was actively participating in it while still in high school. Her dual credit courses, which gave her a head start on her degree, would not have been possible without partnership between the school district and the college. Her paid internship would not have been possible without a partnership between the school district, the chamber, and city government. These partnerships signal a strong shared commitment to developing the talent of young people in the community and to the long-term thriving of the region's people.

For some communities just getting started with their implementation of pathways, this vision may be daunting—but hopefully also inspiring. Others that are further along may still need to rethink and strengthen existing programs and partnerships to deliver on the vision of purposeful pathways. Regardless of history and context, the Commission has four overarching recommendations for K-12, higher education, workforce, community, and intermediary leaders: ➔

Recommendations

1 Provide *all* students with purposeful pathways.

Every student, in every community, should experience a purposeful pathway: high-quality advising, accelerated coursework, and career-connected learning, interwoven with purpose, belonging, and social capital. These should be neither exclusive "programs of privilege" nor "interventions" for students seen as falling behind.

To break longstanding sorting and tracking patterns that have limited opportunity for many students:

- **Map access and participation** in the components of purposeful pathways. Look at who is and isn't participating and ask why.
- **Bring together a "big tent"** to diagnose and workshop challenges. Include students, families, classroom teachers, advisors, work-based learning supervisors, community college faculty, and more.
- **Identify where technical solutions are appropriate**—such as updating academic policies or adjusting course schedules—and **where adaptive solutions are needed** to build buy-in around the idea that all young people need college and career planning.
- **Align cross-sector partners around shared goals and value propositions** to mobilize existing resources and identify what is needed to strengthen and scale purposeful pathways.

2 Hardwire purpose, belonging, and social capital into every pathway.

Narrow pathways designed to prepare young people for entry-level roles in specific industries are increasingly risky as technology and automation disrupt the world of work. In addition to momentum gained from programmatic experiences, students also need agency to adapt and respond to evolving opportunities. Education and workforce systems must embrace what social scientists—not to mention families and students—know to be true: purpose, belonging, and social capital make all the difference, empowering young adults as they develop personal goals and navigate challenging transitions in their early careers.

To make sure agency is intentionally built into the student experience and not just a happy byproduct of positive learning experiences and supportive communities:

- **Audit core programmatic experiences** to identify where student mindsets, skills, and networks are intentionally developed and where they are left to chance or individual champions. Use the findings to pinpoint gaps and set priorities for embedding purpose, belonging, and social capital across the student experience.
- **Ask students what's working—and what's missing**—when it comes to purpose, belonging, and social capital and use those insights to strengthen pathways. Build on existing surveys or create new mechanisms to tap into student voice.
- **Use emerging exemplar practices as a roadmap** to implement high-quality advising, accelerated coursework, and career-connected learning so they are grounded in purpose, belonging, and social capital.

→ *Learn more in the High-Impact Practices Action Guide.*

3 Move the goalposts beyond the high school diploma to economic mobility.

For too long, the driving indicator of success in high school has been diploma attainment. To ensure that students are making progress toward lifelong economic mobility, communities must move the goalposts, from high school graduation to attainment of in-demand, family-sustaining jobs and wages. This represents a significant shift for communities and can only be achieved through forward-looking, outcomes-driven collaboration.

To develop a common language that leads to shared accountability in supporting young people across historically siloed systems:

- **Agree on a small set of shared outcomes** that reflect student progress beyond high school, including postsecondary persistence, credential completion, and whether graduates go on to get jobs with access to family-sustaining wages. Cross-sector leaders need data to understand how effective their current systems and supports are in connecting young people to long-term outcomes.
- **Measure both what is happening in high school,** including students' access to, participation in, and outcomes of programmatic experiences—**as well as the quality of those experiences**, including whether and how experiences are effective in cultivating agency.
- **Leverage workforce data to ensure that education translates into lasting economic opportunity.** Higher education, workforce, and high school leaders should work together to align coursework, advising, career-connected learning, and credentials with pathways to high-wage, high-demand fields. When programmatic experiences are connected to real careers, students can see where they're headed, get excited about possibilities, and start building skills with a clear end goal in mind.

→ *Learn more in the Measurement Action Guide.*

4 Make student transitions a shared responsibility.

Even the strongest, best-intentioned high school programs cannot solve the difficulty students experience when they graduate and step into a college campus or job site that isn't prepared to receive them. Students lose credits, face duplicative processes, and struggle to navigate systems that don't talk to each other. Collaboration across K-12, higher education, and workforce systems is essential to align vision, governance, data, policy, and funding.

To collaborate across sectors to support young people's success:

- **Start with a regional cross-sector team, ideally facilitated by an intermediary/backbone, that takes shared responsibility for student transitions across K-12, postsecondary, and workforce.** The creation of these "pathmaking teams" can formalize relationships across sectors, reduce friction, and build trust among partners—allowing data, dollars, and design to follow students more seamlessly from classroom to career.
- **Inventory existing efforts** to identify what programs and partnerships are already in place, where both strong and nascent relationships lie, and which models are helping students maintain momentum and can be scaled. When "one-off" engagements rather than ongoing, mutually beneficial partnerships are identified, ask how they might be expanded.
- **Measure long-term outcomes** to ensure that students are graduating on pathways that lead to lifelong economic mobility and thriving. Equipped with data, "pathmaking teams" can identify and address the gaps where young people struggle to transition between education and workforce. Outcomes data also support regions in determining which credentials provide value to young people as they navigate their early careers.

→ *Learn more in the Enabling Conditions Action Guide.*

Providing *all* students with experiences like Ari's

Ari's story exemplifies the power of people—and systems—who engaged her in identifying and cultivating a sense of purpose and then connected her to relevant programmatic experiences and opportunities.

Now, imagine that same system—that same collaborative creation of a purposeful pathway—applied to a student passionate about healthcare. That student's "Future Lab" reflection on the challenges within our healthcare system could lead to a paid internship as a patient navigator. His advisor finds opportunities for dual credit and college-level anatomy with a CNA certification, and a peer mentor from the local nursing program helps him navigate the college environment.

Or consider a student who sees her family struggle with predatory loans. Her problem to solve is financial literacy. She takes on a paid internship at a community credit union, enrolls in a college-level accounting class, and receives guidance via Zoom from a peer mentor at a regional university's business school. She's not just learning about finance; she's actively helping in her community and building a professional identity, just like Ari.

Ari's journey feels extraordinary, but it shouldn't. Her success wasn't a miracle; it was the result of an integrated and student-centered design that connected her purpose and aspirations to real-world opportunities.

While this story is a composite, it's informed by high-impact practices being implemented in many different communities.

The vision for purposeful pathways is supported by strong evidence, bipartisan support, and many bright spots across the country.

The question is:

What will it take for us to stop celebrating this story as an exception and start building the systems that make it the norm for every student?

Commissioner Acknowledgments

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Photo by Allison Shelley/Complete College Photo Library

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Resources

To support leaders working in K-12, higher education, workforce or intermediaries seeking to shift from disjointed, siloed approaches and toward purposeful pathways for all students, the Commission created three action guides. To learn more about…

- the integration of programmatic experiences and the cultivation of agency, see the High-Impact Practices Action Guide.
- the enabling conditions that communities must cultivate to scale purposeful pathways, see the Enabling Conditions Action Guide.
- a measurement framework and key considerations for pathmaking teams to assess and continuously improve purposeful pathways, see the Measurement Action Guide.

The Commission also partnered with Big Picture Learning to lead a working group of students and young adults to inform the vision for purposeful pathways. Together, they are developing a resource to be published this spring. It focuses on strategies for co-designing with youth to ensure pathways are relevant and responsive to students' needs.

About Education First

Education First is a national, mission-driven strategy and policy organization with deep expertise in education improvement. We deliver exceptional ideas, experience-based solutions, and results so all students—particularly Black, Indigenous, and other students of color and students living in low-income communities—are prepared for success in college, career, and life. We envision a world in which every student is prepared to succeed and income and race no longer determine the quality of education. We live this mission by partnering with funders, states, policymakers, nonprofits, local education agencies, and more.

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Our vision: All students experience high-quality advising, accelerated coursework, and career-connected learning that cultivate purpose, belonging, and social capital—ensuring that they graduate high school with agency and momentum on purposeful pathways toward economic mobility.

Learn more and explore additional resources from the Commission:

- High-Impact Practices Action Guide
- Enabling Conditions Action Guide
- Measurement Action Guide