



WHITE PAPER

K-12 Career Exploration

Making Career Exploration Count

Identifying Opportunities to Deliver Outcomes for Youth

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PROJECT
EVIDENT

About this paper

Project Evident conducted an evidence and opportunity assessment of career exploration in middle and high schools between December 2025 and May 2026, with funding and support from the Walton Family Foundation and Britebound.

The assessment brings together evidence and practice knowledge across youth development, career development, education, and workforce research, with insights and context from interviews and roundtables with practitioners, researchers, and state and district leaders. The goal is to take stock of existing evidence and knowledge, understand how career exploration is being defined and delivered, and identify pressing gaps that need to be filled to allow practitioners, funders, and policymakers to deliver meaningful outcomes for middle school and high school learners. The assessment aggregates and builds on existing research and analyses across the field, including Britebound and Education Strategy Group's [national scan](#) of middle school career exploration, and does not include a state-by-state analysis of career exploration.

This White Paper presents the key findings from the assessment and identifies priorities to advance practice, policy, and research related to career exploration in K-12. It is supplemented by publications that provide additional analysis and context, including:

- [Laying the Groundwork for Effective Career Exploration](#), which goes deeper into the conditions that shape practices and youth experiences, and what we heard from field experts around priorities for change.
- [What Works in Career Exploration](#), which goes deeper on the evidence base that informs this white paper, synthesizing research about the components of high-quality exploration and what studies show about outcomes for different practices and program models.

This assessment was conducted by Farhana Hossain, Gabriel Rhoads, Greg Keough, Megan Hoffman, and Matt Hillard at Project Evident, and this report was written by Farhana Hossain. Jamie Jutila and Simran Mathews at the Walton Family Foundation and Annie Duong-Turner at Britebound provided critical thought partnership and guidance that shaped this work.

About Project Evident

Project Evident harnesses the power of data, evidence, and technology to achieve greater impact. We believe that by empowering practitioners to drive their own data and evidence building while also strengthening the surrounding ecosystem, we can increase the number of effective solutions in the social and education sectors and scale them faster, ultimately producing better, faster, cheaper, and more equitable outcomes for students and communities.



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The findings and conclusions contained in this report do not necessarily reflect the positions or policies of the funders or those who participated in this assessment.



Executive Summary

Young people face growing uncertainty in navigating today's education and employment landscape, as technology and other shifts in the labor market reshape future opportunities.

More than 26 million middle and high school students are enrolled in U.S. public schools.¹ Many feel unprepared for the choices schools are asking them to make around career pathways and postsecondary options, while they are still developing their sense of who they are, what they want to do, and the kind of life they want to build. In recent national surveys, a little more than half of middle and high school students say they feel prepared for the future, and about 8 in 10 high school students say that they wanted more career exploration opportunities.² The challenges run deeper for young people from low-income and marginalized communities, who often have less access to the information, experiences, and networks that shape what feels possible.³

States, school districts, and community-based organizations are rapidly expanding career-connected learning through investments in career exploration, work-based learning, and other activities for career readiness. This growth reflects both rising demand from young people and growing interest among families in better information and a wider range of education and career pathways, as well as concerns about whether students are prepared for a labor market being reshaped by artificial intelligence (AI).⁴

This paper draws together research from youth development, career development, education, and workforce fields, as well as inputs from educators, practitioners, researchers, and state and district leaders, to present a clear picture of what we know about career exploration today. It also identifies the key ingredients for high-quality career exploration based on existing evidence, as well as the practice and research gaps that policymakers, funders, and practitioners should prioritize to move the field toward shared learning and meaningful outcomes for young people.

¹ National Center for Education Statistics (2024)

² Gallup and Walton Family Foundation (2025); College Board (2024); Bryant (2022)

³ Carnevale et al. (2022); Storlie et al. (2019)

⁴ Britebound (2026a); PowerSchool (2024)



Key Findings

- **Career exploration should start early in adolescence and build over time to help young people develop both awareness and readiness.**

Early adolescence is one of the strongest developmental windows for supporting the active formation of career-related identity, as young people begin more deliberately ruling options in or out based on their emerging sense of self and their beliefs about what is possible. As this process accelerates, the research and practice literature reviewed for this assessment suggests that young people want and need repeated, hands-on opportunities to investigate, reflect, connect, and revise their understanding of themselves and their options. For middle and high school students, that means offering opportunities to discover their interests and values, learn about pathways, build durable skills, form relationships, and strengthen their capacity to navigate choices (see figure on the next page).⁵

- **Young people who actively engage with the world of work during middle and high school – through real world experiences and relationships with employers and trusted adults – are more likely to achieve positive outcomes later in life.**

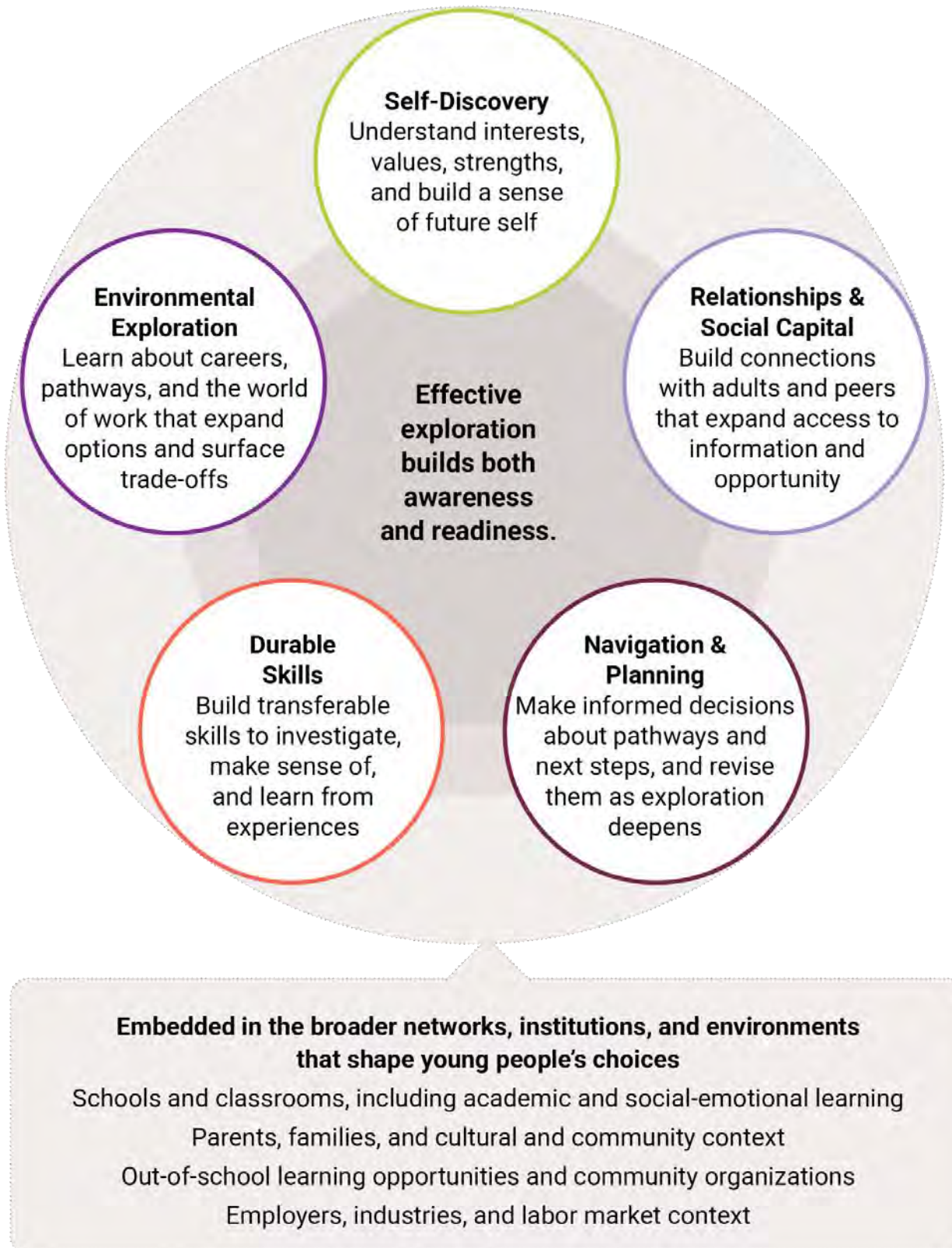
Recent longitudinal analyses of data from the OECD show that specific ways teenagers explore and experience the world of work are associated with better adult outcomes, including employment, earnings, and career satisfaction. In this research, certain experiences show associations with one or more long-term outcomes, including career conversations, workplace visits, and part-time work. Exploration appears to be most effective when embedded in a broader education system and woven into curriculum, advising, employer engagement, and other supports for successful transition.⁶

Broader career-connected approaches – including individualized counseling and planning, project-based learning, mentoring, and work experiences – are also connected to gains in student engagement, awareness, and beliefs. The strongest evidence from U.S. research on students' academic and labor market outcomes comes from structured, multi-component programs like Career Academies and early-college high schools – models that embed exploration within sector- or college-focused pathways, even if exploration is not always their primary focus.

⁵ Project Evident analysis of literature and field interviews; see [Evidence Brief](#) for more details.

⁶ Covacevich et al. (2021); Mann, Denis, & Percy (2020); OECD (2021a, 2021b, 2022)

Components of High-Quality Career Exploration



- **Evidence supports high-quality career exploration as a developmental necessity for adolescents, but critical questions remain about what works for whom and how to design and deliver it at scale.**

Research on the implementation and effectiveness of career exploration programs and practices in the U.S. is thin, especially in middle school. While evidence points to certain activities and practices as core ingredients for meaningful exploration, there are significant gaps in our understanding of how to bundle, sequence, deliver, and measure career exploration for the students who need it most. We also have very little evidence on how different activities and practices drive changes in students' perceptions, beliefs, and behaviors, and how those proximal changes connect to economic and social mobility in the long run. In addition, the adoption of technology-based platforms and tools has outpaced evidence of outcomes.

- **States, districts, and intermediaries are expanding career exploration across middle and high schools, but students' experiences vary widely in depth, quality, and coherence, and often do not include what they say helps them the most.**

Across the country, educators, counselors, youth-serving organizations, intermediaries, employers, and state leaders are working to expand access to career exploration programs and practices. But many students still experience career exploration as a collection of disconnected activities — such as completing an interest assessment, attending career fairs or talks, or creating college and career plans. Access to relationships, skill-building, and experiential learning remains limited across communities, even though young people find them to be the most valuable. A core challenge is that career exploration is not consistently defined in K-12 policy and practice: there is limited consensus on the goals and target outcomes, and on how exploration should connect to academics, career and technical education (CTE), and more intensive pathway-focused programs.

A Path Forward

States, districts, programs, and intermediaries can make career exploration more meaningful by improving the quality and cohesion of student experiences and by building the evidence needed to scale and sustain effective approaches over time. The evidence and opportunity assessment point to the need for a more youth-centered approach to career exploration in K-12 — one where exploration is:



- **Purposefully woven into a student's day-to-day learning** — integrated with core academics and CTE programs during the school day, and coordinated across out-of-school programs, employers, and community partners.
- **Grounded in real-world experiences** — offering young people hands-on opportunities to build their awareness, skills, relationships, and agency.
- **Continuous and cumulative across middle and high school** — connecting programs and practices to build on one another with growing depth and complexity, while allowing for iteration and adaptation as students explore.
- **Built to reach students who need it the most** — increasing opportunities for students who would not otherwise gain high-quality exploration through their existing personal networks.

The next phase of work requires coordinated action among various stakeholders in the field to align investment, policies, practice, and measurement.

Policymakers and state leaders can pair career exploration policy with the infrastructure needed for quality implementation, including staffing, training, partnership coordination, and data systems. They can use their convening power to bring districts, intermediaries, employers, and providers around shared goals, incentives, and accountability measures.

Districts, programs, and intermediaries can engage young people and families as partners, integrate exploration into core instruction, build educator and practitioner capacity to deliver it with coherence across grades, and partner with community organizations and employers to expand access to high-quality exploration for students with the least access.

Public and private funders can lead efforts to build alignment on shared outcomes and measures, invest in well-defined, developmentally aligned exploration strategies alongside the evidence-building needed to test them, support a comprehensive research agenda, and invest in systems-level infrastructure that sustains program-level work over time.

Employers can prioritize career exploration as a longer-term investment in workforce and community development by co-designing sustained partnerships with schools and programs, offering students workplace experiences that include reflection, skill-building, and mentorship, and participating in shared measurement and evidence-building efforts.



Why Career Exploration is Needed in K-12

A body of research spanning career development, youth development, education, and workforce fields provides a strong rationale for early and sustained career exploration as a developmental necessity.

Young people begin to form their career identities early in life, shaping the choices they make later on. What young people choose to explore and pursue is shaped by how they see themselves, what they think is possible, and what they have been exposed to. This sense of self evolves as young people make meaning of new experiences, roles, and settings.⁷

- They need support and resources to understand their interests and abilities in relation to the world of work.

They gradually narrow the careers they see as possible by early adolescence. By age 13 or 14, young people have already ruled in or out certain careers, often based on social perceptions of gender, class, and how they see themselves as students, as well as limited exposure to the range of careers and pathways that exist.⁸ Intentional exploration can prompt them to revisit options they set aside too early.

- They need support to expand what they see as possible.

Their relationships and communities shape their beliefs and opportunities. Family members, trusted adults, and other community networks can strongly influence how young people think about careers, who they meet, and what opportunities they have access to.⁹ But these relationships and networks are unevenly distributed, so some young people have far less access than others.

- They need trusted relationships and networks that expand their horizons.

Their confidence and the conditions around them shape how deeply they engage in career exploration and whether they keep exploring over time. Young people explore more when they feel capable and supported, and have genuine choices and hands-on experiences that build skills and strengthen their confidence to take on new challenges

⁷ Super (1980); Savickas (2005); Porfeli et al. (2011)

⁸ Gottfredson (1981)

⁹ Coleman (1988); Chetty et al. (2022); Gallup, Walton Family Foundation, and Jobs for the Future (2025)

and adapt decisions as they learn. Exploration that grows out of a young person's interests tends to last longer than exploration driven by outside pressure.¹⁰

- They need hands-on opportunities to build skills, confidence, and adaptability.

The environments and systems around young people shape what they can access and act on. Socioeconomic status, neighborhood resources, school funding, transportation, and access to community and health resources all affect what students are exposed to, the choices that feel feasible, and the pathways they can realistically pursue. These conditions vary widely across communities, creating uneven access to high-quality exploration experiences and limiting the ability of some students to act on emerging interests.¹¹

- They need environments and supports that expand access to meaningful exploration, regardless of background or circumstance.

¹⁰ Lent, Brown, & Hackett (1994); Ryan & Deci (2000); Savickas (2005); Rudolph, Lavigne, & Zacher (2017)

¹¹ Brookover (2024); Eshelman & Rottinghaus (2015)

What Evidence Tells Us About Career Exploration Outcomes

Evidence on how specific practices contribute to the academic and career outcomes that matter, for which students, and under what conditions, remains limited but is growing.

In K-12 policy and practice, “career exploration” is commonly described as a phase that comes after early career awareness and before more intensive preparation, training, and work experiences. It is often equated with light-touch exposure that introduces students to the idea of careers, where typical activities include interest assessments, career fairs, digital exploration of occupations, or employer visits. But evidence suggests that exploration happens to varying degrees across a wider range of career-connected learning, including advising, mentoring, project-based learning, work-based experiences, and CTE programs.

For that reason, we reviewed evidence on outcomes across a range of career-connected approaches, examining academic and career measures such as beliefs, awareness, engagement, achievement, skills, and social capital. This chapter summarizes the main takeaways; the [companion Evidence Brief](#) presents a more detailed analysis.

Evidence from OECD Countries

The strongest evidence on the long-term outcomes of career exploration comes from international longitudinal research. The Organisation for Economic Co-operation and Development (OECD) [Career Readiness Project](#) offers some of the clearest available insight into how career exploration in adolescence relates to outcomes later in life, spanning multiple analyses across national longitudinal datasets from eight countries. Across this body of work, the large majority of analyses find significant positive associations between teenage career activities and adult outcomes — a level of consistency that, while not causal, is notable given the diversity of national contexts, study designs, and outcome measures involved. It draws on national longitudinal datasets from several countries, including the United States, to link teenage career activities with adult labor market outcomes.¹²

¹² Covacevich et al. (2021); Mann, Denis, & Percy (2020); OECD (2021c)

Across several OECD countries, career exploration in the teenage years is positively associated with labor market success and satisfaction. By around age 15, young people who discussed their career options with others, attended career talks, visited workplaces, or worked part time were more likely to remain connected to education, training, or employment as adults. They also reported higher wages and greater job satisfaction. Volunteering and internships also show positive associations with some adult outcomes, although findings vary across datasets, student groups, and the type and duration of the experience. Classroom-based reflection activities, application or interview workshops, and short, occupation-focused programs were less consistently associated with long-term outcomes.¹³

Exploration appears to be most effective when it is delivered as part of a structured, integrated approach to help students transition from education to employment. In countries where young people experience positive outcomes, career exploration is embedded in a systemic approach that integrates education and workforce systems, and woven into curriculum, advising, and employer engagement. It is also treated as a gradual, developmental process with repeated opportunities for students to test and refine their career ideas over time.¹⁴

The OECD research offers one of the strongest available longitudinal views of career exploration outcomes, pointing to the importance of experiential activities, employer engagement, and opportunities for young people to connect school with future work. But the evidence remains limited in several ways: most studies identify associations rather than causal effects; the measures often capture whether an activity happened, not its quality, dosage, timing, or sequence; and the findings vary across countries, student subgroups, and labor-market contexts.¹⁵

The findings are relevant to the United States but generalizability may be limited. U.S. students are included in OECD benchmarking data, and they face many of the same challenges seen across OECD countries, including widespread uncertainty about future careers and unequal access to the information, guidance, relationships, and work-based experiences that help make exploration meaningful. At the same time, the U.S. has not yet built the kind of sustained, career-focused longitudinal tracking found in countries

¹³ Covacevich et al. (2021); OECD (2021a, 2021b, 2022); Mann, Denis, & Percy (2020)

¹⁴ OECD (2022); OECD (2023); Mann, Denis, & Percy (2020)

¹⁵ Covacevich et al. (2021); Mann, Denis, & Percy (2020); OECD (2021c)

such as the United Kingdom or Australia, which follow the same students over time with career questions asked along the way.¹⁶

The next section turns to the U.S.-specific evidence base: what has been tested here, what outcomes have been measured, and where major gaps remain.

U.S. Evidence: Middle School

There is broad recognition that career exploration should begin before high school, consistent with evidence from developmental research. But evidence on youth outcomes linked to middle school career exploration, and to career-connected learning more broadly, remains nascent. It rests largely on observational and descriptive studies that use small samples and short time horizons, and the evidence is uneven across approaches. In general, these studies associate middle school career-related programs with short-term gains in academic engagement, self-awareness, postsecondary aspirations, and work-relevant skills.¹⁷ Research connecting middle school career exploration to high school or postsecondary outcomes is very limited.¹⁸

Career-relevant instruction — teaching core subjects through a career lens — has the strongest evidence. A randomized trial found gains in student engagement and how much they valued school, and a longitudinal analysis found gains in math achievement.¹⁹

Career courses, group counseling, and STEM exploration programs are the most studied, and show short-term gains in career self-efficacy, interest clarity, and career awareness. Most of these studies are small, and several find modest or non-significant effects. The most rigorous test in this group, a multi-site randomized trial of a career- and education-planning course, found no effects on its main outcomes: students' motivation to attend school, study habits, and attendance and behavior.²⁰

Rigorous evaluations of expanded-learning-time and other multi-component models in middle school are scarce and show mixed effects. A national evaluation of one

¹⁶ OECD (2024a, 2024b); Mann, Denis, & Percy (2020); Covacevich et al. (2021)

¹⁷ Orthner et al. (2013); Ting et al. (2012); Legum & Hoare (2004); Kovach (2018); Godbey & Gordon (2019); Britebound (2021); Advance CTE (2018)

¹⁸ Hossain, Keough, & Rhoads (2025)

¹⁹ Orthner et al. (2013); Woolley et al. (2013)

²⁰ Turner & Lapan (2005); Gibson & Chase (2002); Ting et al. (2012); Legum & Hoare (2004); Kovach (2018); Chaplin et al. (2010). Career self-efficacy is a student's confidence in their ability to explore careers and make decisions. Interest clarity is how clear a student feels about the kinds of work, fields, or problems they are most interested in. For a glossary of key career exploration constructs, review the companion [Evidence Brief](#).

expanded-learning-time program, which pairs academic support with hands-on apprenticeships led by community volunteers, found no average effect on academic achievement. A separate study looked at just one of its sites and reported gains in student engagement and in the transition to high school.²¹

General mentoring programs improve social-emotional and behavioral outcomes for middle school learners, but they do not explicitly focus on career exploration. Studies consistently show reduced absences and stronger ties to supportive adults, with weaker effects on grades, and results are uneven across programs.²² Some evidence suggests mentoring in the middle school years can support a young person's sense of career identity and connect them to adults who support their goals, and that these connections may pay off later in higher rates of college-going.²³

U.S. Evidence: High School

Information and awareness activities are common in schools but their outcomes are rarely measured beyond participation. Schools use interest and aptitude assessments, career fairs, guest speakers, and workplace tours to introduce students to options. The clearest U.S. evidence is for career assessments and computer-based tools, which are associated with short-term, self-reported gains in career awareness and decision confidence. Guest speakers and career talks are associated with better long-term outcomes, but that evidence is international and appears in the OECD section above.²⁴

Advising, planning, and coaching activities are associated with students' career awareness and beliefs. Individual career and academic plans (like ICAPs and ILPs) show emerging links to course-taking, attendance, and college-going behaviors, mainly when students review them with support from an adult. Career counseling and group workshops show short-term gains in career self-efficacy and interest clarity. Career and academic coaching can improve students' self-efficacy and readiness for postsecondary steps, but evidence on academic achievement like grades is limited.²⁵

Career-focused mentoring may improve career-related activities and networks, but research is limited. Mentoring's most reliable effects are on supportive relationships and social-emotional outcomes, with smaller gains in career confidence and school

²¹ Rulf Fountain et al. (2016); Policy Studies Associates (2010)

²² Raposa et al. (2019); Herrera et al. (2007); Herrera et al. (2023); Guryan et al. (2020); Bernstein et al. (2009)

²³ Guryan et al. (2020); Herrera et al. (2023); DuBois et al. (2025); Raposa et al. (2019); Karcher (2020); Bell (2026)

²⁴ Garcia et al. (2020); Baker (2002); Kashefpakdel & Percy (2016); OECD (2021a); Covacevich et al. (2021)

²⁵ Solberg et al. (2014); Torre Gibney & Rauner (2021); Whiston et al. (2017); Phillips et al. (2024)

engagement and little effect on grades.²⁶

Work-based learning is consistently linked to short-term gains in career awareness and beliefs, with more limited evidence on academic and longer-term outcomes. Paid summer jobs have the most rigorous evidence: randomized studies show short-term gains in employment and earnings, reduced legal-system involvement, and in one study improved school attendance and on-time graduation. Internships, pre-apprenticeships, and apprenticeships do not yet have a strong evidence base in the U.S. Internships are associated with gains in work readiness, and high school apprenticeships are associated with positive transitions to postsecondary education and employment.²⁷

Applied and project-based learning show the strongest evidence for academic engagement and achievement, with career-connected versions less studied.

Project-based learning improves academic engagement, persistence, and achievement, though its career-connected forms have rarely been tested on their own. School-based enterprises are associated with short-term gains in career awareness and beliefs. Summer and afterschool STEM programs show similar short-term gains, and selective summer programs for higher-performing students have been shown to improve college enrollment and STEM-degree completion.²⁸

Structured, multi-faceted programs that work with students for a sustained period of time have the strongest evidence on education and employment outcomes. They typically combine coursework with advising, credentials, hands-on learning, and employer engagement. Different models often prioritize different outcomes; for example, CTE pathways, like career academies or CTE-dedicated schools, focus on specific industries and sectors. A strong and growing body of evidence shows that they improve high school completion, employment, and earnings, with mixed results on college enrollment and completion. College-focused models, including early college high schools, show strong evidence on high school completion and on postsecondary enrollment and completion.²⁹

Evidence for structured programs and whole-school approaches that are more focused on exploration is still emerging. There are whole-school models (such as [Big Picture](#)

²⁶ Raposa et al. (2019); Herrera et al. (2023); Merrill et al. (2017); Lass et al. (2025)

²⁷ Gelber, Isen, & Kessler (2016); Heller (2022); Modestino & Paulsen (2023); Valentine et al. (2017); Theodos et al. (2023); Theodos et al. (2025); Mindham & Schultz (2020); Kuehn et al. (2023)

²⁸ Saavedra et al. (2021); Condliffe et al. (2017); Cohodes, Ho, & Robles (2024); Stern (1984); Berglund et al. (2026)

²⁹ Lindsay et al. (2024); Kemple & Willner (2008); Brunner, Dougherty, & Ross (2023); Berger et al. (2014); Edmunds et al. (2020); Lauen et al. (2017); Song et al. (2024)

[Learning](#) or [MicroSociety](#)) that integrate exploration into the school day with opportunities for mentorship, applied learning, and work-based experience. Others are structured programs (such as [Magnolia Project](#), or [On the Road Collaborative](#)) that prioritize specific aspects of exploration, such as self-discovery, social-emotional development, occupational exploration, relationships, or experiential learning to help young people build interests, skills, and future orientation. Some of these programs have developed meaningful, descriptive evidence about their students, including longitudinal tracking of graduates and alumni studies that point to positive effects on school engagement, confidence, and postsecondary participation.³⁰

Beyond any single career exploration activity, research has identified a chain of near-term outcomes that predict long-term success. In the middle grades, these outcomes include academic engagement, self-efficacy, course-taking, and career awareness; in high school, outcomes include ninth-grade on-track status, sustained achievement, and postsecondary planning behaviors. These near-term outcomes predict high school completion, postsecondary enrollment and completion, employment and earnings, and longer-term economic advancement. Career exploration is theorized to support these near-term predictors, and the OECD evidence links teenage exploration to better adult outcomes.³¹ But whether and how specific career-related programs or approaches in middle and high school move short-term academic, behavioral, or college and career readiness outcomes remains largely untested.

The table on the next page summarizes common practices tied to career exploration by the strength of available evidence in the U.S.

³⁰ Arnold & Mihut (2020); Maxwell, Geckeler & González (2019)

³¹ Covacevich et al. (2021); Mann, Denis, & Percy (2020)

Strength of Evidence Across Practices Tied to Career Exploration

Strongest	Strong	Emerging / Mixed	Limited
Structured, multi-faceted programs for academic and labor market outcomes, including high school completion and higher employment and earnings. Includes: • CTE-dedicated schools • Career academies • Early college high schools	• Mentoring for social-emotional outcomes and relationships • Project-based learning (PBL) for academic engagement and achievement • Paid summer jobs for short-term employment and earnings • Career-relevant instruction for middle-school engagement and achievement	• ICAPs and ILPs, counseling, and coaching for planning behaviors and career beliefs • Youth apprenticeships for transitions to postsecondary education and employment • Structured exploration models for engagement, confidence, and postsecondary participation	Light-touch information and awareness activities on short-term, self-reported gains in awareness and interest. Includes: • Interest assessments • Career fairs • Guest speakers • Workplace tours
Consideration: Evidence rarely isolates which components drive outcomes. CTE models emphasize pathway progression; early college models emphasize postsecondary outcomes.	Consideration: Mentoring and PBL evidence is largely from outside the career exploration context.	Consideration: Evidence is largely correlational or descriptive and varies by design and adult support.	Consideration: U.S. evidence is limited, although career talks and workplace visits have stronger international evidence.

What Defines High-Quality Career Exploration

Effective exploration builds both awareness and readiness: what young people understand about themselves and the world of work, and the skills, relationships, and capacity to act on that understanding.

The literature review and field engagement conducted for this assessment point to the following components as core ingredients for meaningful career exploration:

1. **Self-discovery** supports young people in understanding their own interests, strengths, values, and goals. The ability to discover oneself creates a basis for evaluating new experiences and determining what is meaningful and possible.³²
2. **Environmental exploration** introduces young people to careers, industries, education and training pathways, and workplaces, which expands the possibilities perceived by students and supports them in evaluating trade-offs.³³
3. **Durable skills** allow young people to turn their experiences into learning. Students need skills like communication, problem solving, reflection, and decision making to ask questions, analyze and compare options, and make sense of what they experience.³⁴
4. **Relationships and social capital** enable young people to gain greater access to information, guidance, role models, and opportunities through ongoing connections with peers, educators, employers, and community members.³⁵
5. **Navigation and adaptive planning** provide young people with tools to translate the results of exploration into actual decisions. Students need assistance to understand the criteria for selecting a particular path, compare alternatives, select near-term actions, and revise plans as they learn more or as options change.³⁶

³² Super (1980); Holland (1997); Porfeli et al. (2011)

³³ Gottfredson (1981); Super (1980)

³⁴ Lent, Brown, & Hackett (1994); Farrington et al. (2012)

³⁵ Coleman (1988); Chetty et al. (2022)

³⁶ Savickas (2005); Rudolph, Lavigne, & Zacher (2017); Ajzen (1991)

Together, the five components build toward the knowledge, awareness, beliefs, skills, and connections young people need to continue learning and adapting over time.

- **Identity, purpose, and belonging:** Young people have a clear sense of their identity and purpose related to their learning and work, and they believe they can accomplish more.
- **Agency and self-efficacy:** They have confidence in their ability to investigate options and make decisions in the face of changing conditions.
- **An informed view of options:** They understand the range of options available to them and the trade-offs associated with them, and have a sense that more options are open to them than they first believed.
- **Access to relationships and networks:** They have a set of relationships and connections that they can draw on for information, guidance, and opportunities.
- **Durable skills:** They have transferable skills, such as communication and problem solving, that help them interpret experiences and adapt across settings.
- **Adaptability:** They have the capacity and skills to revise plans and respond to new information as interests, opportunities, and conditions change.
- **Academic engagement and persistence:** They see a stronger connection between their education, future options, and their goals, which increases motivation.³⁷

Career exploration can take many forms, such as advising, assessments, mentoring, project-based learning, digital tools, and work experiences, but activities alone do not define effective exploration. Evidence suggests that what matters is whether they help young people investigate, reflect, connect, and revise their understanding of themselves and their options.

The five-component framework sets clearer bounds around what high-quality exploration should look like in middle and high school. It gives educators, practitioners, funders, and policymakers a shared reference for designing and assessing exploration, and provides a foundation for the measurement and evidence needed to better establish how best to combine, sequence, and design these components for students in different communities. It is a way to assess whether, across middle and high school,

³⁷ The companion [Evidence Brief](#) defines these constructs and reviews the evidence for each; see Table 2, Key Career Exploration Outcomes and Evidence, and the outcome categories.

each young person has repeated opportunities to experience all five components in ways that build on one another and align with the decisions they face at each stage, and is not meant to be a checklist of activities in each grade or program.

The framework also reflects a shift in how exploration is often defined. Rather than a low-intensity stage of awareness building that precedes more intensive experiential and applied learning, high-quality exploration works as a set of connected components that recur and deepen across middle and high school. Its quality and impact depend on how well exploration connects across schools, community programs, employers, and families.³⁸

³⁸ Project Evident interviews (2026)



How Students Experience Career Exploration Today

States, districts, and intermediaries are expanding career exploration across middle and high schools. But young people's experiences vary widely in depth, quality, and coherence, and often do not include what they say helps them most.

Students have growing access to career-related activities across grades, schools, and communities, but their experiences are highly uneven, and evidence that these activities consistently produce the desired academic, career, and developmental outcomes is nascent. This chapter describes what we heard and found about how middle school and high school students experience career exploration today, what they say they value, and the gaps between their expectations and what is available in practice.³⁹

Middle School

In many districts and states, common practices focus on self-discovery and early exposure. Students often take interest or personality assessments, set goals, or complete research assignments on careers. They are often introduced to careers through digital career platforms, guest speakers, career days, classroom activities, and occasional field trips, and, in many places, these activities are still siloed into a single class period or elective rather than embedded across subjects and grades. Students may also begin Individual Learning Plans or career and academic plans that carry into high school; where these plans exist, their design and use vary widely, from check-the-box documents to more robust tools revisited with adults.⁴⁰

Activities or experiences that help turn exposure into learning are less consistently available. Mentoring, skill-building, applied or experiential learning, and employer-connected opportunities are far less available than classroom-based activities. Previously published scans of career exploration in middle schools show that

³⁹ Findings shared here are based on a review of published research and field scans (like Britebound and Education Strategy Group's [national scan](#) of middle school career exploration), and interviews with selected state and local leaders to contextualize the research. For this assessment, we did not replicate a detailed state-by-state analysis of career exploration programs and policies.

⁴⁰ Britebound and Education Strategy Group (2024); Project Evident interviews

access to hands-on activities like job shadowing, workplace tours, or ongoing mentorship remains limited and uneven, even though young people say that they find these experiences especially valuable.⁴¹

Many states are expanding career exploration in middle grades, but there is wide variation in scale, funding, design, and implementation. Common approaches involve funding career coaches or advisors; requiring career and academic plans that follow students from grade to grade; and adopting statewide standards or frameworks for exploration. Maryland, for example, is expanding middle grades career exploration through a statewide career counseling initiative that provides individualized career guidance to students. Delaware has developed state standards for CTE exploration in middle grades and piloted approaches intended to help students build career awareness, identity, and foundational readiness skills.

High School

In many high schools, students experience career exploration as a menu of related but separate activities, rather than a single, coherent journey. CTE courses, dual enrollment opportunities, work-based learning, individual career and academic plans, and college and career advising are commonly offered, but they are not always designed for an integrated experience. Access to internships, apprenticeships, and other work-based learning still varies widely by community, and is shaped by school and district capacity, local labor markets, and employer engagement.⁴² As a result, many students are navigating an expanding set of choices without a clear structure for how exploration should continue once they begin making pathway decisions.⁴³

Multi-component programs, often focused on college and CTE pathways, offer more structured, comprehensive experiences for students who can access them.

CTE-dedicated schools, career academies, Linked Learning, P-TECH, and early college high school models often blend career-themed coursework, work-based learning, credentials, and student supports. However, these programs or schools are not yet the default experience for most high school students. Many of these models are organized

⁴¹ Britebound and Education Strategy Group (2024); Britebound (2025); Britebound (2026b); Gallup and New Hampshire Learning Initiative (2025); Project Evident interviews

⁴² Project Evident interviews; Canney & Mezera (2020); Britebound and Bellwether Education Partners (2022)

⁴³ Advance CTE, College in High School Alliance, and Jobs for the Future (2024)

around selecting and progressing in an occupational pathway, while expectations for continued exploration — inside or outside that chosen program — are less clearly defined.⁴⁴ Most rigorous studies of these models focus on graduation, postsecondary enrollment, and earnings; they provide less detail on how students experience ongoing exploration inside and across pathways. Several interviewees for this assessment cautioned that, without explicit structures for revisiting choices, early pathway selection can feel like tracking for some students.

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“My big thing is I fight random acts of [career] development all day. I want to see cohesive career planning, awareness, planning, exploration, and immersion activities throughout a spectrum of a student’s life.”

– Education leader interviewed for landscape scan

In many schools and systems, students’ experiences shift from broad exposure toward pathway selection and participation as they move through high school. Early in high school, students may access assessments, advising, online career tools, introductory CTE courses, and exposure to employers through events or visits. In later grades, there are typically more opportunities for hands-on and experiential learning within selected pathways (such as CTE concentrations, internships, apprenticeships, or dual enrollment courses) that can help students test and deepen their interests in a particular direction.

Yet national surveys show many students change postsecondary plans late in high school and report uncertainty about costs and pathways, underscoring the need for guidance throughout, not only at the point of selection.⁴⁵ Without consistent access to guidance and reflection that accompany these experiences, the broader work of exploring identity, options, and trade-offs often gives way to course selection, pathway completion, and planning for postsecondary or workforce transitions. This can leave fewer structured opportunities for students to revisit or refine their interests as they learn more.

⁴⁴ Hossain, Keough, & Rhoads (2025); Dougherty (2018); Brunner, Dougherty, & Ross (2023); Hemelt, Lenard, & Paepflow (2019); Warner et al. (2015); Kemple & Willner (2008)

⁴⁵ Perna (2024)

Across Middle and High School

Many students experience their career exploration journey as a series of disconnected events. A student may complete an interest survey, attend a career fair, use a digital platform to learn about industries, and create a plan. However, these activities may not meaningfully foster self-discovery or durable skills if they are not connected or reinforced in ways that inform decision making and learning. Practitioners and administrators interviewed for this assessment referred to this lack of integration or connection among different types of experiences as a core challenge, and raised concerns that many of these tasks are implemented with an eye on compliance requirements as much as quality.⁴⁶

Exploration is often not purposefully connected across the transitions students navigate. Access to career exploration in middle school is not yet widespread, but even where students participate, the insights they gain are not always systematically carried forward into their planning and instruction in high school. As a result, students may lose the benefit of what they have already learned about their interests and options.⁴⁷ Some states are beginning to address the disconnect between middle and high school by creating grade-spanning career planning systems, portfolios, and frameworks. Virginia and Wisconsin, for example, use academic and career planning structures that begin before or during middle school and continue into high school. Some communities also use gateway or bridge programs to support the eighth- to ninth-grade transition, but these models are more commonly focused on high school readiness and on-track support than on connecting career exploration and planning across the transition.

In-school services and out-of-school programs often operate as separate parts of the career exploration ecosystem – distinct in their funding, staff training, and accountability expectations – even when they serve the same students.⁴⁸ Schools may provide broad access to exploration through curriculum, classwork, advising, planning, and technology platforms. Out-of-school or community-based programs, including some that operate in school facilities during out-of-school time or through enrichment blocks, can offer more flexible time, hands-on experiences, and relationships with mentors and other adults. Some communities are implementing more integrated approaches – such as dual enrollment linked to local labor needs, summer youth

⁴⁶ Project Evident interviews; Education Strategy Group (2024); Canney & Mezera (2020); PowerSchool (2024); Shields et al. (2024)

⁴⁷ Project Evident interviews

⁴⁸ Woo et al. (2026); National Academies of Sciences, Engineering, and Medicine (2025); Kazis (2016)

employment tied to school credit, and district-community college partnerships — but these are still limited in scale.⁴⁹

At the same time, schools, nonprofit organizations, and intermediaries have developed structured, multi-faceted models for career exploration in many communities. Some of these approaches shape the entire school experience by integrating career-connected learning into instruction, advising, and student supports across grades (such as Big Picture Learning, MicroSociety, or the CAPS Network). Others operate at a single grade level, in one elective or pathway, or in out-of-school settings that extend access beyond the school day, such as afterschool programs, summer learning, and community-based youth programs.

Parents and family members are among the most trusted sources of career guidance for young people, but they are not systematically engaged in exploration. Districts and schools may send home information about courses, programs, or planning services and host periodic events. Ongoing communication and partnership to help families understand unfamiliar pathways, weigh costs and trade-offs, and support young people in considering a range of options are not widely available.⁵⁰

Designing and implementing high-quality career exploration requires investments and coordination of resources for staffing, training, partnerships, measurement, and data systems. Practitioners and education leaders interviewed for this assessment described gaps across four key areas: embedding exploration in the school day and integrating it with academics; preparing and supporting the educators and practitioners who deliver programs and services; building durable partnerships with employers and community organizations; and aligning funding, accountability, and measures of success with the quality of student experience and outcomes. These conditions vary across districts and schools, creating vastly different learning experiences for students.⁵¹

Technology is playing a larger role, but evidence and implementation are still catching up. Digital career platforms and online information tools are now common, while AI-enabled advising, virtual reality and other immersive tools are earlier in development and adoption. Practitioners and researchers interviewed for this assessment

⁴⁹ Project Evident interviews; Washington STEM (2018); New Skills Ready Network (2025); Robinson et al. (2025); Woo et al. (2026)

⁵⁰ Gallup, Walton Family Foundation, and Jobs for the Future (2025); PowerSchool (2024); Britebound (2026a)

⁵¹ A companion [Practice Brief](#) for this paper describes the conditions that shape career exploration quality today.

emphasized that digital and AI tools can broaden access and support educators when used intentionally alongside human guidance and hands-on experiences, but raised concerns about relying on them as substitutes for advising, mentoring, or real-world interaction before there is stronger evidence on student experience and outcomes.

The table below looks at the components of high-quality exploration introduced earlier, and summarizes how students typically experience it today.

Student Experience Against the Components of High-Quality Exploration

	Typical student experience	Where it often falls short
Self-discovery	Interest assessments, goal-setting exercises, and career research assignments (often one-off)	Opportunities are limited for structured, ongoing reflection and reevaluation across grades that build self-knowledge and confidence.
Environmental exploration	Career days, guest speakers, digital platforms, and field trips	Participation is tracked more than the depth of engagement or how students integrate what they see into their understanding of options.
Durable skills	Applied and skill-building experiences are more commonly available within CTE and selected pathway programs.	Durable skills are infrequently named, developed, or assessed as explicit outcomes of exploration, especially outside of specific pathways.
Relationships and social capital	Mentoring and employer connections are often unevenly distributed across communities and student groups.	Authentic, trusted relationships that expand students' social capital are infrequently designed as core outcomes of exploration and are seldom tracked systematically, even when contacts or events are recorded.
Navigation and adaptive planning	Career and academic planning is common across grades but is often treated as a compliance task rather than ongoing guidance and coaching.	Planning is frequently framed as choosing and staying on a pathway, with limited structured opportunities to revisit, revise, or test options as students learn and circumstances change.

What Young People Want from Exploration

Findings from youth surveys and research, as well as observations from educators, practitioners, and researchers who work with them, indicate gaps between what young people typically experience and what they find most helpful.⁵²

Deeper self-discovery. Young people want to understand what they are good at, what is important to them, and what type of life they wish to live. They want opportunities to try new things, reflect on what they like or do not like, and use resulting insights to guide their next steps.

Hands-on experiences. Young people say that experiences that allow them to apply and learn skills, solve problems, and think creatively are more engaging than passive learning that is fully classroom-based or technology-based.

Authentic connections with adults. Young people value career information and guidance from people with relevant experience. They also value dialogue, mentoring relationships, workplace-based interactions with adults, and environments where they feel respected and feel that they belong.

Agency in the exploration process. Young people want adults to listen to their thoughts and desires about future careers, give them autonomy to explore and investigate, and help them make sense of what they are discovering instead of directing every step.

Practical guidance through navigation without pressure to commit. Young people want clear, practical information about different postsecondary and work pathways, including costs and funding options, and the space to evaluate their options and refine their thinking before narrowing their choices.

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The number one thing that matters to them is finding a space where they feel like they belong.

– State education leader

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The real focus that [young people] have is on things that help with their understanding themselves. What am I good at? What do I like? And less of ‘here’s the top five jobs in your state.’

– Researcher

⁵² Britebound and Education Strategy Group (2024); Britebound (2025, 2026b); Gallup and Walton Family Foundation (2025); College Board (2024); Advance Vermont (2026); Connections Academy and Pearson (2024); Ali et al. (2025). In a 2026 survey, 63 percent of respondents who had recently completed middle school said they wanted more hands-on opportunities (Britebound, 2026b). In a 2024 survey, three in four high school students said they wanted more skill-building opportunities in high school (College Board, 2024).

Where Are the Key Gaps and Challenges?

The assessment surfaced key areas where practice and evidence gaps constrain the quality and scale of K-12 career exploration.

	Practice / Capacity Gap	Evidence / Measurement Gap
Coherence	Students participate in different activities that do not add up to a formative experience across their school years.	What is the right combination and sequence of experiences for high-quality exploration across middle and high school?
Transitions	Exploration is not connected across transitions from middle to high school, and from high school into postsecondary and the workforce.	How do exploration experiences at each stage shape transitions into high school, postsecondary education, and the workforce?
Quality	Students may participate in activities without opportunities for self-discovery, reflection, relationships, or skill-building.	How do experiences affect growth in awareness, skills, social capital, and other predictors of academic and labor market outcomes?
Implementation	Misaligned incentives and capacity constraints limit access to high-quality exploration opportunities.	Which staffing models, training, partnerships, costs, and delivery conditions support quality and outcomes at scale?
Technology	Digital platforms, AI, virtual reality, and immersive tools are increasingly being adopted without clear guidance on effective use and integration.	When and for whom does technology improve access to exploration and outcomes? How can it support self-discovery, relationships, skill-building, and navigation for young people?
Equity	Access to deeper exploration, trusted adults, employer networks, and out-of-school opportunities varies across schools and communities.	Who benefits most from career exploration, and what does it take to expand those benefits equitably?

A Path Forward: Priorities for Practice and Evidence

States, districts, programs, and intermediaries can make career exploration more meaningful by improving the quality and cohesion of student experiences and by building the evidence needed to scale and sustain effective approaches over time.

Across the country, educators, counselors, youth-serving organizations, intermediaries, employers, and state leaders are doing meaningful work to help young people learn about the world of work and make informed decisions about their futures.⁵³ Moving from promising pockets to a system that works for more young people will require stronger implementation and evidence-building capacity that enables educators, practitioners, funders, and policymakers to learn from what is working and spread effective approaches. Any effort to design or expand career exploration should articulate what it expects students to gain and how its design is meant to produce those gains, drawing on existing evidence about the components of effective exploration.

With that foundation, this assessment points to four priorities for a more youth-centered approach, one where career exploration is:

Purposefully woven into students' day-to-day learning. Career exploration is most meaningful when it is a core part of the school day and academic instruction, so students continuously connect what they are learning in classrooms to their emerging identity and career knowledge. It should also be coordinated across out-of-school programs, employers, and community partners, so the experiences students have in and out of school build on one another.

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If we start with what we want to be true for kids at the end of career exploration, then ask what needs to be true to make that happen, then vet our thinking with real students, we could probably get close to defining what good career exploration looks like.

– Education leader interviewed for landscape scan

⁵³ Britebound (2025); Cuevas (2025)

Grounded in real-world experiences. Young people consistently describe wanting more opportunities for hands-on experiences, deeper self-discovery, engagement with professionals and employers, and support in making decisions for themselves.⁵⁴ These priorities align with what the evidence suggests makes exploration meaningful. Work-based and applied experiences are most valuable when paired with reflection, guidance, and support that help young people learn from those experiences, connect their interests to available options, and develop their own sense of direction.

Continuous and cumulative across middle and high school. Career exploration should build across grade levels and in-school and out-of-school settings, with experiences that connect over time and deepen in complexity. It should allow for iteration and adaptation, giving students repeated opportunities to revisit and refine their interests as they learn.

Built to reach students who need it most.

Career exploration should expand what young people see as possible, especially for students with limited access to career information, networks, and out-of-school opportunities. Disparities in opportunities and outcomes may deepen if students cannot access exploration equitably, if schools and programs guide them based on biased perceptions of their strengths or weaknesses, or if students are directed into narrow pathways too quickly, without having an opportunity to explore. Avoiding these risks requires being intentional about how schools and programs design outreach and experiences and how they monitor outcomes.

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Many young people from marginalized communities are focused on survival — not because they lack ambition, but because they haven’t had the opportunity to imagine what might be possible. [Existing] measures and theories about career readiness treats [exploration] as an equitable process for everyone. But we know it’s not.

– Researcher interviewed for landscape scan

⁵⁴ Britebound and Education Strategy Group (2024); Britebound (2025, 2026b); Gallup, Walton Family Foundation, and Jobs for the Future (2025); College Board (2024); Advance Vermont (2026); Connections Academy and Pearson (2024); Ali et al. (2025)

Evidence Priorities

Alongside stronger practice, the field needs a coordinated set of investments to learn what works, for whom, and under what conditions.

Align on outcomes and shared measures. The field needs clearer consensus on the core outcomes that career exploration should help young people build over time, providing a foundation for shared measures that connect to standardized indicators of academic progress and labor market engagement.

Pursue a well-rounded, comprehensive learning agenda. Most existing research is descriptive, focused on participation and short-term outcomes, and tied to single programs. Practitioners and policymakers need a wider body of evidence on how different practices and approaches contribute to youth outcomes that predict high school transitions, postsecondary participation, and labor market outcomes.

Study implementation and equity as part of effectiveness. Practitioners and policymakers also need practical, actionable evidence on how staffing, training, partnerships, program design, and other implementation factors affect student experiences and outcomes.

Evaluate the role of technology in supporting students and educators.

Adoption of digital, AI-enabled, and immersive tools for exploration outpaces our understanding of whether these technologies support positive outcomes. Young people want hands-on, relational experiences, and practitioners describe technology as most useful when it is part of an intentional strategy to support educators and students. There is an urgent need to better understand when and how technology can strengthen the quality of exploration, support reflection and relationships, and contribute to outcomes.

“

We’re seeing districts turn to virtual reality and other technology-based models to bring experiences to students, especially in rural or more isolated communities where it’s harder to get to employers in person. These could be interesting solutions to access challenges, but we don’t yet know if they work, or whether they’re a good substitute for students being able to go and experience things in person.

– Researcher interviewed for landscape scan



A Call to Action: What the Field Can Do

Coordinated action is needed across funders, policymakers, employers, and practitioners to make career exploration meaningful at scale.

This work is already happening in many pockets across the country. What is needed now is stronger cross-sector coordination and sustained investment that aligns policy, practice, and measurement to deliver high-quality career exploration for every young person navigating a rapidly changing world of work.

Policymakers and state leaders can:

- **Set a clear vision and shared definition for evidence-informed career exploration**, and use their convening power to align districts, intermediaries, employers, and providers around shared goals and developmentally cohesive experiences.⁵⁵
- **Pair expansion of career exploration policies and programs with infrastructure investments** needed for quality implementation, including adequate staffing, dedicated time and training, and resources for partnership management.
- **Advance data systems and protocols** that track implementation, the quality of student experiences, and outcomes. To do this, they can:
 - Build educator and program practitioner capacity for data collection and use.
 - Leverage and connect existing systems — such as Perkins V (the federal CTE law) and postsecondary and workforce reporting — as a foundation for a more comprehensive picture of exploration and its long-term impacts.
- **Align accountability mechanisms and incentives with outcomes** related to high-quality career exploration.

⁵⁵ Britebound and Education Strategy Group have done extensive work on middle school career exploration, including detailed, state-level recommendations that align with the findings of this assessment. See [Extending the Runway: A National Analysis of Middle School Career Exploration](#) (2024) and its accompanying model policy set and joint commitment statement, which offer states specific guidance on definitions, governance, and accountability.

Districts, programs, and intermediaries can:

- **Engage young people and families as partners** in designing programs, defining quality, and setting target outcomes.
- **Integrate exploration into students' school-day and out-of-school experiences**, and prioritize coherence of exploration across grade levels.
- **Build educator and practitioner capacity** with training, coaching, practical tools, protected time, and clear roles for supporting exploration.
- **Partner with community organizations and employers** to expand access to applied and experiential learning, networking, and relationship-building, especially for students with the least access to these opportunities.

Funders can:

- **Lead efforts to build alignment on shared outcomes and measures**, developed collaboratively with young people, practitioners, employers, and researchers.
- **Invest in well-defined, developmentally aligned exploration strategies**, and support building evidence of outcomes and implementation alongside them.
- **Support a comprehensive research agenda that can produce actionable evidence** for policy and practice, including rigorous outcome evaluations, longitudinal studies of student trajectories, and implementation and cost-benefit research.
- **Invest in systems-level infrastructure that sustains program-level work over time**, including data systems, practitioner capacity, and partnership coordination.

Employers can:

- **Prioritize career exploration in middle and high schools as a longer-term investment** in workforce and community development.
- **Co-design partnerships** with schools and programs for sustained engagement.
- **Provide workplace experiences that go beyond exposure** to include reflection, skill-building, and mentorship.
- **Participate in shared evidence-building**, measurement, and data-sharing efforts.



Appendix



1. Methodology

This K-12 career exploration evidence and opportunity assessment was conducted by Project Evident between December 2025 and May 2026, drawing on a review of published research, interviews with people working in the field, and expert roundtables to refine emerging findings.

Literature review. The team reviewed more than 400 publications published between 2000 and late 2025, spanning developmental psychology, career development theory, youth development research, program evaluations, systematic reviews and meta-analyses, descriptive and qualitative studies, survey research, and existing scans that examine how career exploration is defined, delivered, and measured. In assessing the strength of evidence for different types of interventions and practices, the team focused on outcome evaluations (including experimental, quasi-experimental, descriptive, longitudinal, and pre/post studies). While the review is extensive, it is not exhaustive: states, localities, and providers often conduct their own evaluations and case studies, but it was not feasible to identify and assess these across all states.

Field engagement. The team interviewed approximately 50 people across more than 35 organizations, including educators, practitioners, researchers, and state and district leaders. The initial list of interviewees was identified by Walton Family Foundation, Britebound, and Project Evident to capture different perspectives; subsequent interviewees were identified with input from the first round of interviewees. Interviews were designed to contextualize findings from the literature review by comparing them with what people are seeing in schools, districts, states, and youth-serving organizations today and to surface gaps and innovations that are not visible in published research. Notes and transcripts were coded thematically. The sample was built through purposive and snowball sampling and is not representative of all perspectives in the field.

Expert roundtables. The team convened one in-person, cross-sector roundtable and one virtual, research-focused roundtable to discuss the components of effective career exploration, to validate the gaps and priorities identified through the assessment, and to prioritize directions for future investments and learning. Participants were primarily people interviewed for this assessment, along with a small number of additional experts. The team also engaged the State Leaders Career Development Network ([SLN](#)), a national community of practice for state leaders in career development, for input.



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Note: Affiliations reflect roles at the time of the interview.

3. Works Cited and Consulted

- Advance CTE. (2018). *Expanding middle school CTE to promote lifelong learner success*.
- Advance CTE, College in High School Alliance, and Jobs for the Future. (2024). *From fragmented to focused: Intentional dual enrollment and the federal role in maximizing student experiences*.
- Advance Vermont. (2025). *May 2025 career navigation survey: Results & takeaways* [Internal document]. Advance Vermont.
- Advance Vermont. (2026). *How do you want adults to talk about career exploration?* [Takeaways one-pager]. Advance Vermont.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Ali, Y., Rooney, S., & McAlpine, B. (2025). *Strong youth apprenticeship programs, according to youth apprentices*. New America.
- Arnold, K. D., & Mihut, G. (2020). Relating postsecondary outcomes to alternative high school models. *Teachers College Record*, 122(7), 1–44.
- Babarović, T., Dević, I., & Blažev, M. (2020). The effects of middle-school career intervention on students' career readiness. *International Journal for Educational and Vocational Guidance*, 20, 429–450.
- Baker, H. E. (2002). Reducing adolescent career indecision: The ASVAB Career Exploration Program. *The Career Development Quarterly*, 50(4), 359–370.
- Bell, A. (2026). *Long-run effects of mentors: Evidence from a randomized evaluation linked to tax records* [Working paper]. Georgia State University.
- Berger, A., Turk-Bicakci, L., Garet, M., Knudson, J., & Hoshen, G. (2014). *Early college, continued success: Early College High School Initiative impact study*. American Institutes for Research.
- Berglund, T., Daugherty, L., Hughes, K., Özek, U., & Wolters, N. (2026). *Running a business in high school: Selection into the Virtual Enterprises program* (EdWorkingPaper No. 25-1329). Annenberg Institute at Brown University.
- Bernstein, L., Rappaport, C. D., Olsho, L., Hunt, D., & Levin, M. (2009). *Impact evaluation of the U.S. Department of Education's Student Mentoring Program* (NCEE 2009-4047). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.
- Britebound. (2021). *Mind the gap: How college and career development needs of middle schoolers are going unmet*.
- Britebound. (2025). *Next steps: An analysis of teens' post-high school plans*.
- Britebound. (2026a). *All options on the table: Parent views on postsecondary education and career paths*.
- Britebound. (2026b). *Looking back, moving forward: Middle schoolers turn curiosity into career direction*.



- Britebound and Bellwether Education Partners. (2021). *Working to learn and learning to work: A state-by-state analysis of high school work-based learning policies*.
- Britebound and Education Strategy Group. (2024). *Extending the runway: A national analysis of middle school career exploration*.
- Brookover, D. L. (2024). The Career Development and Social Determinants Framework: An integrative approach. *Professional School Counseling*, 28(1).
- Brunner, E. J., Dougherty, S. M., & Ross, S. L. (2023). *The effects of career and technical education: Evidence from the Connecticut technical high school system* [Working paper].
- Bryant, J. (2022, June 23). Most high schoolers feel pressure to make premature decisions about future. *BestColleges*.
- Canney, M., & Mezera, D. (2020). *CTE playbook 6: Work-based learning*. ExcelinEd / Foundation for Excellence in Education.
- Carnevale, A. P., Campbell, K. P., Cheah, B., Gulish, A., Quinn, M. C., & Strohl, J. (2022). *The uncertain pathway from youth to a good job: How limits to educational affordability, work-based learning, and career counseling impede progress toward good jobs*. Georgetown University Center on Education and the Workforce.
- Chaplin, D., Bleeker, M., & Booker, K. (2010). *Roads to Success: Estimated impacts of an education and career planning program during middle school* (Final report). Mathematica Policy Research.
- Chetty, R., Jackson, M. O., Kuchler, T., Stroebe, J., Hendren, N., Fluegge, R. B., . . . Wernerfelt, N. (2022). Social capital I: Measurement and associations with economic mobility. *Nature*, 608(7921), 108–121.
- Cohen, M. D., Therriault, S., Scala, J., Lavinson, R., & Brand, B. (2019). *Afterschool programming as a lever to enhance and provide career readiness opportunities*. College & Career Readiness & Success Center at American Institutes for Research.
- Cohodes, S. R., Ho, H., & Robles, S. C. (2024). *STEM summer programs for underrepresented youth increase STEM degrees* (NBER Working Paper No. 30227). National Bureau of Economic Research.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(Suppl.), S95–S120.
- College Board. (2024). *Career and skill-building survey* [Conducted by Morning Consult, September 2024]. College Board.
- Condliffe, B., Quint, J., Visser, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, E. (2017). *Project-based learning: A literature review* (Working Paper). MDRC.
- Connections Academy. (2024, July 15). *New Connections Academy report shows positive school/life balance sets students up for success*.
- Covacevich, C., Mann, A., Santos, B., & Champaud, J. (2021). *Indicators of teenage career readiness: An analysis of longitudinal data from eight countries* (OECD Education Working Papers, No. 258). OECD Publishing.



- Cuevas, E., & Sileo, A. (2025). *State policy actions for expanding career navigation and personalized guidance for young people*. Jobs for the Future.
- Dougherty, S. M. (2018). The effect of career and technical education on human capital accumulation: Causal evidence from Massachusetts. *Education Finance and Policy*, 13(2), 137–166.
- DuBois, D. L., Herrera, C., Rivera, J., Brechling, V., & Root, S. (2025). *Randomized controlled trial of the effects of the Big Brothers Big Sisters Community-Based Mentoring Program on crime and delinquency: Four-year findings*. University of Illinois Chicago.
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12(2), 57–91.
- Edmunds, J. A., Unlu, F., Furey, J., Glennie, E., & Arshavsky, N. (2020). What happens when you combine high school and college? The impact of the early college model on postsecondary performance and completion. *Educational Evaluation and Policy Analysis*, 42(2), 257–278.
- Eshelman, A. J., & Rottinghaus, P. J. (2015). Viewing adolescents' career futures through the lenses of socioeconomic status and social class. *The Career Development Quarterly*, 63(1), 10–25.
- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance*. University of Chicago Consortium on Chicago School Research.
- Gallup and New Hampshire Learning Initiative. (2025). *Harnessing opportunity: The case for career-connected learning in middle school*. Gallup.
- Gallup and Walton Family Foundation. (2025). *Walton Family Foundation–Gallup voices of Gen Z study: Year 3 annual report*. Gallup.
- Gallup, Walton Family Foundation, and Jobs for the Future. (2025). *Known unknowns: Gen Z's limited awareness of non-college pathways*. Gallup.
- Garcia, E. A., McWhirter, E. H., & Cendejas, C. (2020). Outcomes of Career Information System utilization among first-year high school students. *Journal of Career Development*, 48(5), 688–703.
- Gelber, A., Isen, A., & Kessler, J. B. (2016). The effects of youth employment: Evidence from New York City lotteries. *Quarterly Journal of Economics*, 131(1), 423–460.
- Gibson, H. L., & Chase, C. (2002). Longitudinal impact of an inquiry-based science program on middle school students' attitudes toward science. *Science Education*, 86(5), 693–705.
- Godbey, S., & Gordon, H. R. (2019). Career exploration at the middle school level: Barriers and opportunities. *Middle Grades Review*, 5(2).
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545–579.
- Guryan, J., Christenson, S., Curhan, K., Engel, M., Lai, I., Ludwig, J., & Bhatt, M. P. (2020). *The effect of mentoring on school attendance and academic outcomes: A randomized evaluation of the Check & Connect program* (NBER Working Paper No. 27661). National Bureau of Economic Research.



- Heller, S. B. (2022). When scale and replication work: Learning from summer youth employment experiments. *Journal of Public Economics*, 209, 104617.
- Hemelt, S. W., Lenard, M. A., & Paepelow, C. G. (2019). Building bridges to life after high school: Contemporary career academies and student outcomes. *Economics of Education Review*, 68, 161–178.
- Herrera, C., DuBois, D. L., Heubach, J., & Grossman, J. B. (2023). Effects of the Big Brothers Big Sisters of America Community-Based Mentoring Program on social-emotional, behavioral, and academic outcomes of participating youth: A randomized controlled trial. *Children and Youth Services Review*, 144, 106742.
- Herrera, C., Grossman, J. B., Kauh, T. J., Feldman, A. F., McMaken, J., & Jucovy, L. Z. (2007). *Making a difference in schools: The Big Brothers Big Sisters school-based mentoring impact study*. Public/Private Ventures.
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Psychological Assessment Resources.
- Hossain, F., Keough, G., & Rhoads, G. (2025). *Career pathways evidence gap assessment*. Project Evident.
- Junior Achievement USA and Citizens. (2025). *Teens & the future of work* [Survey conducted by Wakefield Research, July–August 2025]. Junior Achievement USA.
- Karcher, M. J. (2020). *Ten-year follow-up on the RCT study of Mentoring in the Learning Environment (SMILE): Effects of the Communities in Schools mentoring program on crime and educational persistence* (Document No. 254619). U.S. Department of Justice, Office of Justice Programs.
- Kashefpakdel, E. T., & Percy, C. (2016). Career education that works: An economic analysis using the British Cohort Study. *Journal of Education and Work*, 30(5), 217–234.
- Kazis, R. (2016). *Research on career pathways* [Issue brief]. MDRC.
- Kemple, J. J., & Willner, C. J. (2008). *Career academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. MDRC.
- Kovach, W. E. (2018). *The effects of a career development intervention on the career aspirations of middle school students* [Doctoral dissertation, Purdue University].
- Krajcik, J., Schneider, B., Miller, E., Chen, I.-C., Bradford, L., Bartz, K., Baker, Q., Palincsar, A., Peek-Brown, D., & Codere, S. (2021). *Assessing the effect of project-based learning on science learning in elementary schools*. Michigan State University.
- Kuehn, D., Payne, J., Trutko, J., & Trutko, A. (2023). *Youth apprenticeship in the United States* (Apprenticeship Evidence-Building Portfolio). Urban Institute; U.S. Department of Labor.
- Kutlu, A., & Bedel, A. (2021). Effect of career days on high school students' irrational beliefs about career choice and on decision making skills about career. *Participatory Educational Research*, 8(4), 454–467.
- Lass, K., Walsh, S., Burgess, K., Levin, J. K., & Jenner, E. (2025). *Evaluation of Achievement Mentoring (AM): Final evaluation report*. The Policy & Research Group.



- Lauen, D. L., Barrett, N., Fuller, S., & Janda, L. (2017). Early colleges at scale: Impacts on secondary and postsecondary outcomes. *American Journal of Education*, 123(4), 523–551.
- Legum, H. L., & Hoare, C. H. (2004). Impact of a career intervention on at-risk middle school students' career maturity levels, academic achievement, and self-esteem. *Professional School Counseling*, 8(2), 148–155.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79–122.
- Lindsay, J., Bleiberg, J., Blake, W., Kempf, A., Kim, A. Y., Lark, B., Malkus, N., Mann, B., & Porter, K. (2024). *What we know about the impact of career and technical education: A 2024 systematic review*. CTE Research Network.
- Mann, A., Benzecry, G., Chambers, N., Huddleston, P., Hughes, D., & Percy, C. (2026). *Work experience: Past, present, future*. Education and Employers Charity.
- Mann, A., Denis, V., & Percy, C. (2020). *Career ready? How schools can better prepare young people for working life in the era of COVID-19* (OECD Education Working Papers No. 241). OECD Publishing.
- Mann, A., Kashefpakdel, E. T., Rehill, J., & Huddleston, P. (2020). *Dream jobs? Teenagers' career aspirations and the future of work*. OECD Publishing.
- Maxwell, N., Bellotti, J., Schochet, P., Burkander, P., Whitesell, E., Dillon, E., Inanc, H., Geckeler, C., & González, R. (2019). *Building college and career pathways for high school students: Youth Career Connect impact findings report*. U.S. Department of Labor.
- Merrill, L., Cole, R., Soltani, J., & Kang, D. (2017). *iMentor's College Ready Program: Examining implementation and impacts for 10th graders*. NYU Steinhardt Research Alliance for New York City Schools.
- Mindham, J., & Schultz, D. (2020). The impact of youth apprenticeship and employability skills programs on career & technical education concentrator-completer post-graduation outcomes. *Career and Technical Education Research*, 44(3), 3–13.
- Modestino, A. S., & Paulsen, R. (2023). School's out: How summer youth employment programs impact academic outcomes. *Education Finance and Policy*.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38(1), 30–38.
- National Academies of Sciences, Engineering, and Medicine. (2025). *The future of youth development: Building systems and strengthening programs*. The National Academies Press.
- National Center for Education Statistics. (2024). *Back-to-school statistics* (Fast Facts No. 372). U.S. Department of Education, Institute of Education Sciences.
- New Skills Ready Network. (2025). *Transforming youth career pathways*.
- Nye, C. D., Su, R., Rounds, J., & Drasgow, F. (2012). Vocational interests and performance: A quantitative summary of over 60 years of research. *Perspectives on Psychological Science*, 7(4), 384–403.



- OECD. (2021a). *Career conversations: Why it is important for students to talk about their futures in work with teachers, family and friends* (OECD Education Policy Perspectives No. 42). OECD Publishing.
- OECD. (2021b). *Experiencing the workplace: The importance and benefits for teenagers* (OECD Education Policy Perspectives No. 45). OECD Publishing.
- OECD. (2021c). *How youth explore, experience and think about their future: A new look at effective career guidance*. OECD Publishing.
- OECD. (2022). *Getting the most out of employer engagement in career guidance* (OECD Education Policy Perspectives No. 36). OECD Publishing.
- OECD. (2023). *Career talks with guest speakers: A guide to delivering an effective career development activity*. OECD Publishing.
- OECD. (2024a). *Digital technologies in career guidance for youth: Opportunities and challenges* (OECD Education Policy Perspectives No. 18). OECD Publishing.
- OECD. (2024b). *Teenage career uncertainty: Why it matters and how to reduce it* (OECD Education Policy Perspectives No. 16). OECD Publishing.
- OECD. (2025). *The state of global teenage career preparation*. OECD Publishing.
- Orthner, D. K., Jones-Sanpei, H., Akos, P., & Rose, R. A. (2013). Improving middle school student engagement through career-relevant instruction in the core curriculum. *The Journal of Educational Research*, 106(1), 27–38.
- Phillips, B., Mulhern, C., Hutchins, B. C., & Edmunds, J. A. (2024). *Implementation and impacts of career-focused advising* (EdWorkingPaper No. 24-1005). Annenberg Institute at Brown University / UNC Greensboro.
- Policy Studies Associates. (2010). *Citizen Schools: Achieving high school graduation. Citizen Schools' youth outcomes in Boston*. Policy Studies Associates.
- Porfeli, E. J., Lee, B., Vondracek, F. W., & Weigold, I. K. (2011). A multi-dimensional measure of vocational identity status. *Journal of Adolescence*, 34(5), 853–871.
- PowerSchool. (2024). *2024 Naviance student survey: Perspectives on college, career, and life readiness*.
- Raposa, E. B., Rhodes, J., Stams, G. J. J. M., Card, N., Burton, S., Schwartz, S., Sykes, L. A., Kanchewa, S., Kupersmidt, J., & Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence*, 48(3), 423–443.
- Robinson, B., Baxter, M., Squire, J., & Mann, S. (2025). *Scaling what works: Lessons on creating a career-connected learning ecosystem from four leading states*. Bellwether.
- Rose, R. A., Woolley, M. E., Orthner, D. K., Akos, P. T., & Jones-Sanpei, H. (2012). Increasing teacher use of career-relevant instruction: A randomized control trial of CareerStart. *Educational Evaluation and Policy Analysis*.
- Rudolph, C. W., Lavigne, K. N., & Zacher, H. (2017). Career adaptability: A meta-analysis of relationships with measures of adaptivity, adapting responses, and adaptation results. *Journal of Vocational Behavior*, 98, 17–34.



- Rulf Fountain, A., Gamse, B., Velez, M., Hillard, M., & Cropper, P. (2016). *Evaluation of Citizen Schools' expanded learning time model: Final report*. Abt Associates.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Saavedra, A. R., Liu, Y., Haderlein, S. K., Rapaport, A., Garland, M., Hoepfner, D., Morgan, K. L., & Hu, A. (2021). *Project-based learning boosts student achievement in AP courses*. Lucas Education Research.
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). John Wiley & Sons.
- Shields, K. A., Hutchins, B. C., Reese, K., Fletcher, E. C., & Hughes, K. (2024). *Building robust district work-based learning data collection systems*.
- Solberg, V. S., Wills, J., Redmond, K., & Skaff, L. (2014). *Use of individualized learning plans as a promising practice for driving college and career readiness efforts*. National Collaborative on Workforce and Disability for Youth.
- Song, M., Zeiser, K. L., Atchison, D., & Brodziak de los Reyes, I. (2024). The longer-term impact of the Early College High School model on postsecondary degree attainment. *American Educational Research Journal*, 61(6).
- Stern, D. (1984). School-based enterprise and the quality of work experience: A study of high school students. *Youth & Society*, 15(4), 401–427.
- Storlie, C. A., Albritton, S., Cureton, J., & Byrd, R. (2019). African Americans and Latino male youth perceived strengths in career exploration. *Journal of Counselor Practice*, 10(2), 22–50.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282–298.
- Theodos, B., González, A. C., Hossfeld, H., Galvez, M., & Elias, J. (2023). *Youth apprenticeship in the U.S.: Understanding the landscape*.
- Theodos, B., Pergamit, M. R., Hanson, D., Edelstein, S., Daniels, R., & Srini, T. (2017). *Pathways after high school: Evaluation of the Urban Alliance High School Internship Program*. Urban Alliance.
- Theodos, B., Pergamit, M. R., Hanson, D., Teles, D., Mackenzie-Liu, M., & Rashid, A. (2025). *Long-term evaluation of the Urban Alliance High School Internship Program*. Urban Institute.
- Ting, S. R., Leung, Y. F., Stewart, K., Smith, A. C., Roberts, G. L., & Dees, S. (2012). A preliminary study of career education in middle school. *Journal of Career and Technical Education*, 27(2), 84.
- Torre Gibney, T., & Rauner, M. (2021). *Education and career planning in high school: A national study of school and student characteristics and program offerings* (REL 2022-116). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest.



- Turner, S. L., & Lapan, R. T. (2005). Evaluation of an intervention to increase non-traditional career interests and career-related self-efficacy among middle-school adolescents. *Journal of Vocational Behavior*, 66(3), 516–531.
- Valentine, E. J., Anderson, C., Hossain, F., & Unterman, R. (2017). *An introduction to the world of work: A study of the implementation and impacts of New York City's Summer Youth Employment Program*. MDRC.
- Warner, M., Caspary, K., Arshan, N., Stites, R., Padilla, C., Park, C., Patel, D., Wolf, B., Astudillo, S., Harless, E., Ammah-Tagoe, N., McCracken, M., & Adelman, N. (2015). *Taking stock of the California Linked Learning District Initiative: Sixth-year evaluation report*. SRI International.
- Washington STEM. (2018). *Lessons in career connected learning for youth and young adults: A project of the Washington State National Governors Association Policy Academy on Work Based Learning*. Prepared by Verrenti Consulting for Washington STEM.
- Whiston, S. C., Li, Y., Goodrich Mitts, N., & Wright, L. (2017). Effectiveness of career choice interventions: A meta-analytic replication and extension. *Journal of Vocational Behavior*, 100, 175–184.
- Woo, A., Covelli, L., Sahoo, S. K., & Augustine, C. H. (2026). *How schools and after-school programs can collaborate to support academic alignment* (Report No. RR-A4386-2). RAND Corporation.
- Woolley, M. E., Rose, R. A., Orthner, D. K., Akos, P. T., & Jones-Sanpei, H. (2013). Advancing academic achievement through career relevance in the middle grades: A longitudinal evaluation of CareerStart. *American Educational Research Journal*, 50(6), 1309–1335.