



Executive Summary

For decades, a college degree has been considered the key to unlock economic prosperity in the United States. College degree-holders have, on average, earned higher wages than those without degrees, which has contributed to large and persistent U.S. income inequality.¹ The COVID-19 pandemic, associated economic disruption, and tight labor markets may be upsetting those trends. The college earnings premium appears to be declining for the first time in decades² and, in 2021, 40 percent of recent college graduates were working in jobs that have not require a bachelor's degree.³ Simultaneously, the value proposition of college is beginning to fade in the eyes of many in the American public.⁴ As higher education costs continue to skyrocket and student debt mounts, increasing shares of Americans are reconsidering whether college is truly worth the expense.⁵ Declining college enrollment numbers provide additional cause for caution.⁶

Colleges are being called on by the public to improve economic outcomes for their students. As the public increasingly asks colleges to prove their value, some in the business community question post-secondary institutions' contributions to addressing labor shortages and skill mismatches in occupations of. Likewise, they express concern about the skills system's capability to generate the number of diverse, skilled candidates to help them meet their diversity, equity, and inclusion objectives.⁷ In the wake of this disruption, leaders in the college ecosystem are modernizing long-standing programs and launching new initiatives to improve student connections to the workforce and enhance their career trajectories after college. However, to date, those initiatives have received too little attention both in higher education budgets and public policy priorities. Encouraging educators and policymakers alike to commit more resources to these efforts requires a better understanding of what helps students move from education into good jobs.

In this playbook, we provide a framework to help college better deliver on the American Dream. We create a coherent, comprehensive taxonomy of the landscape of college-to-jobs programs and policies through a review of the existing academic research according to a set of common criteria. With a focus on public two-year and four-year colleges, Minority Serving Institutions and Historically Black Colleges and Universities, we identify 13 "interventions" within the college ecosystem that could be used to ease the transition into good jobs in the workforce.



Interventions

Career coaching

One-on-one counseling between an advisor and a student, which may involve helping students develop career navigation skills and access career information, reviewing job application materials, and connecting students to professional opportunities. Advisors may include career counselors, faculty, alumni, or other trained staff.

Cohort programming

Career-focused learning program structures in which small groups of students are enrolled together in two or more linked courses that connect to specific industries, careers, or fields of study.

Career pathways initiatives *includes meta-majors, guided pathways*

Structured sequences of connected education and training programs that provide students with basic skills and occupational knowledge aligned with industry needs. A basic career pathway model includes multiple entry and exit points that result in stackable credentials, aligned with labor market demands.

Career mentorship programs

Targeted programs that foster personal relationships between college students and college alumni, faculty, staff, or local employers, designed to help students strengthen their ties with industry professionals, grow their knowledge of potential career paths, make informed career decisions, and build their social networks.

Career readiness curriculum

Content that provides instruction, materials, and other support mechanisms to help students gain competencies in career and social skills, including leadership, communication, professionalism, critical thinking, teamwork, and career- and self-development skills. Pedagogy may also include a focus on applied career practices like resume creation or interview preparation.

Experiential learning coursework

Coursework wherein students learn by actively engaging in hands-on, real-world, or simulated real-world projects, either in the classroom or within companies. These projects are intended to provide learners with both 'hard' and 'soft' skills.

Industry-recognized credentials

Certificates, certifications, and licenses that signify the attainment of skills and competencies needed for a career in a given industry or occupational area. These are generally based on standards developed or endorsed by employers or industry associations.



Last-mile bootcamps

Programs in or affiliated with a college that provide accelerated training in a specific skill set, geared towards teaching technical, job-focused skills. The programs are often the crucial final step before students enter the workforce.

Internships

Short-term work experiences that help students gain entry-level exposure and applied experience in a particular industry, field, or organization.

Job shadowing

Informal, short-term, usually unpaid experiences in which students follow and closely observe employees to better understand the day-to-day rigors of their job and company. These may range from one-time experiences to longer term, more regular experiences with a company or specific employee.

Co-ops

Longer-term (1-3 semesters), full-time work-based learning experiences at an organization that align with students' majors, are centrally organized by the college or faculty, and may provide academic credit to the students.

Apprenticeships

Industry-driven training programs that combine paid, on-the-job learning with classroom instruction and result in nationally-recognized, portable credentials. Colleges may co-design curricula, provide academic instruction, or administer and operate the apprenticeship program, in partnership with local businesses.

Subsidized youth employment programs

e.g., summer jobs programs

Publicly-funded initiatives in which students are paid to attend school in the summer or for practicum experiences in non-apprenticeship "learn and earn" models. In other settings, subsidized job programs may include general experiences where students are paid for related classroom and work-based learning experiences.



The College-to-Jobs Matrix

Intervention Dimensions

To help inform future investments, we assess each intervention along four key dimensions:

- ▶ **Prevalence of research** supporting the intervention,
- ▶ **Strength of evidence** that the intervention improves students' economic outcomes,
- ▶ **Prevalence in practice** in the U.S., and
- ▶ **Ease of implementation** for colleges and their ecosystem partners.

Our evaluation is based on an extensive literature and landscape reviewed and summarized in the College-to-Jobs Matrix

Legend

A green circle indicates that an intervention has (1) a substantial body or (2) strong causal research behind it, (3) is prevalent in practice, or (4) is relatively easy to implement. Meanwhile, a red circle indicates that an intervention has (1) little research or (2) weak evidence supporting its economic impacts, (3) is rarely implemented in the United States, or (4) is difficult and resource-intensive to establish and operate. A yellow circle indicates a moderate amount of research and implementation prevalence and feasibility

Intervention Category	Research Prevalence	Research Strength	Implementation Prevalence	Implementation Feasibility
Career coaching				
Cohort programming				
Career pathways initiatives				
Career mentorship Programs				
Career readiness curriculum				
Experiential learning coursework				
Industry-recognized credentials				
Last-mile bootcamps				
Internships				
Job shadowing				
Co-ops				
Apprenticeships				
Subsidized youth employment programs				



Our review of the literature and practice in the field yields several additional insights:

- ▶ **The college-to-jobs ecosystem is poorly aligned, making collaboration among stakeholders difficult and limiting accountability:** Although partnerships between colleges, employers, and government agencies are critical to success, actions are rarely coordinated across sectors. Researchers study interventions as they are designed, which generates research insights that reflect the siloed nature of the workforce ecosystem.⁸ While many colleges are experimenting with new models, research often lags far behind practice, leaving the efficacy of such initiatives unknown. Moreover, employers are often overlooked in the research—even though they play a key role in student economic success. Although all stakeholders share an interest in improving economic outcomes for students, no one is held accountable for ensuring students achieve positive financial outcomes.
- ▶ **College-to-jobs interventions tend to be siloed *within* colleges:** Combining college-to-job interventions—and integrating them across departments—improves their effectiveness. However, few colleges do that well, in large part because it requires significant institutional and cultural change. Instead, the majority of schools offer disjointed career services and career learning opportunities. Students are generally required to seek out and navigate career-connected supports on their own.
- ▶ **Interventions are often implemented inequitably, but there are strategies to improve access and success for underserved students:** Communities of color, particularly Black students, have been underserved by the college-to-jobs ecosystem. Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) are historically under-invested in, despite their outsized contribution to economic mobility for students of color.⁹ In all environments, college-to-jobs interventions must be designed around equity, including through the integration of wraparound services for students and course credit and/or pay for work-based learning.

We also identified key actions that colleges, employers, policymakers, and researchers can take—both individually and in partnership—to improve college-to-job transitions for students.

- ▶ **Colleges must put economic mobility at the center of their mission and hold faculty and departments accountable to this goal.** This includes aligning courses and majors with in-demand, high-paying careers, integrating experiential learning opportunities into coursework, and providing for-credit or paid opportunities for career learning. Colleges should create a “go-to” place for employers to engage with the institution and student body. College leadership ought to actively participate in regional economic decision-making bodies, like the chambers of commerce. Institutions should also invest in learning and sharing best practices with peer institutions across the country.



- ▶ **Employers must invest in partnerships with postsecondary institutions, community-based organizations, and other employers if they are to escape the risks associated with relying on the 'spot market' for labor.** Employers ought to engage with diverse institutions and other partners in their regions, including community colleges and HBCUs. They should devote resources to career development earlier in the college pipeline, by helping co-design curricula, providing access to career mentors and state of the art equipment and technology. Moreover, they must remove barriers to students gaining in-demand skills by offering structured, paid, career immersion experiences aligned with learning goals.
- ▶ **Policymakers must provide resources to support colleges' career missions.** Colleges should be assessed on students' economic outcomes and provided with the necessary resources to promote student success. Both federal and state policymakers should emphasize transparency to incentivize institutions to improve their performance, including through the College Scorecard. Federal policymakers should consider reforming postsecondary funding to focus on career outcomes. For example, the population of institutions eligible for Title IV Federal funding could be expanded to include partnerships with employers providing appropriate training, with safeguards to avoid abuses. Policymakers should also renew efforts to advancing equity by expanding appropriations for HBCUs and MSIs with the purpose of building on growing corporate commitments to DEI. State policymakers must support student services at colleges and incentivize regional cross-sector partnerships, while improving longitudinal data systems to track economic outcomes—to ensure colleges are meeting economic mobility goals.

Higher education leaders, employers, policymakers, and researchers each can play an integral role in reimagining how college can deliver on pathways to career success for all students. To fulfill the economic promise of college, these stakeholders must embrace a shared definition of success and focus collectively on achieving it.