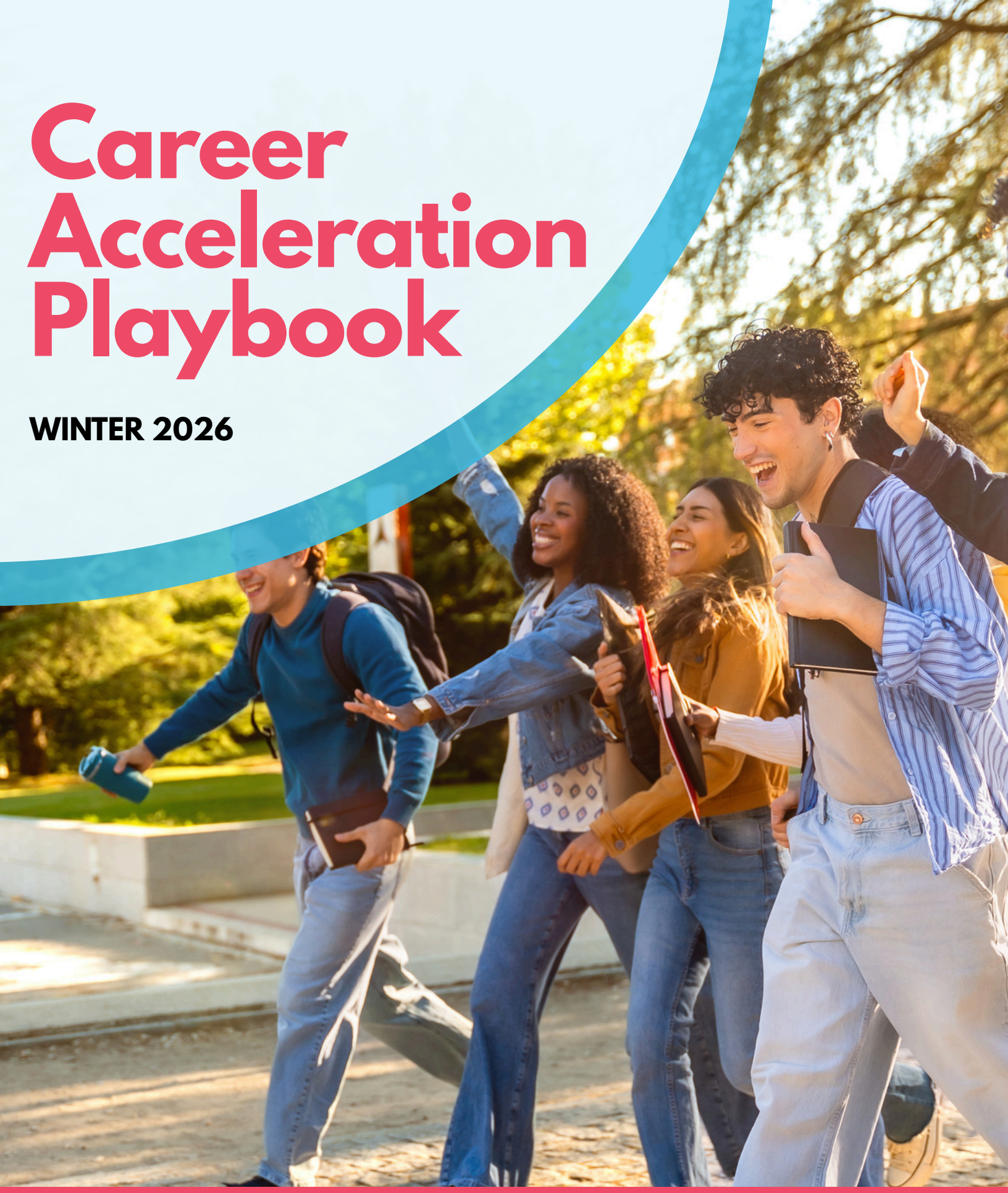
Career Acceleration Playbook

WINTER 2026



College Promise

College Promise Career Acceleration Playbook

John Barnshaw, Senior Leader
Jennifer Gu, Research Intern

Table of Contents

Section 1: Purpose and Overview of the Career Acceleration Playbook

Purpose of the Career Acceleration Playbook

The **Career Acceleration Playbook** is a practical guide for Promise program leaders and practitioners to strengthen connections between students, their educational institutions, and the workforce. The Playbook provides actionable tools and labor market insights that can empower students to explore career pathways while in college, and prepare them for long-term success.

The **central goal of the Playbook is to equip Promise leaders with strategies to support both traditional and adult learners as** they navigate often non-linear pathways from college to career. Like a sports playbook, not every strategy is meant to be used at once; rather, **the intent is to build awareness of the full range of options available so leaders can select and apply the approaches that best fit their students, institutions, and communities.** Another goal of this playbook is for you to be able to explain concepts and information to others in a straightforward manner. Thus, while you may have heard of many of these concepts before, the aim is for you to feel comfortable to explain this content simply to others.

Upon completion of the Playbook, leaders and practitioners will gain:

- ***Labor Market Literacy.*** A foundational understanding of the labor market and its key components.
- ***College-Career Insights.*** Greater awareness of how students choose their majors and strategies to guide them toward opportunities aligned with labor market demand.
- ***Economic Mobility Strategies.*** Key insights into factors shaping economic mobility and strategies to help students access greater economic opportunities.
- ***Approaches to Talent Connections.*** Practical approaches to build partnerships that connect students and educational institutions with local and regional workforce needs, and in so doing, strengthen both student success and community prosperity.

Read this First!

While there is a lot of content in this Playbook, which can seem overwhelming, the most important thing to remember is that as a Promise leader or practitioner, ***you are uniquely positioned to help students on their journey to economic prosperity!***

Traditional sources of career guidance are frequently underutilized by students. Nearly all faculty (92%) —who often serve as students' closest mentors— report being approached by students for career advice, yet only 64% feel confident guiding students on career pathways outside academia (Gatta et al., 2024). Similarly, while career centers exist on nearly every college campus, last year, over 71% of undergraduates visited their career center only once or not at all, limiting the impact of comprehensive career support for students (National Association of Colleges and Employers, 2024).

If you know nothing about the labor market or economic mobility, read this Playbook, and upon completion, you should be ready to have conversations about a host of topics with Promise students. Along the way, there are discussion questions to guide you on our journey together.

Overview of the Career Acceleration Playbook

Following this brief overview, the Career Acceleration Playbook is organized into quick-reference sections, offering both topic-specific guidance and a broader orientation of key factors in connecting education and the workforce—a growing priority in higher education.

- **Section 2**: Provides an overview of the labor market and the importance of skills—an essential yet often overlooked area in higher education.

- **Sections 3–8**: Demonstrates how to apply workforce skills in areas such as internships, talent connections, career conversations, and building community partnerships beyond higher education.

- **Section 9**: Introduces the Career Acceleration Tool, providing an overview of key product features.

- **Section 10**: Concludes with a summary of key takeaways, tying crucial elements of the Playbook together.

Factors Shaping College and Career Opportunities

College and career opportunities are not simply determined by individual interests or ambition—they are profoundly shaped by socio-historical factors, student knowledge and decision-making, and labor market demand for college-educated workers. Each of these dimensions reveals the interplay between higher education, individual agency, and the evolving needs of the workforce.

Socio-Historical Factors. For the first 250 years of higher education in the United States, most people who could attend college generally had a job in their vocation upon completion of their degree (Thelin, 2019). However, at the turn of the twentieth century, vocation bureaus emerged to help new immigrants find work aligned to their occupation (Dey and Cruzvergara, 2014). Following World War II, the GI Bill opened higher education for millions of returning veterans, marking the emergence of job placement centers that later evolved into career counseling services (Geiger, 2015). These centers evolved to provide career planning and counseling for those in emerging majors and occupations of the 1970s and 1980s (Dey and Cruzvergara, 2014).

The Internet revolution marked another turning point with online accessibility and labor market data systems. The Internet, social media, and the availability of high-quality labor market information have transformed career centers into networking hubs that engage hiring organizations to recruit their students and build talent connections between educational institutions and employers (Dey and Cruzvergara, 2014). In each period, access to higher education expanded, but so did the complexity of navigating pathways from education to employment. Today's students face an increasingly complex labor market compared to prior generations.

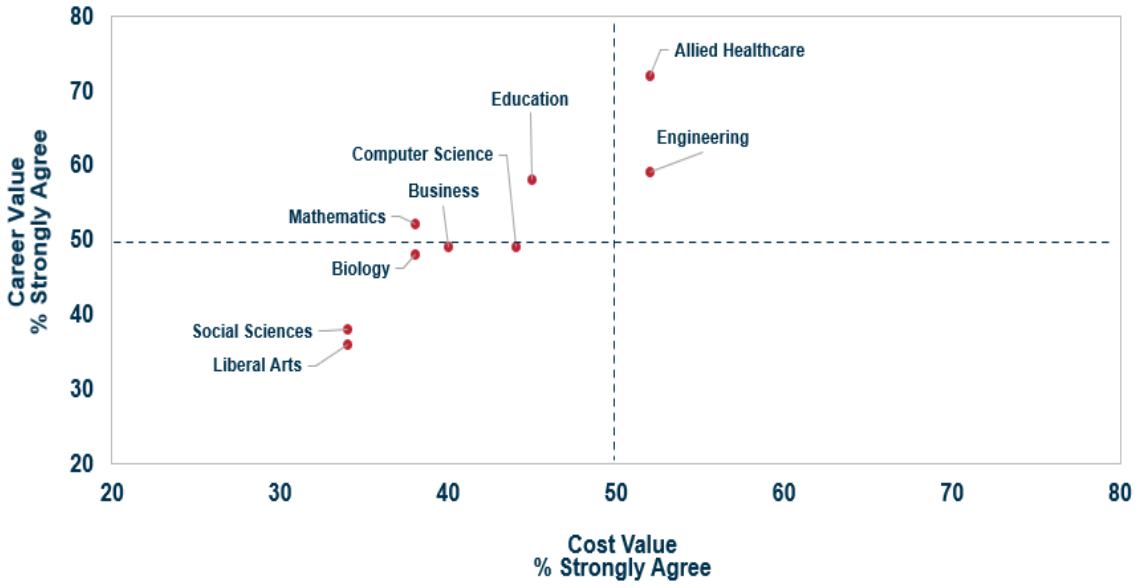
Student Knowledge. College students receive countless messages about "following your passion" or "doing what you love" (Stebleton, 2019). Often, students internalize these

messages, selecting a major that closely aligns with their personal interests rather than career outcomes. More than four-in-ten (43%) students select their majors based on "personal passion or interest," compared to just 17% who prioritize career prospects and 13% who focus on salary (Carlton, 2024; Forbes Advisor, 2024). Similarly, the National Survey of Student Engagement (2024) found that while 89% of seniors emphasized the importance of academic interest and fit, fewer seniors considered career mobility (59%), job availability (55%) or salary potential (52%) as important factors.

The tendency to focus on "following your passion" often creates a disconnect between what students value when choosing majors and the realities of the labor market. The Strada-Gallup Education Consumer Value Survey (20219; 2021) found that American adults, including alumni aged 18-65, saw greater career and cost value in their education on average if their majors were closely connected to jobs. As Figure 1 indicates, occupations like Healthcare, Engineering, and Education are closely associated with education being both worth the cost and providing strong career value. Other majors, such as Social Sciences and Liberal Arts and Sciences, were associated with significantly less career and cost value. Essentially, most Americans feel that their education was worth the cost if they are able to see how it directly advanced their careers. However, when it is time for students (typically freshmen and sophomores) to choose their majors in college, job opportunities and salary are not the main criteria that they consider while making their decisions.

Figure 1: Selected Occupations and the Perception of Career and Cost Value by Respondents, United States, 2021

S



Source: Strada Education Network, 2021

While personal fulfillment is important, not all majors provide abundant or financially sustainable opportunities. Unfortunately, by the time many students realize the limited prospects of their chosen major, it is often too late to change paths.

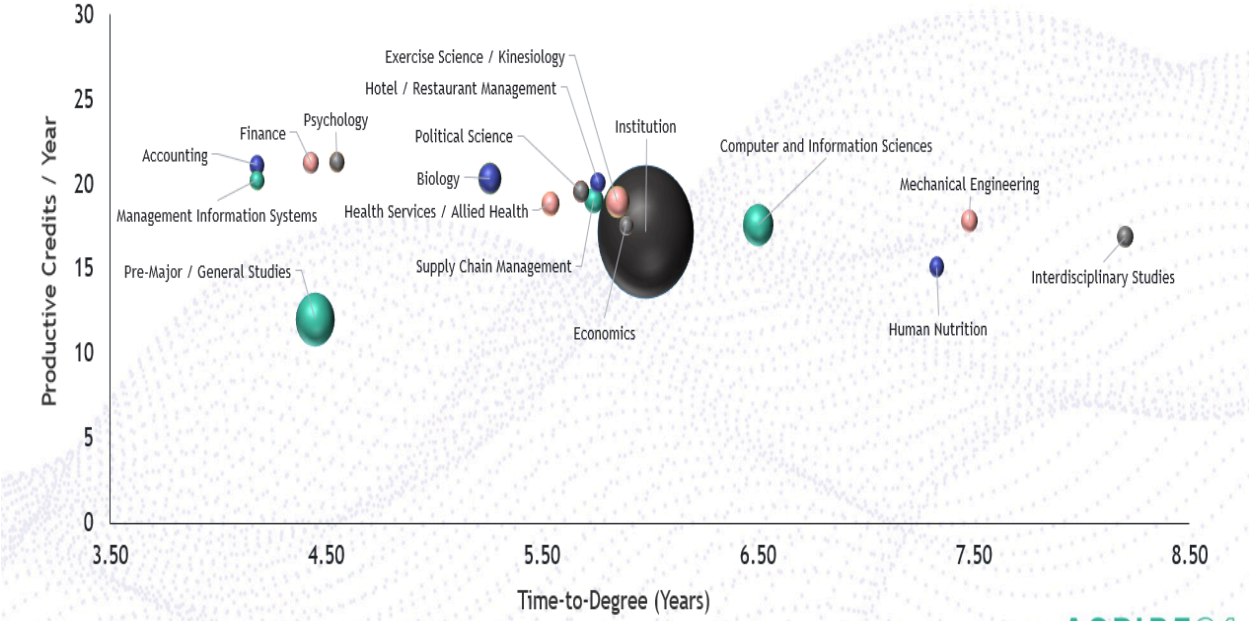
Therefore, the **early years of college for students are critical**. Students must understand that their choices may carry long-term consequences for economic opportunity. While higher education encourages exploration and provides a wealth of academic options, Promise programs can play a vital role in helping students connect their passions with viable and economically career pathways. When students are equipped with timely labor market insights, they are better positioned to make choices that serve their futures in sustainable and meaningful ways.

Demand for College-Educated, Early Career Workers. Since the founding of American higher education in 1636, the demand for college-educated workers has strongly shaped patterns of enrollment and completion (Thelin, 2019). This demand, however, has fluctuated with broader economic conditions. For example, college attendance declined during the Great Depression, not simply because of demographics, but due to a lack of available jobs. Less than a decade later, the post–World War II economic expansion—fueled by the GI Bill and robust labor demand—reversed this trend, drawing millions of students into higher education (Geiger, 2015). These patterns underscore that the decision to attend college is not solely individual; it is profoundly influenced by the likelihood that the time and expense will yield a meaningful return.

At the student level, challenges also emerge in the time required to earn degrees. At many four-year institutions of higher education, it is not uncommon for the average student to take 5.75 years to graduate. In some academically rigorous majors with fixed pathways like Computer Science (Computer Information Sciences) the average time-to-completion is longer still at 6.50 years (Barnshaw, 2021). While much of the delay may be explained by students switching majors whether due to performance or preference, some of the delay may be explained by students not having a firm understanding of what to study when they begin their academic journeys, leading students to switch fields later in their college journey. Research from the Community College Research Center (2021) shows that students who delay selecting a major often accumulate credits that do not count toward degree completion, further delaying completion.

The lack of understanding of the labor market is an opportunity for Promise programs to aid their students before they spend too much time struggling to figure out “what not to do,” or worse, leave higher education with “some college, no degree.”

Figure 2: Bubble Plot by Productive Credits Per Year, and Students, United States, 2021



What social science surveys and our work with more than a thousand institutions of higher education has concluded is that many students progress through higher education without a clear understanding of the labor market. Knowledge of in-demand skills, occupational pathways, and workforce expectations are essential not only for choosing a major, but also for seeking internships, building networks, and developing competencies that translate into meaningful work. Labor Market Information (LMI) provides a critical resource for students navigating these decisions. By integrating LMI into advising and career preparation, Promise programs can help students align academic choices with real opportunities, shortening time-to-degree while improving post-college outcomes.

The Value of Providing Labor Market Information to Students

Access to labor market information (LMI) empowers students to make more informed and strategic decisions about their academic and professional paths. Prior to entering higher education, students can use LMI to explore the range of opportunities associated with different fields of study, helping them align early choices with long-term goals.

During college, understanding the labor market becomes even more critical. While higher education equips students with specialized knowledge, research shows that only 34% of graduates feel prepared for the labor market (Gallup, 2021). This gap highlights the need for better integration of real-world labor insights into advising and curriculum.

LMI helps students answer essential questions:

- What is the number of people employed in a given occupation? (Size)
- What companies are hiring for occupations in this region or state? (Staffing)
- What can an employee expect to earn in a given occupation? (Salary)
- What are the knowledge and skills required to be successful in an occupation? (Skills)

Unlike classroom-based learning alone, leveraging labor market insights can prepare students by providing a roadmap for building relevant skills, pursuing high-demand opportunities, and developing professional networks—all of which are essential to becoming competitive workforce candidates.

Through the Career Acceleration Tool (CAT see Section 8), Promise programs can embed LMI into college and career supports, preparing their students in ways that not only enhance Promise program outcomes, but also strengthen economic mobility in a community by aligning educational pathways with employment opportunities.

The Value of Providing Labor Market Insights through Promise Programs

Students need clear, accessible information about the labor market to make informed choices during college. Promise programs are uniquely positioned to provide this guidance early, helping students understand the opportunities tied to their educational and career decisions.

Addressing Gaps in Career Services Support. While career centers exist on nearly every college campus, they are often underutilized. In 2024, over 71% of undergraduates visited their career center only once or not at all, making it difficult to deliver comprehensive career support to students (National Association of Colleges and Employers, 2024). Faculty—who often serve as students' closest mentors—face similar challenges. Nearly all faculty (92%) report being approached by students for career advice, yet only 64% feel confident guiding students on career pathways outside academia (Gatta et al., 2024). Although students may have access to faculty and career centers, these resources are either underutilized or insufficiently equipped to provide robust labor market support.

Promise Programs: Positioned to Lead. Since Promise programs often begin working with students prior to the start of their college enrollment, often by helping them complete the FAFSA, their early entrance into the college student journey offers a great opportunity to fill this gap left by career services and faculty. For students, Promise programs serve as a trusted partner who can provide practical, real-world guidance alongside financial and academic support. For institutions of higher education, Promise programs bring an external perspective on the importance of aligning academic offerings with workforce needs. Since many Promise programs have influential community members, often members of the largest employers in a community or region, Promise programs can act as intermediaries that help cultivate talent pipelines between colleges and employers.

Since Promise programs operate at the intersection of students, higher education, and employers, they are a natural partner in the education-to-workforce landscape—helping all parties align around labor market opportunities.

Expanding Beyond Access to Completion and Careers. The past decade has seen a 730% increase in Promise programs. Today, the more than 450 Promise programs nationwide have succeeded in expanding access to higher education for millions of students. However, access to higher education does not guarantee student completion or early career success in the labor market. Today's labor market is rapidly shifting toward a knowledge-based economy, where students' choices about majors, skills, and networks carry increasing weight. To prepare students for these realities, Promise programs must integrate LMI into their support models.

By equipping students with a deeper understanding of workforce trends, Promise programs can guide them toward educational paths that not only provide access to college, but also open doors to economically prosperous careers. In so doing, Promise programs will evolve from gateways to higher education to bridges of education and economic mobility.

Leveraging Labor Market Insights to Strengthen Promise Programs

Promise programs have a unique opportunity to deliver early, trusted guidance on how students' educational choices align with labor market realities. By incorporating LMI into their work, Promise leaders and practitioners can strengthen student outcomes and community impact in three important ways.

Providing Students Guidance Early in their Journey. Promise programs engage with students at critical moments—often before they step foot on campus, while completing the FAFSA, or in their first year of college. This is precisely the time when major and career exploration can be most impactful. Research shows that the earlier students declare and commit to a major aligned with their goals, the greater the likelihood of on-time graduation (Barnshaw, 2021). By delivering clear college-to-career pathways information at this stage, Promise programs can help students avoid costly delays or major changes later in their academic journey.

Filling the Gaps in the College Experience. Higher education often assumes that career services will provide students with labor market training. In reality, the majority of students never fully utilize these resources. In fact, many undergraduates never visit their career center, and those who do typically wait until their final year—when it is often too late to change majors or pivot toward better career opportunities (Van DerZeil, 2021). Among the students they serve, Promise programs often have the trust of Promise students, having guided them through the college access process, with many programs continuing to support students throughout their academic journey. This trust provides a powerful platform to deliver credible labor market insights when students are most open to guidance.

Leveraging Employer and Community Connections. Promise programs also benefit from strong reputations within their local communities. Employers often view Promise programs favorably because they represent both student potential and workforce development. Institutions of higher education are not always perceived as being understanding of employer needs (Gallup, 2019). By cultivating and leveraging these relationships, Promise programs can connect students to internships, apprenticeships, and early career opportunities that align with local and regional workforce demand.

Why Labor Market Insights Matter

Labor market information equips Promise leaders and practitioners with actionable tools for:

- Clarifying the availability of jobs in the community or region.
- Identifying employers that hire in occupations and industries.
- Helping students understand salaries and the long-term implications of their choices.
- Highlighting the skills employers value most.

Perhaps the most important thing to remember for Promise leaders and practitioners is that even a basic conversation about labor market realities represents an improvement for many students, who otherwise may graduate without ever having discussed their career pathways. By integrating these insights into their programming, Promise leaders and practitioners can encourage students to pursue majors, internships, and training that position them for sustainable employment and upward mobility.

Building Alignment Across Stakeholders. Beyond serving students, Promise programs can serve as conveners—bringing together students, academic institutions, and employers. As a more acute understanding of student needs and the labor market evolves, Promise programs can emerge as leaders and well-informed advocates for stronger education-to-workforce connections, adding additional value for students, employers, and communities.

Concluding Thoughts. Over the past decade, Promise programs have earned the trust of students, many colleges and universities, policymakers, and employers. Their unique role in aiding students to and through completion makes them ideal agents for leveraging labor market insights to improve student outcomes and strengthen regional economies. The next step is equipping Promise leaders with the knowledge and tools to confidently provide this guidance and build the networks that turn insights into opportunities.

Section 2: Foundations of Labor Market Information

What is a Labor Market?

A **labor market** is the system where employers seek workers, and individuals seek jobs. At its core, the labor market is the space where labor (knowledge, skills, and effort) is exchanged for compensation (wages, salaries, benefits) from employers. Similar to markets for goods and services, the labor market may be understood as the market for employment.

Van Noy and colleagues (2023) define **labor market information** (LMI) as "employment data by location and occupation, labor supply and demand, earnings, unemployment, and labor force demographics." Essentially, labor market information are data that helps us understand how the labor market operates—who is available to work, what jobs are in demand, what wages are being offered, and how these patterns shift over time.

Understanding the labor market is crucial because it often influences economic, technological, political, demographic and even educational changes in regions, states, and the nation. LMI continuously evolves and helps us understand what jobs are available, which skills are in demand, and where opportunities are located for your students and your Promise program.

Foundational Forces of the Labor Market

At its core, the labor market functions through the interaction of two main forces:

Labor Supply: The pool of people available and willing to work and may include:

- Students entering the workforce for the first time.
- Experienced professionals seeking new opportunities.
- Part-time workers expanding their hours.
- Individuals re-entering the labor force after time away.

Labor supply is shaped by factors, including:

- Population size and demographics (age distribution, migration patterns, retirement rates).
- Education and training levels (certifications, degrees, skills).
- Geographic and occupational mobility, meaning the willingness to move for work or shift industries.
- Worker preferences, such as interest in remote work, flexible schedules, or the willingness to earn less in more passion-aligned occupations or specific industries.

Labor Demand: The need that employers have for workers to fill particular roles. Demand fluctuates, but is often is based on:

- Business growth and industry cycles (retail contraction, healthcare expansion).
- Technological change (automation, AI, and technological impacts on the workforce).
- Policy and regulatory environments (investments in infrastructure, reductions in appropriations supporting sectors such as clean energy, education, or healthcare).

- Regional, national, or global economic trends (trade patterns, supply chain shifts, or recessions).

For example, the recent expansion of AI has fueled demand for large amounts of energy to support data centers. One recent study found that the average electricity demand for a ChatGPT search was 867% greater than that of a Google search (International Energy Agency, 2024). The growth of business in this area, brought about by technological changes, has also influenced the policy and regulatory environments for energy sources such as nuclear and non-renewables like oil.

Labor Market Information v. Labor Market Insights

Occasionally, you may find LMI and insights being used interchangeably. It is important to distinguish between **labor market information (LMI)** and **labor market insights.**

- ***Labor Market Information (LMI)*:** Refers to the raw data—employment levels, wage trends, unemployment rates, industry growth, and workforce demographics. This data is often collected by government agencies (e.g., Bureau of Labor Statistics), state workforce boards, and research organizations.
- ***Labor Market Insights:*** Refers to LMI analysis, interpretation, and application. Insights help explain what the data means for students, educators, employers, and policymakers. For example, knowing that the Information Technology (IT) sector is projected to grow by 15% over the next decade is *information.* Understanding that this translates into a need for data literacy, cybersecurity skills, and programming expertise—and then advising students accordingly—is an *insight.*

For Promise leaders and practitioners, providing insights is critical. Accessing and understanding LMI and generating insights allows you to translate raw data into actionable guidance for students, ensuring that academic choices are aligned with future economic opportunities.

The labor market is the system that connects people to jobs and skills to opportunities. It is central to economic prosperity, workforce planning, and personal career success. Understanding how it works—and where it's headed—helps students, higher education institutions, employers, and communities make informed decisions in a changing world. Now that you have a foundation for understanding how a labor market functions, you can feel well versed on the foundations of what a student should consider for an occupation, and correspondingly the majors that most closely align with those occupations.

Four key facets shape the labor market: *Size, Staffing, Salaries,* and *Skills*. These dimensions provide the essential questions students should consider when deciding on a degree and career pathway.

The Big Four: Facets of the Labor Market

Recall in the previous section that labor market information can help students answer essential questions:

- What is the number of people employed in a given occupation? (Size)
- What companies are hiring for occupations in this region or state? (Staffing)
- What can an employee expect to earn in a given occupation? (Salary)
- What are the knowledge and skills required to be successful in an occupation? (Skills)

These facets help comprise some of the most important features a student might want to consider for deciding what degree and career to pursue. We will explain each in detail so that you can be well-prepared to aid students in these decisions.

Size

Labor market size reflects the overall scale of an occupation and whether it is projected to grow, remain stable, or contract. Large fields—such as health care and education—employ millions and typically offer more stable opportunities, while niche occupations may have smaller, more competitive employment bases.

Why does this information matter? Having insights on whether an occupation is projected to expand or contract is very important to know for students, educators, investors, and policymakers.

For Students: The size of the labor market signals the number of jobs that may be available upon graduation.

For Educators and Employers: The size of the labor market guides program development, hiring plans, internship opportunities, and training investments.

Keys to Remember: The most important thing to convey is that the size of the labor market helps identify if a given occupation is projected to expand, remain constant, or contract.

The labor market is constantly evolving, but by understanding size projections, students can better prepare for their future by aligning their education with growing occupations. One of the most important questions students should ask is: "Will there be jobs in my chosen field by the time I graduate?"

For example, health professions such as Registered Nurses and Physicians generally maintain steady or may increase with the large number of retirements coming in the next decade. By contrast, some fields may fluctuate or decline sharply due to AI and emerging technologies. Understanding these patterns helps students not only select majors that match their interests, but also ensures those choices lead to economically prosperous careers.

Ultimately, examining consistencies and shifts in labor market size gives students the foresight to pursue careers that balance personal fulfillment with strong employment prospects.

Staffing

Staffing refers to what employers may be hiring in a labor market. This includes understanding the largest employers in a region, the organizations that consistently recruit for particular degrees or programs, and the hiring dynamics that reveal whether employers are struggling to find talent.

Why does this information matter? Staffing can help you understand which industries and companies are hiring candidates.

For Students: Staffing data helps students know *where* opportunities exist, *which* employers to connect with early, and *when* occupations typically hire. For example, accountants are recruited heavily from January to March, while elementary and secondary teachers are often hired over the summer. Understanding staffing cycles gives students a head start on preparing for internships and jobs.

For Educators and Employers: Staffing insights may indicate where educational offerings might need to expand or adapt, and which employers may be open to building talent connections through internships, practicums, or apprenticeships.

Keys to Remember: The most important thing for Promise leaders and practitioners to remember is that identifying what industries and employers are most active in hiring helps align education offerings with workforce demand.

If there is an imbalance where there are more jobs, and fewer skilled workers, this could be a good opportunity for students, and a good opportunity for employers to explore talent connections. For example, if a job posting is still active, and has been open for longer than 45 days, particularly for a large sized organization, that could be a strong indicator that the employer, or staffer, is struggling to find talent and that occupation may be a good candidate to reach out about providing an internship or a practicum for students.

Conversely, if there are fewer jobs, and more skilled workers, this could be a good opportunity for you to encourage students to return to school to gain additional skills and to reach out to employers to highlight how Promise students might be a good fit for their needs.

Salaries

Perhaps the single most important factor for fostering and maintaining economic mobility is a student's ability to secure employment in an occupation that offers both a strong starting salary and clear opportunities for long-term career growth. Understanding salaries is foundational to navigating the transition from education to the workforce. Yet, many students do not have an accurate sense of earnings potential across different occupations or majors.

Why does this information matter? If our goal is to expand educational and economic opportunity for Promise students, salary awareness is among the most important tools for advancing prosperity. Salary expectations influence the choice of academic programs, the pursuit of certain career paths, and the ability to plan for life after graduation. Without

reliable information, students may overestimate or underestimate their potential earnings, making it harder to align their education with viable workforce outcomes.

For Students: A recent study (Marinescu et al., 2017) found that when asked to estimate salaries of alumni from various majors, *students were off by an average of 40%*. This gap in understanding can lead to sub-optimal career selection. If students underestimate salaries in a particular field, they may avoid majors that could provide them with stable and economically prosperous opportunities. Conversely, if students overestimate, they risk pursuing programs that leave them disappointed or financially insecure.

Having accurate, accessible information about salaries early in their academic journey, can empower students to make more informed choices about their major and career pathways.

This knowledge may allow them to better:

- **Assess Financial Alignment:** Evaluate whether expected earnings match their financial goals, such as managing debt, supporting a family, or building long-term wealth.
- **Evaluate Trade-Offs Sooner:** Consider the balance between pursuing academic interests ("passion majors") and choosing careers with greater economic stability and upward mobility.
- **Align Skills and Aspirations:** Align personal strengths and professional goals with occupations that provide both personal satisfaction and financial security.

When students are equipped with transparent salary insights, they are better positioned to design career pathways that honor their interests while also ensuring sustainable economic opportunity.

For Educators and Employers: Salary awareness is not only a matter of student planning—it is increasingly central to higher education and the communities served by those institutions.

Recently, as a part of House Resolution 1 (One Big Beautiful Bill Act), many academic programs will be subject to postsecondary outcomes review. Under the law, if the average salary of graduates from an academic program falls below the average salary of high school diploma holders in the region for two of three consecutive years, then the program could lose eligibility for federal student aid. For many public institutions, the loss of federal aid would effectively force program closure. This policy shift underscores the increasing importance of understanding salaries and earnings. In other words, aligning education with labor market outcomes is no longer optional—it is a matter of program sustainability and community prosperity.

Employers also benefit from greater salary transparency. Competitive pay is a crucial factor in attracting and retaining talent, especially in industries struggling with talent shortages. By partnering with Promise programs, employers can communicate realistic salary ranges to students early on, helping to ensure that graduates are prepared for financially viable career paths while employers build pipelines of motivated and informed candidates.

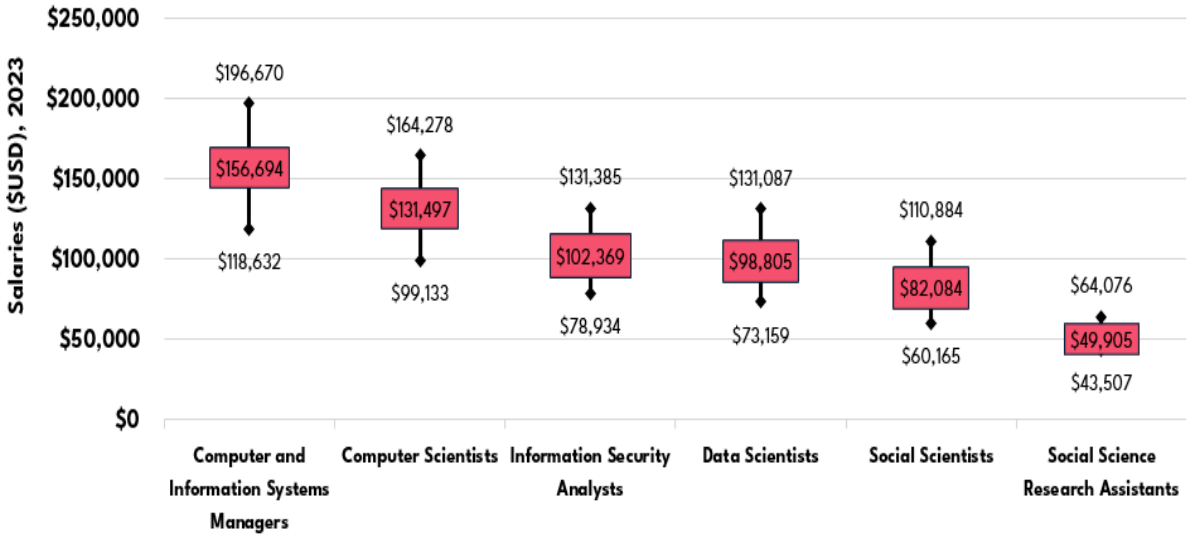
Interpreting Salary Information: A **salary** is a fixed amount of money paid to an employee, typically on a bimonthly or monthly basis, regardless of the number of hours worked. Salaries generally differ from wages, which are a fixed amount paid per hour to an employee. To

compare salaries and wages, one can generally convert the total annual salary of an employee and divide by 2,080 (40 Hours/Week; 52 Weeks/Year) to arrive at the hourly wage.

Most annual salaries are reported by the median, which is preferred over the mean because it is less sensitive to outliers. However, understanding the range of salaries in an occupation—especially the lower quartile, median, and upper quartile—provides students and Promise practitioners with deeper insights.

All salaried occupations have hiring ranges. These ranges result from a variety of factors, but ultimately, this variability may guide one's occupational choices. That is, in order to make decisions about one's career in regard to salary, it is important to examine the median, lower, and upper quartiles (25% cutpoints) of hiring ranges of related occupations. The median salary (50th percentile) is the middle value, or the salary one might expect from a certain occupation. The wider the range, the greater career mobility, while smaller ranges suggest less salary increase in that occupation. It is also important to consider hiring ranges within specific geographic regions, as salary might vary widely from region to region.

Figure 3: Quartile Salary Bands for Selected Occupations, United States, 2023



Consider some of the comparator data available in Figure 3:

- The median salary for Information Security Analysts (someone that works in Cybersecurity), is $102,369 while Data Scientists earn $98,805. While both occupations offer economically prosperous earnings, all things being equal, the Information Security Analysts earn more at both the low-end ($78,934) and the high end ($131,385) of the quartile bands. These differences in earnings add up over time.
- When comparing Computer and Information Systems Managers to Computer Scientists, the additional skills required for management appear worth it as the lower, middle, and upper quartile values are higher (compare upper values of $196,670 to $164,278) to those of the Computer Scientists.

For Promise leaders and practitioners: Salary awareness should not just be about listing average pay—it's about showing students the earning landscape of an occupation: entry-level

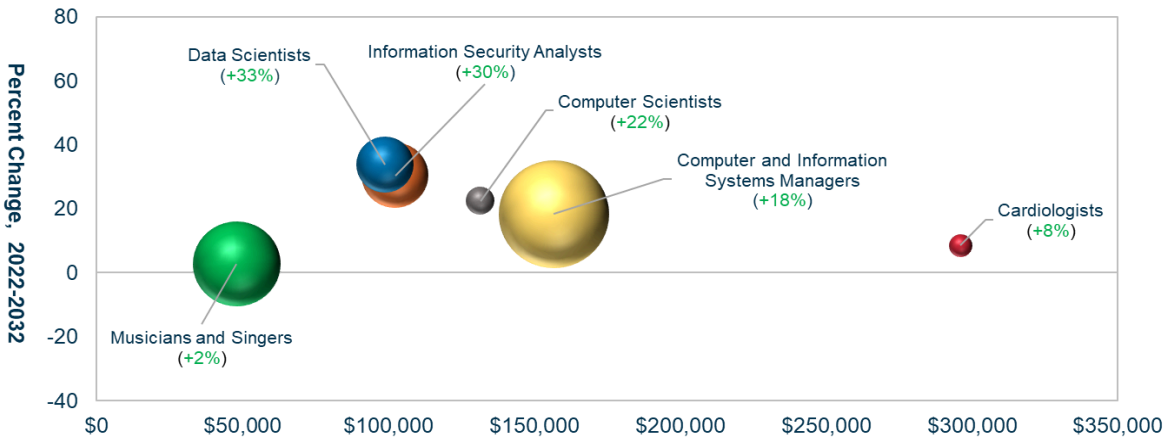
realities and career mobility. By grounding students in a fuller picture, Promise programs can balance personal interests with economic opportunity and ultimately, help students make more informed choices about their majors and career pathways. Information about salaries, skills, and knowledge requirements of nearly every occupation in the United States labor market can be found for free using O*Net (https://www.onetonline.org/), the one-stop for occupational information published by the United States Department of Labor.

Putting The Pieces Together: Thus far, we have explored three key facets of labor markets—*size, staffing, and salaries*—and why they matter for students navigating college-to-career pathways. Combining these factors can provide a fuller picture of the opportunities and challenges in different occupations.

Figure 4 illustrates how the size of the labor market intersects with salaries in several occupations. For example, Cardiologists (red circle) represent a specialized niche occupation within the healthcare sector that is projected to grow 8% between 2022 and 2032, and remains one of the highest-paying occupations in the United States, with median annual salaries exceeding $300,000. Students considering this pathway must balance the small labor market size, highly competitive entry requirements, post-baccalaureate education, and residency with the long-term economic security such a role can provide.

Computer and Information Systems Managers (yellow circle) represent a much larger field, employing more workers than Cardiologists, Computer Scientists, and even Data Scientists. With a projected growth of 18% in the coming decade, and a median salary exceeding $150,000 annually, this occupation combines size, growth, and strong earnings potential. For students, this means broader opportunities, more accessible entry points, and career pathways that scale upward with experience.

Figure 4: Selected Occupations, Salaries, Projected Size, and Percent Change, United States, 2023 - 2033.



Combining insights about labor market size and salaries allows Promise leaders and practitioners to provide students a clearer sense of alignment between their programs of study today and their careers tomorrow. By putting these pieces together, students are better

equipped to choose majors, build skills, and enter the labor market with confidence that their choices are both personally meaningful and economically prosperous.

Keys to Remember: This discussion of salaries covered a lot of ground, but there are three keys to remember that can help students as they prepare for their future careers:

- ***Salary Awareness Shapes Choices.*** Many students do not have an accurate sense of earnings potential across different occupations or majors. In fact, research shows students often misjudge early-career salaries by as much as 40%. Understanding salary expectations early is foundational to navigating the transition from education to the workforce.
- ***Look Beyond the Median.*** The median salary provides a helpful benchmark, but it does not tell the whole story. Examining the full salary range—including bottom and top quartiles—shows both the starting point and the long-term earning potential. A wider range often signals more career mobility and opportunities for advancement.
- ***Not all Occupations are Equal.*** The size of a field, its projected growth, and its salary all vary by occupation. It is important for students to recognize that not all majors or careers provide the same salary opportunities. Considering these differences earlier in their academic journey helps students balance passion and practicality in their career choices.

Skills

A **skill** is an individual's ability, knowledge, and expertise that enables them to carry out specific tasks or activities effectively (Lightcast, 2025). Individuals acquire skills through a variety of pathways including:

- ***Formal Education:*** Classroom instruction that is often assessed and awarded in the form of diplomas, certifications, and degree programs.
- ***Training:*** Occupation-specific instruction, workshops, and professional development.
- ***Experiential Learning:*** Practical experiences such as on-the-job training, internships, practicums, and apprenticeships.
- **Informal Education/Competency Education:** Learning or training often through non-institutionalized or formally recognized means often stemming from volunteering, hobbies, community engagement, and self-study.

Why does this information matter? Skills are the building blocks of employability, career advancement, and long-term adaptability in the labor market. Unlike credentials, which signal a general level of competence when associated with the completion of a program or degree, skills reflect what a person can actually do in practice. Skills are among the most transferable currency in the labor market. While job titles, credentials, and technologies may evolve, skills often provide workers with resilience and flexibility that can span occupations and employment sectors.

For Students: Understanding what skills are in-demand helps align their education with the realities of the future of work. Learning in-demand skills can aid an employee in retention or advancement depending upon the organization or employment climate.

For Educators: Mapping curriculum to skills helps ensure program relevance for students, employers, accreditors, policymakers, and communities.

For Employers: Skills are among the strongest signals of job readiness and substantially aid in the talent evaluation process as well as considerations for promotion and advancement.

For Promise Leaders and Practitioners: Moving forward, Promise leaders that ensure Promise programs are not just about access, but also about outcomes, will greatly benefit by training Promise students and embedding skills development into program design. Practitioners can guide students not only on what program to choose, but also on which skills are most advantageous along the way. Simply helping students see the connection between coursework, skill-building and learning, can greatly aid employability.

For Employers: Skills are among the strongest signals of job readiness and substantially aid in the talent evaluation process as well as considerations for promotion and advancement.

Keys to Remember: The most important thing to understand about skills is that they signal what a student or employee can do and are increasing in significance. Skills can substantially aid students, employers, and Promise programs:

- ***Skills: The Currency of the Labor Market:*** Unlike credentials, which signal completion of a program, skills show what a person can *actually do*. Some skills are often transferable across occupations and employment sectors, providing workers long-term resilience and adaptability.
- ***Skills: The Connective Tissue between Education and the Workforce:*** Successful matriculation into the workforce depends on more than completing a program—it requires students to graduate with in-demand skills that employers are actively seeking. These skills are the connective tissue linking education to employment: they ensure that what students learn in classrooms translates into what they can do in the workplace.
- ***Future-Proof Promise Programs through Skills:*** For Promise leaders and practitioners, focusing on skills strengthens educational connections, employer partnerships, and student outcomes. Promise programs that emphasize skill-building—whether mentoring students, experiential learning opportunities, or partnerships with employers—help ensure that education is not just about access, but about lasting economic mobility.

Concluding Thoughts: This section explored the meaning of the labor market, the role of labor market information, and the four key facets that shape career decision-making and economic outcomes in the labor market: *Size, Staffing, Salaries,* and *Skills.* Each of these facets provides students, educators, Promise leaders, and employers with essential insights into how education connects to workforce outcomes.

Ultimately, LMI is more than a set of data points—it is a bridge between aspiration and opportunity. By understanding and applying insights about the size, staffing, salaries, and skills in an occupation or the labor market, Promise leaders and practitioners can better prepare students for success, ensure programs remain impactful, and contribute to the economic prosperity of your communities.

Section 2 Discussion Questions

1. What percent of students have one or fewer meetings with career services?

2. What are some ways to transform labor market information to labor market insights? Create a list of guidelines that students may use to interpret labor market information.

3. Given your current knowledge of the labor market, which occupations do you expect to grow? Which do you expect to shrink? Now, do some research on O*Net. How does this change or affirm your initial expectations?

4. Browse through some job boards, looking for postings longer than 3 months old. You may need to narrow down to a specific field first. What do these jobs have in common? Do they share a particular industry or skill? How might these similarities translate into educational offerings or new talent connections?

5. As you're working with students, ask them to estimate the salary range of an occupation they're interested in. How does this compare with O*Net salary metrics? Upon this examination, ask them about the reasoning behind their initial estimation, and discuss why the actual range may be higher/lower/wider/smaller.

6. On O*Net, select an occupation (it's best to choose one applicable to students in your region). Then, using knowledge of your local employers and institution's programs, brainstorm some ways your chosen occupation's in-demand skills may be learned—either through formal education, training, experiential learning, or informal learning.

Section 3: Survey of Work-Based Education and Learning Experiences

Overview

Now that we have an understanding of labor markets—and the four key facets that shape labor market success (size, staffing, salaries, and skills)—it is important to turn our attention to the pathways that prepare students for greater economic opportunity: work-based education and learning experiences.

While many Promise leaders and practitioners are deeply familiar with expanding access to higher education, perhaps fewer have focused as intently on the experiences that connect education to employment. Recent research (Finley, 2023) among hiring managers found that:

- ***Hands-On Application Matters Most:*** 88% of hiring managers reported that practical, applied learning is crucial in evaluating candidates.
- ***Younger Hiring Managers Prefer Internships and Work-Study:*** Among employers aged 40 and under, 73% considered completing an internship and 71% considered completing a work-study program to be among the most important experiences for new hires. This compares to just 46% who valued collaborating with a faculty member.

Work-based education is also important for students as over 75% of students who participated in a work-based experience said that their experiences helped them improve communication, professionalism, and teamwork skills (National Association of Colleges and Employers, 2024).

Developing work-based education and learning experiences is a crucial area that many students are unfamiliar with until later in their academic journey—often when it is too late to fully participate. By providing an overview here, Promise program leaders and practitioners can purposefully think about how to:

- ***Share information*** about the types and benefits of work-based experiences.
- ***Curate opportunities*** that match educational and occupational areas.
- ***Strengthen alignment*** between academic programs and the labor market.

Opportunities for Promise Programs: Promise programs should actively support work-based education and experiential learning opportunities since they:

- ***Expand Opportunity.*** Promise programs overwhelmingly serve low-income, and often, first-generation students—groups that are historically least likely to participate in internships, practicums, or apprenticeships. Yet these are the very experiences most valued by employers. By actively curating and supporting these opportunities, Promise programs help close opportunity gaps, ensuring students not only graduate but also secure jobs aligned with their education. Without intentional intervention, many Promise students risk completing their degrees without the critical experiences necessary to secure early career employment in a degree-aligned occupation.
- ***Strengthen Student Success through Partnerships.*** Many colleges and employers already have mechanisms that allow nonprofits, such as Promise programs, to participate in connecting students to work-based learning. Promise programs can serve as brokers of opportunity—linking students with employers, leveraging alumni networks, and collaborating with community-based organizations. By engaging in work-based learning opportunities for students, Promise programs can add value

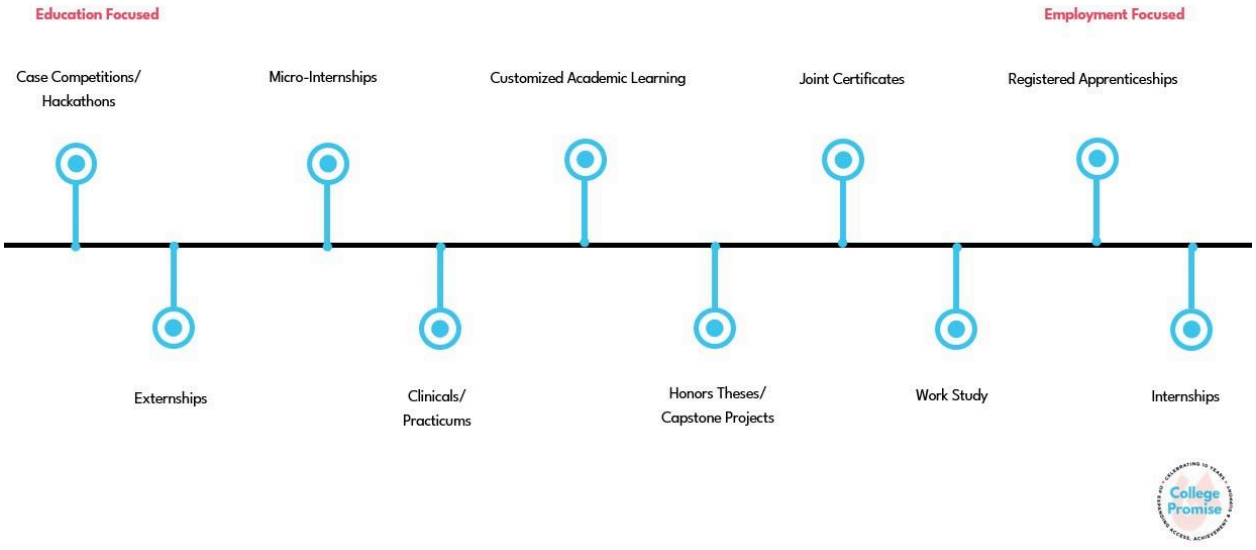
beyond tuition-support to students, while also contributing to student employability and long-term economic mobility.

- ***Build Sustainable Talent Connections.*** Work-based education provides a natural bridge between students, higher education institutions, and employers. For Promise programs, facilitating these connections can strengthen relationships with local industries, chambers of commerce, and community stakeholders. Over time, these ties can lead to new sources of financial support. Promise programs that connect students with employers not only help students launch careers—they also position themselves as trusted partners in regional workforce development that can later aid in financial contributions and support, thereby creating a new form of revenue and reducing Promise program reliance upon appropriations or philanthropic contributions.

Work-Based Education and Learning Experiences for Students

There are ten major work-based education and learning experiences for students: (1) Case Competitions/Hackathons, (2) Externships, (3) Micro-Internships, (4) Clinicals/Practicums, (5) Customized Academic Learning, (6) Honors Theses/Capstones, (7) Joint Certificates, (8) Work Study, (9) Registered Apprenticeships, and (10) Internships. Figure 5 presents these work-based education and learning experiences on a continuum from those predominately focused on education and programs of study to those predominantly focused on employment. While this continuum may vary from one experience to another, it is a useful heuristic for understanding whether the oversight provided to the student is predominately located in education or the workforce. The following sections provide a brief overview of each work-based education and learning experience, and, wherever possible, a relevant example to model for Promise program leaders and practitioners.

Figure 5: Continuum of Work-Based Education and Learning Experiences



Case Competitions/Hackathons

Explanation: Case competitions and hackathons are short-term, high-intensity events where students collaborate to solve real-world problems. These opportunities are typically sponsored by companies or community organizations and last anywhere from 24 hours to a few weeks. Case competitions usually give students weeks to prepare a polished solution to present on a final "pitch day," while hackathons compress the problem-solving process into 24–36 hours of continuous work.

Both formats challenge students to apply their academic knowledge, work under pressure, and practice professional skills such as time management, teamwork, and public speaking. Perhaps most importantly, case competitions and hackathons offer early exposure to industry-level challenges and allow students to showcase creativity and innovation in front of potential employers. For companies, these events serve as early talent connections—providing access to motivated students and fresh ideas. Employers often serve as judges, mentors, or sponsors, making case competitions and hackathons valuable networking opportunities that can lead to internships or other career pathways.

Example: In 2022, Delta Air Lines partnered with the University of Georgia to host the *Delta Design Challenge*. Eight teams of five students each developed strategies to reduce single-use plastic bottles on Delta flights. Students spent weeks preparing before pitching their solutions directly to Delta executives. The competition was part of Delta's broader Student Industry Fellows Program (SIFP), which connects students with local companies on industry-focused projects throughout the semester (Fleenor, 2022). This experience not only allowed students to apply classroom learning to a real sustainability issue, but also gave students a sense that their work had tangible impact, while providing Delta with creative, student-driven solutions.

Externships

Explanation: Externships are short-term, observation-based experiences that typically last anywhere from a single day to several weeks (University of Arizona, 2020). Previously conceived of as a "job shadow program," externships do provide students with an opportunity to shadow professionals, observe daily responsibilities, and gain a behind-the-scenes look at a specific occupation or industry, but often also provide students an opportunity to try routine work as part of the externship. While externships have long been common in professional schools such as medicine or law, they are increasingly expanding into programs like business, journalism, and the social sciences.

Externships often involve attending staff meetings, conducting informational interviews, completing light administrative tasks, or participating in small projects. Perhaps the greatest strength of an externship is career exploration: students can participate in externships to test how their academic interests might translate into specific jobs and assess their fit for particular industries before committing to longer-term work-based experiences. For employers, externships serve as a low-cost, low-commitment way to engage with early talent, build brand recognition, and identify students with potential for future internships or employment.

Example: The Bucknell University Center for Career Advancement connects second-year students with employers for 1-2 day externships focused on career exploration (Wendell, 2020). According to Rachel Redmond, who leads the program, the goal of an externship is "getting exposure to an industry, a company, a job role early in their college career" (Wendell, 2020). At Bucknell University, student externships have included law firms, fashion

enterprises, and businesses. In the span of a few days, students meet with CEOs, learn about emerging technologies, and gain exposure to industry needs. Many students also worked on short, targeted projects—making externships both a networking opportunity and a formative career exploration tool.

Micro-Internships

Explanation: Micro-internships are short-term, project-based work experiences that usually last anywhere from 10 to 150 hours over the course of a week or months. Unlike traditional internships, they do not require a full semester of commitment and are often designed to fit within a student's existing academic schedule. Students work on discrete assignments—such as developing a marketing campaign, conducting research, or analyzing data—that allow them to apply classroom knowledge to real-world problems.

Micro-internships are particularly valuable for students who may not have the time or resources to commit to full-time internships, such as low-income or first-generation students balancing school and work, or student parents balancing family responsibilities. Micro-internships give students the opportunity to build résumé skills, gain professional references, and explore career options in a low-barrier to entry approach. Employers benefit from micro-internships as they provide cost-effective access to student talent, allow organizations to "test drive" potential interns or hires, and help advance access to early career talent.

Example: Parker Dewey is a national platform that connects students to employers for micro-internships, and partners with universities to expand access to these professional experiences. Through their partnerships, students have completed projects in areas including analytics, communications, financial modeling, marketing, human resources, social media management, and product design. Many students at the University of North Carolina at Chapel Hill have taken advantage of micro-internships. Yonas Kemal, a second-year Business Administration and Public Policy student, found that micro-internships were a quick way for him to build networking skills and engage with new industries and roles (Kemal, 2022).

Clinicals / Practicums

Explanation: Clinicals and Practicums are experiential learning opportunities focused in professional settings that are often embedded within a course or offered as standalone courses within an educational program. Clinicals are most common in healthcare-related fields such as nursing, pre-med, or psychology. During clinical rotations, students spend time in hospitals or clinics shadowing healthcare providers, assisting with care, and, in some cases, interacting directly with patients. Practicums, often tied to teacher training or business, are common in upper division undergraduate and graduate programs (Mauer 2021).

Both clinicals and practicums are designed to bridge theory with real-world practice, demonstrating to employers that students have applied skills and are more job-ready upon entering the workforce. Many students ultimately continue working in the schools or healthcare facilities where they completed their clinicals or practicums, making these experiences an important pathway into professional roles.

Example: The UCLA School of Nursing (2025), one of the top nursing schools in the United States, requires students to balance classroom learning with extensive clinical rotations. Nursing students may spend 4–5 days per week in partner hospitals. Students rotate through multiple hospitals to gain exposure to a range of patient populations and medical conditions, which helps them refine career interests while building essential skills. Similarly, education students completing teaching practicums often gain direct classroom management experience, preparing them for immediate employment upon graduation.

Customized Academic Learning

Explanation: Customized academic learning experiences represent opportunities where students blend classroom instruction with applied or independent projects. These tend to be longer in duration than externships or hackathons and often span an entire semester or academic year. They are considered highly education-focused, but with increasing value for employers as signals of persistence, critical thinking, and skill application. Customized academic learning experiences may fall into three broad categories:

- ***Research:*** Students collaborate with faculty, or under faculty supervision, on a project that may involve one or two semesters. Research experience provides students an opportunity to contribute to scholarly work, develop technical and analytical skills, and sometimes present or publish their findings, honing skills and experience generally valued by employers.
- ***Directed Individual Study:*** Students design their own course of study on a topic not currently offered in the curriculum, and generally work closely with a faculty member as mentor. This option provides high levels of academic independence and tailored learning and often can be woven into research that aids a business or non-profit organization.
- ***Internships with Academic Credit:*** Typically semester-long experiences that combine professional work with research, faculty supervision, and written reflection. Internships with credit ensure that students not only gain workplace experience but also link those experiences back to their academic programs.

Research, Directed Individual Studies, and Internships with Academic Credit, all benefit from close mentorship of students by faculty, hands-on learning, and the chance to build transferable skills such as critical thinking, collaboration, and communication. For employers, these experiences demonstrate initiative and meta-skills that are often predictors of long-term career success.
one or

Example: At Johns Hopkins University (2025), students can participate in Customized Academic Learning (CAL) opportunities. Each experience earns one credit per semester (equivalent to 40 hours of work), and students may complete up to three CAL credits per term (Johns Hopkins University, 2025). Students partner with faculty sponsors to shape their experiences, which can include research, individualized study, or credit-bearing internships. Customized Academic Learning programs demonstrate how students translate classroom knowledge into real-world experiences while building strong connections with faculty and employers.

Honors Theses / Capstone Projects

Explanation: Honors theses and capstone projects are culminating academic experiences typically completed in the final year for an undergraduate. Both theses and capstone projects require sustained effort and integration of knowledge gained throughout a course of study, but they differ slightly in focus:

- ***Honors Theses:*** Research projects conducted under the supervision of one or more faculty members. An Honor's Thesis often results in substantial written or creative outputs—such as a 50+ page paper, a performance, or a script—and are defended orally before faculty. These projects strengthen critical thinking, advanced writing, and research skills while showcasing subject-area expertise.
- ***Capstone Projects:*** A research project that emphasizes real-world application. Students may design products, run experiments, create business plans, or develop software. Capstones allow students to apply their classroom learning to modern-day challenges, demonstrating both problem-solving ability and professional readiness.

Theses and Capstone Projects signal intellectual rigor, persistence, and mastery—qualities highly valued by employers and graduate schools. They also provide opportunities for students to present their work at professional or academic conferences, opening doors to networking and career advancement.

Example: At Emory University (2025a), students may apply to the Honors program in their third year if they hold a 3.50 GPA or higher. Accepted students spend their final undergraduate year conducting research under faculty mentorship. In the spring, they must defend their thesis before a committee, and outstanding work may be recognized with departmental honors—such as "high" or "highest" honors—or even university-wide prizes (Emory University, 2025a). Emory further supports students by awarding travel and presentation grants for those invited to present at professional conferences, ensuring that students' work has both academic and practical visibility (Emory University, 2025b).

Joint Certificates

Explanation: Joint certificate programs are collaborative credentials offered by two or more educational institutions, or by an institution in partnership with an employer or industry group. They are designed to bridge academic learning and workforce needs by aligning curriculum with in-demand skills, often in fields such as information technology, advanced manufacturing, healthcare, and business.

Joint certificates are typically shorter, more focused, and explicitly tied to specific occupational competencies. Joint certificates can improve student employment outcomes by pooling faculty expertise, instructional resources, and employer partnerships. They also enhance credibility: a credential backed by multiple institutions (or endorsed by industry leaders) signals broader recognition of skill mastery, particularly at less prestigious academic institutions.

Examples: There are two broad categories of Joint Certificates:

- ***Higher Education Collaborations:*** The University of Texas at El Paso (UTEP) and El Paso Community College (EPCC), enables students to pursue joint certificates in

cybersecurity and data analytics (Hegar, 2025). These credentials are designed with local employers in mind to align directly with regional labor market demand.

- ***Higher Education-Industry Partnerships:*** One of the most prominent examples of higher education–industry partnerships comes from SAS (2025a), an institute for data management and advanced analytics best known for its software suite under the same name. Under this model, faculty commit to teaching a defined number of credit hours using SAS software typically in programs like business analytics, data science, epidemiology, or management and information systems (SAS Institute, 2025b). In turn, SAS engages directly with employers who rely on their tools, helping to connect programs with students who complete a minimum level of SAS coursework with hiring opportunities. Today, there are more than 100 higher education institutions in the United States that offer SAS Joint Certificates (2025c). Building on this successful model, companies, such as Amazon, Google, and Microsoft have since offered similar joint certificates (Western Arizona College, 2025).

Work Study

Explanation: Work Study is a federal financial aid program that provides students with part-time employment opportunities to help cover educational expenses. These earnings can be applied toward tuition, books, transportation, or housing, and students typically participate for one to four years during their enrollment (Federal Student Aid, 2025). Work Study positions generally fall into two main categories:

- ***On-Campus Employment:*** Generally includes employment like tutoring, serving as a teaching assistant, library or lab support, and campus tour guide.
- ***Off-Campus Employment:*** Generally includes employment with a for-profit or non-profit organization, schools, or governmental agencies, often linked to a student's field of study. For off-campus work study employment, the federal share of wages paid to students is limited to 50%. The for-profit organization must provide a nonfederal share of at least 50% (Federal Student Aid, 2025).

For students, Work Student offers more than financial relief—it helps low-income students build transferable skills, gain relevant work experience, and form professional networks early in their careers. For employers, the program provides access to motivated student talent at a lower cost, since the federal government subsidizes up to 50% of Work Study wages (Federal Student Aid, 2025).

Example: In 2017, Pearl Celix, a student at Pima Community College (AZ) pursuing an Associates Degree in Business Administration, quickly realized that she could not balance her full-time job with her course work (Samra and Grammar, 2022). Through the Work Study Programs at Pima Community College, Ms. Celix collaborated with faculty on a project where she learned HTML coding—an unexpected skill that later shaped her career path. After transferring to Northern Arizona University, she graduated with a Bachelor of Business Administration in 2019. Reflecting on her journey, Celix credited the Work Study Program for financial stability and professional growth (Samra and Grammar, 2022).

Registered Apprenticeships

Explanation: Registered Apprenticeships (RA) nationally recognized programs that combine paid employment, on-the-job training, and mentorship with classroom-based instruction. Unlike internships, which are often exploratory, apprenticeships are designed to teach students the full scope of an occupation. They are "registered" with the United States Department of Labor (2025a) or a state apprenticeship agency, meaning they must meet national standards for program design, quality, and worker protections. Programs typically last several months to multiple years depending on the industry, and culminate in a portable, nationally recognized credential. Students may also receive academic credit for their apprenticeship work.

For students, Registered Apprenticeships provide a structured pathway to a career, early exposure to professional environments, and the ability to earn income while building skills. Registered Apprenticeship programs reduce the uncertainty of transitioning from college to the workforce by offering clear training, mentorship, and industry-recognized credentials.
For employers, Registered Apprenticeships are a tool to develop a skilled workforce tailored to industry needs. They also reduce turnover, create loyalty, and generate measurable returns: studies have shown employers earn an average of $1.47 return for every $1 invested (Jobs for the Future, 2025).

Example: Many industries, including advanced manufacturing, construction, healthcare, and technology rely heavily upon Registered Apprenticeships (ApprenticeshipUSA). Recently, Trident Technical College (SC) (2025) launched the Charleston Regional Youth Apprenticeships (CRYA), a two-year RA program that began with just 13 apprentices and now includes more than 180 companies and 351 apprentices. Today, students can pursue Registered Apprenticeships in fields such as culinary arts, computer networking, and pre-nursing (United States Department of Labor, 2025b). Many graduates have transitioned directly into full-time employment, crediting their apprenticeships for providing career clarity and professional readiness.

Internships

When most people think of internships, they typically imagine two categories: *paid* and *unpaid*. While this distinction is common, it oversimplifies the range of internship models available to students today. In reality, internships vary by timing, structure, compensation, and connection to employment outcomes. Broadly, internships can be grouped into four categories:

- ***Pre-Internship Programs:*** Short-term, often early-career experiences that provide exposure and skills development.
- ***"Traditional" Internships:*** Semester-long, project-based experiences with professional mentorship.
- ***Cooperative Education (Co-ops):*** Generally longer than a semester, full-time rotations that alternate with academic semesters to provide deeper immersion.
- ***Intern-to-Hire Programs:*** Structured talent connections where internships transition from college with the expectation to directly enter into full-time employment, generally in the same organization as the internship.

Each of these models serves different purposes for students and employers. For students, they represent opportunities to build skills, test career interests, and develop professional networks. For employers, they provide early access to talent, a chance to build pipelines, and an avenue to evaluate future hires in real-world settings.

The following section will highlight and extend the discussion about internship programs. Like Registered Apprenticeships, internships are among the most formative work-based experiences as students are working directly with clients and employees, characteristics greatly desired by employers.

Pre-Internships

Explanation: Pre-internships are short-term, early exposure programs for first- and second-year students, typically lasting a few weeks to a few months over the summer. In contrast to a micro-internship, which generally focus on a narrowly tailored work project or deliverable, pre-internships are designed to acclimate students to the professional world before a traditional internship. Pre-internships also serve as talent connections to future opportunities—students who complete pre-internships are often strong candidates for internships later.

***Example*:** Google's STEP (Student Training in Engineering Program) (2025) is a competitive 12-week paid pre-internship for computer science students. Participants are mentored by Google engineers, complete software engineering projects, and attend leadership and technical workshops (Google, 2025). Similarly, companies such as Microsoft, Chase, and Bank of New York offer pre-internship programs to help students build technical skills, industry awareness, and professional networks early in their careers (Bank of New York, 2025; JP Morgan Chase, 2025; Microsoft, 2025).

"Traditional" Internships

Explanation: While very few people refer to internships as "traditional internships," we use the term to specifically describe paid internships that typically stretch one semester or longer, often geared to third- and fourth-year undergraduates. Internships place strong emphasis on experiential learning, giving students the opportunity to take on meaningful organization-based projects while still receiving mentorship. Paid internships generally offer more responsibility and technical application than unpaid ones, and research shows that paid interns have stronger career outcomes, receiving more job offers and higher starting salaries on average than unpaid interns or non-interns (National Association of Colleges and Employers, 2024).

Example: Synchrony Financial (2025) has a 10-week, paid Business Leadership Program (BLP) that offers tracks in finance, data analytics, and human resources. The program combines leadership development with real-world impact, and begins with a three-day conference where interns meet senior leaders. Synchrony's supportive model has produced strong talent connections, with many interns later rising to senior vice president roles within the company (Way Up / Yellow, 2024).

Cooperative Education (Co-Ops)

Explanation: Co-Operative Education experiences (Co-Ops) are extended, full-time work—usually four to eight months—that alternates with academic semesters. Due to the

duration and intensity, co-ops provide deeper immersion than internships, allowing students to take on greater responsibilities and even become embedded in organizational culture. Students often earn academic credit alongside pay, and while co-ops may lengthen time-to-degree, they significantly increase students' employability and starting salaries.

Example: Northeastern University operates one of the nation's most renowned co-op programs, with over 3,800 employer partners. Nearly all Northeastern students participate in at least one co-op, and more than half receive job offers from their co-op employers. The university also requires students to take a co-op preparation course, ensuring they build the professional skills needed to maximize the experience (Cooper, 2025).

Internship-to-Hire

Explanation: Some employers formalize the internship-to-employment pathway through structured intern-to-hire programs. These programs require students to complete a set number of internship hours—often across multiple semesters—before transitioning into full-time employment. The internship-to-hire model provides students with a clear, often guaranteed career pathway, while allowing employers to cultivate talent connections aligned directly with their workforce needs.

Example: NASA's *Pathways Program* (2025) is a multi-semester intern-to-hire model that prepares STEM and business students for full-time employment at NASA. Interns complete Individual Development Plans, blending assignments, training events, and mentorship. After completing 480 internship hours, participants transition into full-time employment upon graduation, ensuring a smooth education-to-workforce transition. Many state agencies such as the Office of the Pennsylvania Auditor General and the Illinois Department of Labor have also started intern-to-hire programs.

Concluding Thoughts: This section explored the ten major work-based education and learning experiences for students:

- Case Competitions/Hackathons
- Externships
- Micro-Internships
- Clinicals/Practicums
- Customized Academic Learning
- Honors Theses/Capstones
- Joint Certificates
- Work Study
- Registered Apprenticeships
- Internships

Work-based education and experiential learning substantially improve a student's ability to secure opportunities that are highly valued by employers and hiring managers. These experiences build technical, professional, and career navigation skills that are increasingly seen as prerequisites for early career success.

Historically, many Promise students have faced barriers to participation in internships and other experiential learning opportunities. The need to earn wages, care for children, or balance family responsibilities often limits their ability to pursue traditional unpaid or underpaid pathways. As a result, Promise students may graduate with fewer professional experiences, putting them at a disadvantage compared to peers.

Promise leaders and practitioners can play a transformative role in expanding opportunity for students by building stronger employer partnerships that align local and regional talent needs with student opportunities. In so doing, Promise programs may also be able to create revenue opportunities through the management and alignment of talent connections.

Section 3 Discussion Questions

1. What are some work-based experiences that are already offered in your area?

2. What are some work-based experiences that may be beneficial to your students? Who can you reach out to initiate them?

3. Research top industries and employers in your local area. What work-based experiences do they currently offer? What are some ways they could expand these opportunities to support the types of students in your program?

4. Working with a student, create a pathway of experiences (that align with their education, interests, and current and upcoming skills) that they may complete over the course of their academic career. Don't worry about solidifying a perfect plan—this is just an initial brainstorm!

Section 4: Positioning Skills for Placement

Overview

The previous sections explored the labor market and its key dimensions—including size, staffing, salary, and skills—and reviewed ten major work-based and experiential learning opportunities. Together, these provide context for the types of experiences that help students develop competencies employers value most. However, gaining these experiences is only part of the equation. Students must also learn how to position their skills for placement in ways that resonate with hiring managers and align with workforce needs.

For many Promise students, especially those that are first-generation, low-income, or balancing school with work and family responsibilities, translating academic achievements and work-based learning into professional opportunities can be challenging. Promise leaders and practitioners play a crucial role in equipping students with strategies to bridge this gap. For many students, Promise programs may be their only structured opportunity to learn how to frame their skills in ways that resonate with hiring managers.

This section explores four key factors that can help position student skills for placement. By intentionally cultivating these areas, Promise leaders and practitioners can strengthen students' ability to compete for jobs, enhance employer partnerships, and accelerate pathways to economic mobility.

Translating the Skills Taught to What is Sought by Employers

Recognizing Transferrable Skills: Many students underestimate the value of their past experiences. As students enter the workforce, one of the most important steps is learning to position the skills they already have. Many of these skills are transferable—even if they don't seem directly connected to a job title.

For example, a veteran who drove a tank may initially assume their options are limited to delivery or truck driving. In reality, military service develops discipline, leadership, problem-solving and an attention to detail—skills that translate to millions of jobs and hundreds of occupations. Similarly, students with retail or food service experience may not realize they've built communication, customer service, and problem solving skills that are also highly valued across millions of jobs and hundreds of occupations.

Table 1: Selected Transferable Skills by Total Postings, United States, 2020 - 2025

Skill Name	Total Postings	Projected Skill Growth
Communication	71,190,063	3.6%
Customer Service	54,345,882	5.2%
Leadership	30,543,929	8.5%
Detail Oriented	26,476,875	7.1%
Problem Solving	23,696,822	11.3%
Writing	20,879,456	11.8%
Planning	19,544,229	10.9%
Project Management	13,069,065	19.8%
Critical Thinking	6,140,462	23.4%
Data Analysis	5,535,203	25.8%

Table 1 presents selected transferable skills by total postings and projected skill growth. Of more than 607 million job postings scraped across the United States during a five year period, more than 71 million postings were looking to hire someone with effective communication skills. Other transferable skills across millions of jobs and hundreds of occupations include Customer Service, Leadership, Detail-Oriented, Problem Solving, Writing, Planning, Project Management, Critical Thinking, and Data Analysis. Note how three transferable skills: Project Management (+19.8%), Critical Thinking (+23.4%), and Data Analysis (+25.8%) are all projected to grow greater than 15% relative to other skills.

Recognizing transferable skills can significantly strengthen both your resume and your job prospects. Many students underestimate the value of experiences gained in part-time work, volunteering, or academic settings, yet these roles often build competencies employers prize. By scanning job descriptions, reviewing employer websites, and understanding company values, students can learn to frame their skills in ways that align directly with hiring needs.

Today's labor market data underscores this point. In a recent survey by the National Association of Colleges and Employers (NACE), nearly 90% of recruiters identified problem-solving skills as one of the most important attributes they seek in candidates (Gray and Koncz, 2025). Other highly ranked skills included teamwork (81%), written communication (77%), and strong work ethic (73%). These findings confirm that employers are not just evaluating technical expertise; they are also scanning for social skills that drive workplace success.

Aligning Specific Skills with Opportunities

As students acquire and build skills, specific occupational skills will evolve to become more essential. Recognizing and developing these skills early can give students a competitive edge, particularly if they already have a strong interest in a specific career path.

As Matthew Hora, Associate Professor at the University of Wisconsin–Madison notes, "We have to start with [skills that are] a bit more chunked or abstracted—our minds need that. But then we have to move away from that as soon as possible" (Carlson, 2025). In practice, this means including descriptors like "data analysis" or "communication," but also focusing on naming and demonstrating specific, occupation-valued skills.

For example:

- A student aspiring to become a statistical programmer in the pharmaceutical industry should highlight not only "data analysis," but also proficiency in widely used programming languages and tools such as Python, R, SAS, and Stata.

- A nursing student seeking opportunities in emergency or critical care units would benefit from securing certifications like Advanced Cardiac Life Support (ACLS) or Sterile Processing Techniques, in addition to baseline clinical training.

- A future graphic designer might complement creativity and communication skills with mastery of Adobe Creative Cloud and familiarity with real estate market trends if targeting housing-related industries.

When transferable skills are combined with occupation-specific skills, students build a dual foundation—broad competencies that demonstrate adaptability and occupation-tailored expertise that signals immediate value to employers. This combination is precisely what hiring managers look for when selecting candidates who can succeed today and in the workforce of tomorrow.

Persona and Portfolio Development

In today's competitive labor market, curating a professional persona is essential for students and early-career professionals. A professional persona reflects not only skills and achievements, but also a student's ability to communicate in ways that attract employers. Effective persona development can be the bridge between what a student has learned, their experiences, and how potential employers perceive their readiness in the workplace.

Academic and career-oriented projects often provide the building blocks of this persona. For example, a student completing a data analytics project can showcase technical proficiency in software such as Python or R, while also highlighting teamwork and problem-solving. Similarly, participation in a business case competition not only demonstrates analytical and presentation skills but also the ability to work under pressure in a collaborative environment. As we saw in Section 3, employers value these experiences because they reflect how academic learning translates into workplace performance.

Curating a persona, extends beyond resumes and cover letters. Digital platforms now serve as the first impression for many recruiters. LinkedIn is the most prominent tool, where students can highlight accomplishments, publish reflections on projects, and connect with industry professionals. Similarly, platforms like Portfolium and Handshake allow students to curate portfolios that showcase academic work, creative projects, and internship experience in visually compelling ways that also allow for verified accomplishments. For example, a nursing student might upload clinical reflections or skills checklists, while a computer science student can post completed coding projects or links to LinkedIn, GitHub repositories, or Handshake.

A well-curated professional persona signals self-awareness, professionalism, and career readiness. By intentionally aligning academic achievements with career goals—and strategically presenting them on social media and professional networking platforms—students can distinguish themselves in a competitive labor market. Ultimately, curating a professional persona is about crafting a coherent, authentic story that helps employers see a student not just as a candidate, but as a future colleague and contributor.

Resume and Cover Letters

A resume is a critical tool in the job search process—it is both a representation of the student's professional self and the first impression with recruiters and employers. At its core, a resume is a simple, shareable document that highlights skills, experiences, and accomplishments.

Formatting and Templates: When building a resume, students should start with a clean, professional template. Many high-quality examples are available through college career centers, and Promise programs can leverage a few examples that can substantially aid students in their search. Generally, resume formatting should be simple: avoiding multiple colors or complicated layouts. A clear structure and high readability matters more than design.

Highlighting Skills and Experiences: The key to a strong resume is specificity. Students should not just explain what was accomplished, but rather demonstrate the impact. For example, instead of writing, "Was a leader to a team of 6," write: "Led team of six in a research study from data collection to analysis through reporting and presenting principal findings."

Action verbs like *supervised, mentored, designed, analyzed,* or *implemented* can help convey results more clearly. Employers want to see evidence of how student experiences built the skills that align with the job posting.

Passing Applicant Tracking Systems (ATS): Today, many employers use Applicant Tracking System (ATS) software to scan resumes for keywords. Reviewing the job description—and incorporating relevant industry skills—will help a resume get noticed. Students should include specific words that appear in the job posting to improve ATS alignment. For example, if the position lists required skills of R and Python, students should not simply put "Statistical Software," but rather list *R* and *Python*.

Cover Letters: Since 2020, there has been a substantial decline in the number of employers requesting a cover letter. For those that still do or provide the option, and if a student's experience may not directly translate from the resume, a cover letter—if effectively executed—can enhance a candidate's profile.

While there are many cover letter templates available online, the best ones are typically from placement organizations, such as college career centers. A strong cover letter should be 3–5 short paragraphs (around 250–400 words).

Structure and Content: Generally, cover letters have three sections:

- ***Introduction:*** The student should explain who they are and why they are interested in the role (be sure to state the specific job title in the cover letter).
- ***Body:*** The body should be used to share relevant experiences and skills that connect directly to the job and share how skills and experiences align to the student persona. Avoid simply repeating the resume.
- ***Conclusion:*** The student should quickly (1-4 sentences) reinforce enthusiasm, an eagerness to contribute, show respect for the employer's consideration, and indicate how their strongest skill aligns to the most important skill in the posting.

Cover letters are also a great place to highlight transferable skills—such as problem-solving, communication, and leadership—especially for students who may not yet have extensive technical experience.

Preparing for Interviews

Interviewing may feel intimidating, especially for students entering the workforce for the first time. However, it's important to remember that interviews are a **two-way process**: while the employer is assessing whether the student is a good fit for the company, the student should also evaluate whether the company aligns with their values, goals, and work style.

Research the Organization: The best preparation starts with research. Students should learn about the organization's mission, values, and culture. Key questions students should consider include:

- How do the organization's values align with mine?
- How might my skills and experiences align with their expectations?
- Could I see myself working and contributing to this organization long-term?

Use the STAR Method: Many interviewers use behavioral questions that begin with "Tell me about a time when..." or "Have you ever...?" To answer effectively, use the STAR method:

- ***Situation:*** Briefly describe the context.
- ***Task:*** Explain the challenge or responsibility.
- ***Action:*** Detail what you did.
- ***Result:*** Share the outcome, ideally with measurable impact.

Practice Common Questions: Students can spend a few hours practicing responses before an interview. Begin with the common opener: "Tell me about yourself." Keep the answer brief and focused on relevant skills, experiences, and goals. This sets the tone for the rest of the conversation without overwhelming the interviewer. Some examples of STAR questions include:

- Share a time when you faced a challenge. What did you do and why?
- Have you ever had to develop a new skill on the job? Tell us about that learning experience.
- Tell us about the proudest project that you have worked on.
- Tell us about a time when you worked well on a team.

- Tell us about a time when you exceeded expectations. What did you do and why?

Technical Interviews: In occupations like Information Technology, Engineering, and Computer Science, employers may conduct technical interviews. Accordingly, preparation is different:

- Practice coding problems on platforms like *LeetCode* and *Stack Overflow*.
- Review core knowledge from your program of study.
- Reach out to alumni to learn what's typically tested or review comments on *Blind*.

Concluding Thoughts: This section explored four key factors—Translating the Skills Taught to What is Sought by Employers, Persona and Portfolio Development, Resume and Cover Letters, and Preparing for Interviews—that are essential for positioning students for placement. Taken together, these strategies provide Promise leaders and practitioners the tools to help students recognize, communicate, and showcase their talents in ways that align with labor market demands. By helping students translate classroom learning into employable skills, build a professional persona, and prepare compelling application materials, Promise leaders and practitioners can close the opportunity gap between Promise students and employers. In addition, cultivating these practices strengthens employer partnerships by ensuring that students are prepared to contribute meaningfully in the workplace. Ultimately, intentional focus in these areas not only enhances Promise students' competitiveness in the job market but also accelerates pathways to economic mobility, supporting the broader mission of Promise programs to expand opportunity and promote lasting prosperity.

Section 4 Discussion Questions

1. Working with a student, examine their old resume and make a list of transferable skills—try to do 10 for each past experience. Which of these skills are sought after by current employers? Make sure that students highlight these skills in future resumes, applications, and interviews!

2. Working with a student, browse through the top occupation-specific skills for relevant jobs on O*Net. Which of these skills will be learned through their institution of higher-ed? What are some ways the remaining skills may be developed?

3. Working with a student, take some time to review their LinkedIn profile. What are some ways to better organize it? Are the student's top skills clearly highlighted? Does their headline demonstrate their goals? Essentially—what story does their page currently tell? And what changes can you make to improve that story?

4. One frequent challenge with resumes is the lack of action verbs. Working with a student, review their resume and mark areas that could be rewritten to highlight the student's actions—*managed, developed, grew, etc.* As you're doing this, consider how you might emphasize the student's skills.

5. Lead a mock interview with a student. As they answer, ask yourself the following questions: are they using the STAR method? Do you notice any unnecessary repetition or confusing structure in their answers? How do they hold themselves physically? These questions—in addition to the content of their answers—can guide you to what

employers might notice during interviews. Your answers to these questions, as well as your feedback to the student, will be important to their success!

Section 5: Developing Practicums and Internships for Low-Income Students

Developing Practicums and Internships for Low-Income Students

Practicums and internships bridge the gap between classroom learning and the workplace, offering students hands-on experience, professional networks, and a clearer understanding of their career paths. For low-income students, these opportunities can be transformative—but only if they are designed with providing the keys to locked doors. As Promise leaders and practitioners, you can provide substantial aid in helping students participate in practicums and internships. Below are key steps to ensure practicums and internships meet the needs of low-income learners.

Identify Barriers to Participation: Before building or refining programs, it is essential to understand the unique challenges low-income students face.

Common barriers include:

- Financial constraints such as unpaid or underpaid positions, transportation costs, and required materials.
- Scheduling conflicts with part-time jobs or family responsibilities.
- Limited access to professional networks or mentors.
- Awareness gaps in knowing how to find and apply for opportunities.

Understanding the lived experiences of low-income students ensures that the program design directly addresses their needs. Gathering this information can be done through student surveys, focus groups, or collaboration with campus support services.

Establish Paid or Partner to Provide Funded Opportunities: One of the most significant barriers is the inability to work without pay.

To make practicums and internships accessible:

- Partner with employers to offer stipends, hourly wages, or academic credit with an additional financial award.
- Seek funding through grants, alumni contributions, or corporate sponsorships.
- Explore Work Study eligibility for internships, allowing students to be paid through existing campus payroll systems.

Financial support not only enables participation but also signals that the work students perform is valued.

Build Strong Employer Partnerships: Section 6 will provide greater detail on how to establish talent connections between Promise programs and employee partners. For now, understand that it's important to share messages that resonate with employers: focusing on student needs allows employers to shape their advancement in a way that directly aligns with their labor market needs. This is a crucial opportunity, especially in a tight job market (a condition where there are more positions than skilled workers available to fill them).

Collaborations with employers are central to creating quality, sustainable placements. Promise leaders and practitioners can substantially advance collaborations to aid low-income students in the following ways:

- ***Develop a clear value proposition for employers***, showing how Promise students can contribute meaningfully to their organization. For example, if your Promise student already has work experience, be sure to highlight that for employers. If your Promise students are adult learners, highlight how they are often highly effective at prioritizing and effectively managing competing projects and deadlines.
- ***Partner with mission-aligned employers*** who are committed to supporting low-income, first-generation, or particular regions you both serve in your community.
- ***Offer employers training on mentoring*** low-income and first-generation students, focusing on workplace culture, communication, and career development.

Employers who understand the challenges faced by low-income students are more likely to create supportive environments.

Integrate Academic Relevance: To maximize impact, practicums and internships should connect closely with a students' program of study:

- Work with faculty to align experiences with curriculum objectives.
- Ensure that internship duties are substantive and skill-building, avoiding purely clerical work.
- Offer reflective assignments or seminars where students connect their workplace learning with academic theory.

This alignment strengthens both academic outcomes and career readiness.

Provide Wraparound Supports: As many Promise leaders and practitioners well know, low-income students may require additional support to be successful in college and those supports generally extend to practicums or experiential learning:

- Mentorship programs pairing students with industry professionals.
- Career readiness workshops covering resume writing, interview skills, and workplace etiquette.
- Transportation assistance, such as transit passes or mileage reimbursement.
- Access to professional attire through campus career closets or clothing stipends.
- Flexible scheduling or virtual internship options for students with caregiving or job obligations.

These supports can aid low-income and first-generation Promise students so they can focus on gaining the practical experiential learning to open doors later in their career.

Streamline the Application and Matching Process: For larger Promise programs, complicated application systems or lengthy forms can discourage participation. To improve access:

- Offer centralized application portals where students can view all available placements. Commercially available platforms include LinkedIn, Handshake, and Riipen for internships or practicums and Parker Dewey for micro-internships.
- Provide application coaching sessions, especially for first-time applicants (See Section 4).
- Use matching processes that consider both skills and personal circumstances, such as location, hours, and accessibility needs.

A transparent, supportive process increases participation rates and ensures students are matched to well-fitting roles.

Monitor Quality and Collect Feedback: Continuous improvement requires ongoing evaluation and feedback from students and employers:

- Gather feedback from both students and employers through surveys or debrief meetings.
- Track outcomes such as skills gained, post-graduation employment, and continued engagement with the employer.
- Adjust program policies, employer partnerships, and supports based on findings.

Maintaining high quality connections ensures a program remains attractive to both students and employers. Often, when education stakeholders are establishing practicums and internships, or related work-based and experiential learning activities, they begin with a few employee partners. Not all require the same amount of support. Carefully consider the amount of staff time and energy used to support each partner. Even if you have few partners in your community, do not be afraid to pause support if the connection is more effort than the value. Too often, education partners think first of the student opportunity, no matter how small, and are willing to expend considerable resources to support all students. Promise leaders should be judicious in their use of resources and this includes the time and energy associated with each employee partner.

Scale Through Partnerships: Expanding opportunities for low-income students often requires broader collaboration:

- Partner with local chambers of commerce, workforce boards, and industry associations to reach more employers.
- Collaborate with non-profits and community organizations that serve similar populations.
- Advocate for state and federal funding to support paid internships and experiential learning initiatives.

These partnerships can expand both the number and quality of available placements.

Highlight Success Stories: Sharing student success stories helps sustain momentum and attract new employee partners:

- Feature student and employer testimonials in newsletters, social media, and events.
- Use data to demonstrate impact, such as employment rates or skill gains.
- Celebrate alumni who started their careers through the program, reinforcing its value to funders and employers.

Storytelling humanizes the outcomes and inspires continued investment. Research (Small et. al, 2007) has found that sharing a compelling story resulted in a 108% increase in donations over a similar argument providing just data or statistical evidence. Effective success stories are crucial to all facets of Promise program support because they have the potential to elicit physiological responses and action (Zak, 2015). Simply put, powerful stories stimulate the brain to pay attention, involve a more cognitively immersive experience, and when stories involve emotion, they may also trigger physiological responses, which aid in remembrance and engagement.

Commit to Partnership Building Long-Term: In the coming decade, traditional sources of revenue for Promise programs will likely contract. Therefore, it is essential to leverage existing resources to aid students in the most strategic ways while leveraging collaboration to foster new revenue opportunities. Building community partnerships requires a long-term commitment by Promise leaders and practitioners. To that end:

- Embed practicums and internships into organizational strategic planning.
- Ensure Promise leaders and community leaders champion the importance of equitable experiential learning.
- Continually adapt to shifts in labor market needs, technology, and student demographics in your community.

Sustained commitment ensures low-income students have ongoing pathways to meaningful careers.

Concluding Thoughts: When designed intentionally, practicums and internships can be powerful tools for advancing social mobility. For low-income students, they offer not just professional experience, but a bridge to opportunity that could alter life trajectories. By addressing barriers, offering financial and wraparound supports, and building strong employer and community partnerships, Promise leaders and practitioners can create programs that are both equitable and transformative for low-income students.

Section 5 Discussion Questions

1. Based on what you have learned, what makes your students stand out to employers? How will you help students develop clear value propositions for employers?

2. Research some local employers that you think would be good fits for your students. Be open minded! These may be top companies, local businesses, non-profit organizations, government agencies, and more! Do these organizations already have programs for students? If not, what are some ways to initiate this conversation?

3. Can you think of occupations that appear in industries they're not traditionally associated with? For example, many health care providers employ a large number of Information Technologists. What are similar examples in your region?

4. What are some employers that already work closely with your institution(s) of higher-ed? Research the opportunities they offer, and consider how these opportunities may be expanded or adjusted to better fit your Promise program's students. Often,

working with an established institution-employer connection may be the best way to begin!

5. What additional support might your Promise students need? Career readiness workshops? Transportation? Understanding your students holistically is fundamental to guiding them toward opportunities.

Section 6: Strategies for Fostering and Maintaining Talent Connections

Introduction

Too often, there are significant gaps between education and the workforce that students must navigate. For example, in a survey done by Harvard Business School's Partnership Imperative, 80% of community-college educators agreed that "My college is producing the work-ready graduates that employers need," while only 62% of employers claimed that "Community colleges are producing the work-ready employees that my company needs" (Fuller & Raman, 2022). Additionally, only 25% of employers claimed to be transparent about their hiring needs with educators (Fuller & Raman, 2022).

In order to rectify the education-workforce misalignment, it's important to get academic institutions and employers working together, aligning their resources, and adjusting their approaches to benefit each other, and ultimately, students as well. Liz Moran, director of global academic programs and certifications at SAS, outlines this adjusted, collaborative educator-employer relationship: "Our perspective is that academic institutions have been entrusted to serve as subject matter experts on the professional development of their students, and the role of industry is to support them and their students on the journey to career readiness" (National Association of Colleges and Employers, 2026).

The best way to establish these collaborative relationships is to **create talent connections**, or partnerships between academic institutions and employers meant to align skilled labor with economic opportunities. Promise Programs have the opportunity to facilitate these connections.

Align on Goals

When building a talent connection, it's important to recognize that each of the three parties (Higher Education, Employers, Promise programs) have the same goal—to carry students from education into jobs—but different perspectives.

Academic institutions teach students valuable skills and hope to have students translate their education into jobs with employers. Employers aim to hire workers that have the necessary skills to succeed. Promise programs work to align students with in-demand jobs and/or economic opportunities and hopefully, provide some professional skills development. Since all three parties share different perspectives, it's important for them to engage with one another actively—consolidate resources, share LMI and other data, and understand each other's practices—in order to reach their common goal. Notably, **Promise Programs have the opportunity to act as bridges between academic institutions and employers, and are uniquely positioned to guide collaborative efforts by engaging in the best practices to build talent connections.**

Develop Talent Connections

If the first time you have ever read the term "talent connection" was on this page, then the following will provide a step-by-step guide for you to develop talent connections for your Promise program.

Promise programs are uniquely positioned to serve as connectors between students, educational institutions, and employers. By combining local knowledge, trusted relationships, and data-informed planning, Promise programs can help accelerate regional talent pipelines and ensure students are prepared for high-quality employment.

When developing a talent connection, it is critical to **establish mutual understanding between institutions and employers.** The best talent connections are formed on the basis of understanding the other party's perspective. Employers need to understand the type of institution they're working with—whether it be a community college, technical school, public university, etc.—and how they operate. Each institution has different practices. Promise Programs, who are in ongoing partnerships with their academic institutions, can guide employers through these operations. This will not only ensure smooth communication, but more importantly, help employers understand the resources and values of the institution they're collaborating with, which is fundamental to any strong partnership. Academic institutions need to have a good grasp on the current and future states of the industries they're preparing their students for, particularly its place in the labor market, in-demand skills, and new and growing technologies, not only for the benefit of students but also to have productive conversations with employers.

1. Start from Strength, Size, and/or Influence in Your Region

A strong talent strategy begins with understanding the local labor market. If you have board members or colleagues that routinely employ students from your partnering institutions of higher education, that might be a great place to start as you have an existing relationship that is strong. If the institution of higher education already has connections, and you have a strong relationship with the institution, offer to provide Promise students with a "Professional Skills Bootcamp" tailored to meet student needs described in some of the sections above (What is a labor market?; Resume Writing; A Survey of Work-Based Experiences.

Another approach could be to connect with the employers that hire the most people. Large employers tend to recruit continuously, often across multiple hiring seasons, making them natural anchors for talent connections. These relationships are especially valuable when the employer is headquartered in your city or region, as local employers are more likely to hire locally and invest in long-term workforce development.

Since every region has a distinct economic profile, Promise programs should map dominant industries and employers in their area. For example, In Philadelphia, life sciences, financial services, and technology are key, with companies like AstraZeneca and Comcast shaping the regional workforce.

Generally, you can identify these employers through simple internet searches, regional economic development reports, or by working with librarians and public libraries, which often maintain detailed information on local industries. In addition, Fortune 500 companies—ranked annually by revenue—can be valuable partners. These firms often offer higher wages and increasingly hire for remote or hybrid roles, expanding opportunities for students beyond strict geographic boundaries.

2. Design with the Student in Mind

Creating opportunities for students is one of the most active ways that employers can get involved with an academic institution. They are a direct way for students to reap the benefits of talent connections and engage with what may be their future employer. There are many different kinds of opportunities that employers and educators can create for students. Some examples include offering research and capstone projects, hosting case competitions and sponsoring hackathons, providing guest lectures, panels, and webinars, and offering internship opportunities.

There are several recent examples of how Promise programs have worked to design their talent connections with the student in mind. In each example, Promise programs aid students by (1) engaging students early, (2) intentionally connecting academic pathways to in-demand skills, and (3) anticipating students' needs through proactive career exploration, employer partnerships, and structured workforce preparation.

Lynchburg Beacon of Hope. Beacon of Hope, a Promise program based in Lynchburg, Virginia, engages students as early as sixth grade to prepare them for college and careers. Through their Career Centers and early college and career readiness efforts, the community has experienced a substantial increase in college enrollment through its partnership with more than 20 colleges and universities in the region.

Beacon of Hope offers a compelling model for aligning college attainment, skill development, and the workforce of the future. Beacon of Hope provides free college education to students pursuing frontier occupations in healthcare, nuclear technology, cybersecurity, and advanced manufacturing—equipping them with in-demand skills for future employment.

The early results are impressive: participating students see a projected 59% salary increase, equating to more than $40,000 over their previous earnings. This translates into a projected annual increase in taxable earnings of more than $1 million to the Commonwealth of Virginia. Perhaps most importantly, graduating students stay and work in the Lynchburg region, earning a family-sustaining wage of $52,000 annually.

AlamoPROMISE. AlamoPROMISE, a Promise program in San Antonio, Texas focuses not only on college completion, but also on ensuring that the in-demand skills that are taught in the classroom are aligned with employers and the labor market. Like many colleges and universities, and the Promise programs aligned to those institutions, staff conduct labor market analyses, develop workforce boards, and discuss internships and jobs with prospective employers in the region. Alamo Colleges does this through their academic program review process. They ensure that all academic programs align with sustainable wages for graduates of the region, and, in many instances, that graduates can earn well above those of high school graduates for comparable jobs in the region. In addition, AlamoPROMISE and Alamo Colleges have built relationships with local business leaders to ensure that they are helping to deliver the in-demand skills employers require in the regional labor market.

However, what makes AlamoPROMISE and Alamo Colleges innovative in this space is their purposeful design of the student experience as career-focused, ensuring that students learn *how* the skills they learn in the classroom translate to the workforce.

San Antonio College President Francisco Solis stated that as part of their career-focused approach, career services plays a central role early in the student experience: "We are trying to connect students to the career center *first*. They have only heard from their friends or family

that they want to be a 'nurse.' We are asking students, 'Is there something else in a health institute you may be interested in because you have the skills for it? We are doing that to build skills.'" President Solis and Alamo Colleges recognized that not all students were adequately discussing how the skills they were taught aligned with what employers sought.

To address this challenge, the Alamo Colleges create *Blitz Week*, which all AlamoPROMISE students participate in as part of their educational training. As President Solis describes, "Blitz week is talking about how your education aligns to the professional skills—critical thinking, communication, leadership—and listing those skills on the resume. This is important because today's labor market is competitive, as they are often computer-read (through AI or Applicant Tracking Systems) and many employers don't look at resumes."

Los Angeles College Promise. The Los Angeles College Promise, in Los Angeles, California offers intentional career and major exploration throughout the program and has access to internships through many partners. All Los Angeles College Promise students are required to participate in a summer transition program prior to the start of their first semester. Students are often given the choice between a credit- or non-credit-bearing option and can participate either virtually or in person. The summer transition program introduces students to college resources, including career services, and includes major/career exploration activities integrated with the campus Guided Pathways frameworks.

Following the first spring semester, students who are taking summer classes participate in a Second Year Success workshop that includes career pathways preparation. The Second Year Success workshop explores how to write resumes and conduct professional interviews, provides general job search tips, and focuses on how students can distinguish themselves in the workplace. A well-curated professional persona signals self-awareness, professionalism, and career readiness. By intentionally aligning academic achievements with career goals—and strategically presenting them on social media and professional networking platforms—students can distinguish themselves in a competitive labor market. Ultimately, curating a professional persona is about crafting a coherent, authentic story that helps employers see a student not just as a candidate, but as a future colleague and contributor.

Los Angeles College Promise students also have priority access to internship and career preparation job opportunities through a partnership with the City of Los Angeles, the Los Angeles Mayor's office, and various community partners. These opportunities have provided students with the opportunity to build professional skills, gain hands-on industry experience in their chosen career field, and create the social networks that are key to professional success.

3. Identify the Largest Degree Programs and Institutional Strengths

Once major employers are identified, Promise programs should assess the educational supply side of the talent pipeline. Understanding which degree programs are most common locally helps clarify what skills institutions can offer employers and where natural alignment already exists.

Nationally, just 30 degree programs account for roughly 65 percent of all degrees awarded, underscoring the importance of focusing on scale as well as specialization. Employers are far more likely to engage when an institution offers programs that teach skills directly relevant to

their workforce needs. By mapping large degree programs to regional industries, Promise programs can identify high-potential partnerships and highlight underutilized talent pools.

4. Create Aligned Opportunities for Programs Without Obvious Pipelines

Not all fields of study map cleanly onto specific occupations. Programs in the social sciences, liberal arts, and humanities often develop in-demand skills—such as critical thinking, communication, and data literacy—without a clearly defined career pathway. Promise programs can play a critical role in translating these skills for employers and helping institutions articulate the workforce value of their graduates.

Strong partnerships depend on fit and mutual understanding. Employers often compete heavily for talent from highly selective institutions, yet substantial and diverse talent exists at public universities, independent colleges, and community colleges.

Promise programs can help employers better understand the strengths of different institutions—for example, that many community college students bring prior work experience, participate in apprenticeships, and represent diverse talent pipelines. At the same time, institutions must understand the industries they serve, including growth trends, emerging technologies, and evolving skill demands, while employers must learn how different types of institutions operate in order to collaborate effectively.

Labor Market Information (LMI) is a critical tool in this process. Institutions can use LMI to identify skills gaps, adjust curricula, and educate students about labor market realities. Employers can use LMI to benchmark wages, identify in-demand skills, and target institutions whose programs best align with their hiring needs. Promise programs can serve as the bridge, ensuring LMI informs both sides of the partnership.

5. Establish an Advisory or Talent Connections Board to Sustain Momentum

Effective talent partnerships require more than one-time donations or informal relationships. They demand sustained engagement, shared accountability, and continuous improvement. Creating an advisory or workforce board provides the structure and the workforce connections often needed to maintain momentum and alignment over time.

An effective board should include representatives from employers, educational institutions, your Promise program and of course, students. Together, members can share information about curriculum updates, co-design skill-building opportunities, and use LMI to inform strategic decisions. Importantly, student voices must be included. Students are the ultimate beneficiaries of these partnerships, and their perspectives often surface the most practical and innovative solutions.

Advisory boards can support a wide range of industry engagement opportunities, such as capstone projects, guest lectures, case competitions, internships, job shadowing, and sponsored hackathons. In many cases, building on or expanding existing career development initiatives—rather than creating entirely new ones—can ease implementation and better align with institutional capacity.

Putting It Together

By systematically identifying regional employers, aligning degree programs to workforce demand, translating non-traditional pathways, and sustaining engagement through advisory structures, Promise programs can play a pivotal role in strengthening local talent ecosystems. This approach not only improves employment outcomes for students but also supports regional economic growth—fulfilling the Promise mission of connecting education to opportunity.

Section 7: Crucial Conversations with Students about Career Opportunities

A key theme of this Playbook is that as a Promise leader or practitioner, ***you are uniquely positioned to help students on their journey to economic prosperity!***

Remember: Traditional sources of career guidance are frequently underutilized by students. Nearly all faculty (92%) —who often serve as students' closest mentors report being approached by students for career advice, yet only 64% feel confident guiding students on career pathways outside academia (Gatta et al., 2024). Similarly, while career centers exist on nearly every college campus, last year, over 71% of undergraduates visited their career center only once or not at all, limiting the impact of comprehensive career support for students (National Association of Colleges and Employers, 2024). Accordingly, it is crucial to **have conversations with students about career opportunities as soon as possible**.

Crucial conversations about careers should not solely be reserved for juniors and seniors; they should begin as early as a student's first year in college. When introduced early and revisited often, these conversations help students connect their academic choices to real labor market outcomes, build relevant skills intentionally, and pursue pathways that support long-term economic mobility.

For many students—particularly those from low-income or first-generation backgrounds—early career guidance can be transformative. It can mean the difference between graduating with a clear plan for sustainable employment or entering the workforce unsure of how their degree fits into the economy.

1: Start with "What Can You Do with Your Major?"

Broaden Students' Career Horizons

Many students arrive on campus with a narrow view of how majors connect to careers, often assuming a one-to-one relationship between a field of study and a single occupation. As a Promise leader or practitioner, **you can help students see majors as launchpads**, not job titles.

Effective strategies include:

- Sharing alumni stories that highlight unexpected or non-linear career paths.
- Hosting employer or alumni panels that showcase multiple roles associated with the same major.
- Using labor market data tools—to map degree programs to a wide range of occupations.

Focus on the Skills Earned

A critical early message is that regardless of a student's major, they are learning valuable skills that can translate into a career. By emphasizing transferable skills and lifelong learning, you

can help reduce anxiety and encourage exploration through certificates, internships, or work-based learning.

2: Discuss Earnings Potential—Early

Why Salary Conversations Belong in First-Year Support

Recall that in Section 2, Marinescu et al., (2017) found that when asked to estimate salaries of alumni from various majors, *students were off by an average of 40%*. This gap in understanding can lead to sub-optimal career selection. If students underestimate salaries in a particular field, they may avoid majors that could provide them with stable and economically prosperous opportunities. Conversely, if students overestimate, they risk pursuing programs that leave them disappointed or financially insecure.

While first-year students may not be negotiating job offers, they are making academic decisions that influence future earnings. Introducing salary information early helps students align expectations with reality.

As a Promise leader or practitioner, you can:

- Share typical entry-level wage ranges associated with common roles.
- Explain the difference between starting salaries, median wages, and long-term wage growth.
- Discuss how compensation varies by geography and industry.

These conversations should *never* discourage students from pursuing meaningful work. Instead, they should focus on strategy—identifying higher-paying niches, complementary skills, or portfolio careers that make passion-driven paths financially sustainable.

3: Help Frame Skills as a Currency of the Labor Market

Helping Students Identify Marketable Skills

Recall the example above from the Alamo Colleges, which created *Blitz Week*, where students discuss how their education aligns to the professional skills—critical thinking, communication, leadership—and listing those skills on the resume. Having a structured time of the year to discuss skills taught in classes with those sought by employers can be a great way to help your students make the connections to the marketable skills they are learning and stand out in the job market from other prospective employees.

For example, a sociology or history major builds research, data interpretation, and communication skills relevant to policy, consulting, and market research. A computer science major develops collaboration, problem-solving, and client communication skills that enhance technical expertise.

4: Connect Skills and Majors to Labor Market Demand

Use Data to Ground Career Decisions

Labor markets are evolving rapidly due to automation, generative AI, and emerging technologies. Students benefit when they can see how their developing skills align with high-growth fields.

Practical approaches include:

- Reviewing real job postings and highlighting required skills that match coursework.
- Sharing regional labor market data to reflect local opportunities.
- Facilitating employer sessions where recruiters explain current and emerging skill needs.

Promise programs can help ensure these conversations remain relevant, localized, and actionable.

Making Skills Visible

Students often possess valuable skills without knowing how to articulate them. Promise leaders and practitioners can support students in:

- Translating coursework and projects into resume-ready skills.
- Identifying skill gaps and planning how to close them through internships, volunteering, or short-term credentials.
- Distinguishing between social skills (communication, adaptability) and rapidly changing technical skills.

5: Introduce the Concept of Economic Prosperity

Recently, foundations, researchers, and policymakers have sought to better articulate the value of a postsecondary degree in the labor market. Generally, there seems to be consensus that a postsecondary degree should confer an earnings premium of approximately 15% over those with a high school diploma. Nationally, this would equate to a median annual income of about $56,000 in 2026 dollars. As noted before in Section 2, salaries in one region of the country can greatly vary from another region, so $56,000 may not lead to economic prosperity in your region, but it is important to have the conversation with students because earnings is a major drive of economic mobility and security.

From "Getting a Job" to Achieving Economic Security

An economically prosperous salary enables graduates to meet basic needs, manage debt, and plan for the future. For many students, understanding this concept early on is essential to informed decision-making.

Promise program leaders and practitioners can:

- Use tools such as the MIT Living Wage Calculator to show cost-of-living differences by location.
- Compare expected earnings to housing, transportation, and childcare costs.
- Discuss benefits—health insurance, retirement plans, tuition assistance, and more—as part of total compensation.

Keep the Conversation Student-Centered

Effective questions include:

- "What kind of lifestyle do you want to afford after graduation?"
- "Where do you see yourself living, and what does that mean financially?"
- "What trade-offs are you willing—or not willing—to make?"

6: Embed Crucial Conversations as Routine within your Promise Program

The best way to embed career conversations in your Promise program is to routinize them into daily conversations with students. If you have your own student interns or employees, or students on your advisory team, begin with them, and daily, look for opportunities to ask practical conversation about career opportunities.

Practical Conversation Starters for Promise leaders and Practitioners include:

- What drew you to your major?"
- What are your plans for the summer?
- Have you explored any of our work-based learning opportunities?
- "Let's look at some jobs people with your degree are getting."
- "Here's the typical starting salary—how does that align with your goals?"
- "What skills are you building right now?"
- "Have you thought about where you'd like to live after graduation?"

7: Create a Career Student Roadmap

A structured, multi-year career roadmap helps students align their passions with practical workforce outcomes. In this example, a first-year sociology major interested in social justice works with career services early to identify transferable skills and explore aligned career options. Over time, the student intentionally builds those skills through targeted coursework, experiential learning, and internships, while expanding professional networks. By graduation, the student has relevant experience, in-demand skills, realistic salary expectations, and a clear pathway into a mission-driven career that supports long-term financial sustainability.

Scenario: A first-year sociology major passionate about social justice but concerned about loan repayment.

- **Year 1:** Career services identifies transferable skills in research, communication, and data analysis. The student explores careers in policy analysis, nonprofit management, and user research.

- **Year 2:** The student enrolls in a statistics course and volunteers on a community-based data project.

- **Year 3:** They secure an internship with a local government agency and connect with alumni working in public policy.

- **Year 4:** They graduate with relevant experience, in-demand skills, realistic salary expectations, and a clear pathway to a mission-driven career that offers a sustainable wage.

Putting It Together: Clarity from Day One

Crucial conversations about careers are not one-time interventions—they are ongoing dialogues that should begin the moment students enter college. By helping students understand what they can do with their major, the earnings potential of different paths, the skills they are developing, and the importance of a sustainable wage, Promise programs and career services professionals empower students to make informed, strategic choices.

Remember, you may be the only person that ever has a conversation with a student about their career. When these conversations happen early and often, students can intentionally shape their academic journey and career preparation—positioning themselves for meaningful work, economic stability, and long-term

Section 8: Career Acceleration Tool for Practitioners

This Playbook has publicly available information where Promise leaders and practitioners can look to have conversations with students about careers and transform labor market information into insights. Two notable examples that we have mentioned are O*Net (https://www.onetonline.org/), the federal source for salary, skills, and education information on every occupation in the United States, and the MIT Living Wage (https://livingwage.mit.edu/).

In order to better serve Promise programs and your student needs, College Promise has begun development on the Career Acceleration Tool (CAT) is the first scalable solution intentionally designed to drive both *college achievement and career advancement*—closing the gap between education, skill-building, and economic opportunity. The CAT is different from existing online solutions as it aims to bring the separate silos of student journeys, labor market information, career resources, and training into one integrated experience.

The CAT aims to clarify college and career pathways and align the skills necessary to improve educational and economic outcomes for millions, many of whom are from low-income backgrounds. The platform focuses on four components that have been demonstrated to increase economic opportunity and career advancement:

- **Educational Selection:** Helping learners determine the type of education (e.g., on-the-job training, short-term credential, apprenticeship, institution of higher education) that might be best suited to their career aspirations.
- **Programmatic Selection:** Helping learners determine the type of academic program or training that best aligns with their career aspirations.
- **Career Selection.** Helping learners understand what types of occupations align with their educational plans, what skills are necessary, and what skills and experiences offer career-accelerating progression.
- **Professional Skill Development:** Helping learners acquire essential skills like financial wellness, data literacy, and social skills, which aid in short- and long-term career advancement.

The CAT is designed to help students and Promise practitioners understand how education and career decisions interact to shape long-term economic opportunity. It is grounded in four interrelated factors—institutional selection, program or major selection, occupational selection, and professional skill development—that together influence earnings, career stability, and upward mobility. Rather than treating college choice, field of study, and career outcomes as separate decisions, the tool emphasizes how these choices compound over time and how earlier decisions can either facilitate or inhibit future opportunities.

Institutional Selection: Where Students Enroll

The decision of whether to attend college, and which institution to attend, plays a significant role in shaping lifetime earnings, completion outcomes, and access to social and professional networks. Research shows that the internal rate of return for college is above 9% (Zhang et. al., 2024), which exceeds the rates of returns for commodities, mutual funds, and some equities over the long-term, making postsecondary education an excellent choice for students. If students do not wish to attend college, there are other opportunities to consider like

Registered Apprenticeships, or skills-based bootcamps, that can provide the skills necessary to succeed in selected occupations.

Program and Major Selection: What Students Study

The choice of major is often a stronger predictor of post-college earnings than the institution itself. Fields such as STEM, health care, and business tend to yield higher wages and stronger employment outcomes, while arts and humanities majors often have lower early-career earnings (Webber, 2016). These differences persist even after accounting for student ability, meaning that major choice independently affects economic outcomes. However, low-income and first-generation students may face barriers to entering high-return fields due to limited information, uneven academic preparation, or capacity constraints in high-demand programs . Accordingly, as Promise leaders and practitioners it is crucial to have conversations with students as early as possible in their academic and career journey. Aligning academic pathways with labor market information—and ensuring students have the preparation and support to succeed in those fields—is critical to improving economic prosperity for students and communities.

Occupational Selection: Jobs After Education

Even with a degree, the occupation a graduate enters has a major impact on earnings and career trajectory. Working in a job unrelated to one's field of study is associated with lower wages over the long-term, particularly in specialized disciplines. Occupational mismatch can result from poor labor market information, geographic constraints, or economic downturns at the time of graduation. At the same time, technological change has increased demand for occupations that rely on non-routine cognitive and social skills, while automating routine tasks. Access to internships, apprenticeships, and employer networks plays a key role in helping students secure aligned, resilient employment and avoid long-term earnings scarring.

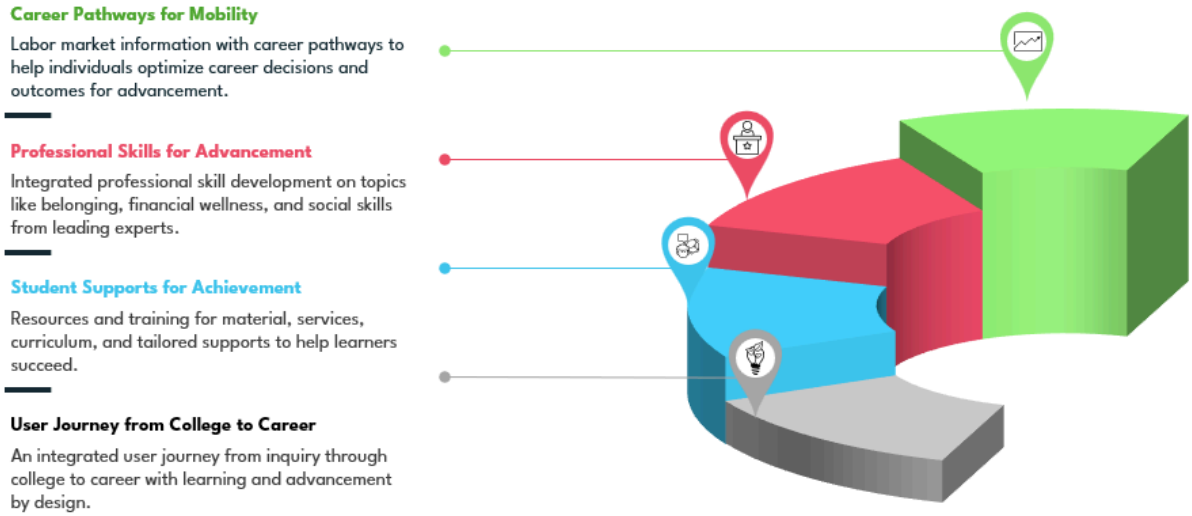
Professional Skills: Capabilities That Sustain Mobility

Beyond degrees and jobs, professional skills are essential for long-term adaptability and success. Social skills—such as communication, teamwork, and problem-solving—are increasingly valuable and complement technical expertise. In addition, prior research has shown that training on social skills can improve short- and long-term economic outcomes as occupations that necessitate social skills often pay more, and once in those occupations, workers with strong social skills are more likely to be promoted (Deming, et. al, 2017).

Data literacy has become critical across nearly all sectors, enabling workers to interpret and use information in evidence-based environments. Financial literacy supports mobility by helping individuals manage debt, build savings, and preserve the gains of higher earnings.

Finally, a strong sense of belonging influences persistence and completion, particularly for underrepresented students, making inclusive environments and mentoring central to economic outcomes.

Figure 6: Career Acceleration Tool Overview



Conclusion: An Integrated Approach to Economic Prosperity

Long-term economic prosperity and advancement is not determined by a single decision but by a sequence of interconnected choices and experiences. Institutional selection shapes access to resources and networks; program and major selection influence skill development and alignment with labor market demand; occupational selection determines early earnings and career momentum; and professional skills enable resilience and long-term growth. Interventions that address all four factors—by improving transparency, aligning education with workforce needs, reducing job mismatch, and building broad skill sets—offer the greatest potential to expand opportunity and promote sustained economic mobility. As Figure 6 describes, our aim with the Career Acceleration Tool is to provide one-stop for students and Promise practitioners to learn and have crucial conversations about their educational and occupational journey.

If you would like to learn more about the Career Acceleration Tool, please contact John Barnshaw at College Promise.

9. Putting the Pieces Together: Summary of the Career Acceleration Playbook for Promise Programs

While there is a lot of content in this Playbook, which can seem overwhelming, the most important thing to remember is that as a Promise leader or practitioner, ***you are uniquely positioned to help students on their journey to economic prosperity!***

Similar to a playbook for football, there may be a lot of plays that are in the book that are studied and evaluated, but are not called. In the same way, not everything in this playbook needs to be implemented for your Promise program. Rather, carefully curate the "plays" or "concepts" from this playbook that you believe will be most beneficial for your students.

In sum, the *Career Acceleration Playbook* is a practical, action-oriented guide designed to help Promise program leaders strengthen the connection between college access, student success, and long-term economic mobility. While Promise programs have been extraordinarily successful in expanding access to postsecondary education, access alone does not guarantee completion, meaningful employment, or sustained economic opportunity. The Playbook responds to this reality by equipping Promise leaders with labor market knowledge, strategies, and tools that help students navigate increasingly complex and non-linear pathways from college to career.

At its core, the Playbook positions Promise programs as uniquely situated at the intersection of students, higher education institutions, employers, and communities. Since Promise programs often engage students earlier than traditional career services—frequently before students enroll in college—they are well positioned to provide timely, trusted guidance about academic choices, skills development, and workforce opportunities. The Playbook is structured not as a prescriptive checklist, but as a flexible "menu" of strategies that you as a Promise leader or practitioner can adapt to your local context, institutional partners, and the students that you serve.

Why Labor Market Insights Matter for Promise Programs

A central principle of the Playbook is that many students move through higher education with limited understanding of the labor market. National research consistently shows that students select majors based primarily on interest or passion, while giving far less weight to job availability, salary potential, or long-term mobility. At the same time, students frequently overestimate or underestimate earnings associated with different fields, often by large margins. This disconnect can lead to prolonged time-to-degree, excess credits, switching majors late in college, or leaving higher education with "some college, no degree."

Promise programs can play a decisive role in addressing this gap. The research indicates that many faculty do not feel confident advising students on careers outside academia and career centers are underutilized by most students. As a connector of students to college, Promise programs have established trust, early engagement, and often, community credibility. By integrating labor market information into advising, programming, and partnerships, Promise programs can help students connect their interests with economically prosperous opportunities.

Foundations of Labor Market Information

The Playbook introduces labor market information (LMI) as the foundation for effective college-to-career guidance. LMI refers to data on employment, occupations, wages, skills, and workforce demand, while labor market insights involve interpreting and applying those data to occupations and jobs. For practitioners, the goal is not to turn Promise staff into economists, but to help them translate complex information into clear, student-centered guidance.

Four core facets of the labor market frame this work:

1. Size – The number of people employed in an occupation and whether that occupation is growing, stable, or declining.

2. Staffing – Which employers are hiring, when they hire, and where talent shortages or surpluses exist.

3. Salaries – Earnings potential, including entry-level pay and long-term mobility.

4. Skills – The knowledge, competencies, and abilities employers often seek.

Together, these facets help students ask essential questions: Will there be jobs in this field? Who hires for these roles? What can I expect to earn? What skills do I need to succeed? Promise practitioners can use these questions to guide conversations about majors, internships, experiential learning, and career planning.

Skills: A Convertible Currency for the Labor Market

The Playbook emphasizes that skills—not just credentials—are the connective tissue between education and employment. While degrees signal completion, skills signal capability. Employers increasingly focus on what candidates can do, not simply what credentials they hold. Skills are also more transferable across occupations and industries, providing students with resilience as technologies and job roles evolve.

For Promise programs, embedding a skills lens into advising and programming has several benefits. Skills training helps students recognize the value of experiences they already have (such as part-time work, caregiving, military service, or volunteering), encourages intentional participation in work-based learning, and strengthens alignment with employer needs. By helping students articulate both transferable skills (e.g., communication, problem solving, teamwork) and occupation-specific skills (e.g., programming languages, certifications, technical tools), Promise programs can significantly improve employability and early career outcomes.

Work-Based Education and Experiential Learning

A major portion of the Playbook surveys work-based education and learning experiences that connect academic learning to real-world application. Employers overwhelmingly value hands-on experience, and students who participate in experiential learning report stronger professional skills and greater career clarity. Yet low-income and first-generation students—who comprise the majority of Promise participants—are often least likely to access these opportunities.

The Playbook outlines ten major forms of work-based learning, ranging from short-term, education-centered experiences to longer, employment-centered pathways:

- Case Competitions and Hackathons
- Externships
- Micro-internships
- Clinicals and Practicums
- Customized academic learning
- Honors theses and capstone projects
- Joint Certificates
- Federal Work-Study
- Registered Apprenticeships
- Internships (including Pre-Internships, Co-Ops, and Intern-to-Hire models)

Rather than privileging one model over another, the Playbook encourages Promise practitioners to think in terms of pathways—sequencing experiences over time so students can progressively build skills, confidence, and professional networks. Importantly, many of these experiences can be structured to be paid, short-term, or flexible, reducing barriers for students who must balance work, school, and family responsibilities.

Positioning Skills for Placement

Experiential learning alone is not enough if students cannot effectively communicate their skills to employers. The Playbook therefore focuses on helping students position their skills for placement through resumes, interviews, portfolios, and professional personas. Many students struggle to translate academic projects or part-time jobs into language that resonates with hiring managers.

Promise leaders and practitioners can add substantial value by helping students identify transferable skills, align them with specific job requirements, and present evidence of those skills through concrete examples. This includes guiding students in resume development, interview preparation, and portfolio building, as well as encouraging use of professional platforms such as LinkedIn or digital portfolios. For many Promise students, this guidance may be their first structured exposure to professional norms and expectations.

Building and Sustaining Talent Connections

Beyond individual student support, the Playbook positions Promise programs as brokers of talent connections between higher education institutions and employers. Employers often struggle to find qualified candidates, while institutions are not always perceived as responsive to workforce needs. Promise programs—rooted in community trust and often supported by local leaders—can bridge this gap.

By leveraging labor market insights, Promise programs can identify high-demand employers, anticipate hiring cycles, and design partnerships that benefit students and employers alike. These partnerships may include internships, apprenticeships, practicums, or employer-informed curricula. Over time, such connections can strengthen regional talent

pipelines, improve student outcomes, and even diversify revenue streams for Promise programs through employer engagement and sponsorship.

Crucial Career Conversations with Students

The Playbook also addresses the importance of having honest, timely conversations with students about career opportunities. These conversations are not about discouraging passion or limiting choice, but about ensuring students understand trade-offs and long-term implications. When students receive labor market guidance early—before committing to a major or accumulating excess credits—they are better positioned to align their interests with viable pathways.

Promise leaders and practitioners are encouraged to frame these conversations as supportive and empowering, emphasizing options, flexibility, and skill-building rather than prescriptive outcomes. Even modest exposure to labor market realities can significantly improve student decision-making compared to little to no guidance.

The Career Acceleration Tool

The Playbook culminates with an overview of the Career Acceleration Tool (CAT), which operationalizes many of the concepts presented. CAT integrates labor market information with career exploration, skill development, and pathway planning. For Promise programs, the tool offers a scalable way to embed labor market insights into student support, complementing advising and programming rather than replacing them.

Conclusion: From Access to Mobility

Taken together, the *Career Acceleration Playbook* helps to frame the role of Promise programs for the decade ahead. While access remains foundational, the next phase of the Promise movement is about completion, careers, and economic prosperity for students and communities. By integrating labor market insights, expanding work-based and experiential learning, strengthening employer partnerships, and helping students position their skills, Promise programs can evolve from gateways to college into bridges to opportunity.

The Playbook affirms that Promise leaders do not need to do everything at once. Instead, it invites practitioners to start where they are, build confidence in labor market literacy, and gradually layer strategies that align with their students and communities. In doing so, Promise programs can continue to deliver on their core mission—expanding educational opportunity—while ensuring that opportunity leads to meaningful, sustainable outcomes in the workforce.

Appendix

A Roadmap for Crucial Conversations with Students

Year 1: Career services helps them identify transferable skills in research, data analysis, and communication. They learn about roles in policy analysis, nonprofit management, and user research.

Year 2: They take a statistics course and volunteer for a community data project.

Year 3: They intern with a local government agency and network with alumni in public policy.

Year 4: They graduate with a competitive skill set, a clear understanding of market demand, and a realistic salary expectation—positioning them for a sustainable wage in a mission-driven career.

References

1. The Bank of New York Mellon Corporation. (n.d.). Pre-Internship Program. The Bank of New York Mellon Corporation. https://www.bny.com/corporate/global/en/careers/students/pre-internship.html
2. Bureau of Labor Statistics. (2024, August 29). Software Developers, Quality Assurance Analysts, and Testers. Occupational Outlook Handbook. https://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm#tab-6
3. Carlson, S. (2025, April 23). "We Don't Know What 'Skills' Means." The Chronicle of Higher Education. https://www.chronicle.com/newsletter/the-edge/2025-04-23?utm_source=Iterable&utm_medium=email&utm_campaign=campaign_13310897_nl_The-Edge_date_20250423
4. Carlton, G. (2024, August 14). Back-To-School Sentiment: College Students' Perspectives On the Academic Year Ahead. Forbes. https://www.forbes.com/advisor/education/student-resources/back-to-school-sentiment/
5. Cooper, L. (2025, January 6). 115 years later: How Northeastern's co-op program grew with the university. The Huntington News. https://huntnewsnu.com/82523/campus/115-years-later-how-northeasterns-co-op-program-grew-with-the-university/#:~:text=Co%2Dop%20is%20a%20cornerstone,for%20co%2Dops%20and%20internships.
6. Culbertson, D. (2024, April 24). US Q1 2024 Business-to-Business Labor Market Update: The Worst May Be Over for Software Development Job Postings. Indeed Hiring Lab. https://www.hiringlab.org/2024/04/24/us-q1-2024-business-to-business-labor-market/
7. Emory University. (n.d.-a). Conference Presentation Grants. Emory Undergraduate Research Programs. https://college.emory.edu/undergraduate-research/research-support/conference-grants.html
8. Emory University. (n.d.-b). Stand for Honors. Emory Institute for the Liberal Arts. https://ila.emory.edu/majors-minors/resources-for-students/current-majors/honors.html
9. Federal Student Aid. (n.d.). The Federal Work-Study Program. FSA Partner Connect. https://fsapartners.ed.gov/knowledge-center/fsa-handbook/2022-2023/vol6/ch2-federal-work-study-program#:~:text=see%20Volume%203.-,FWS%20Jobs%20and%20Employers,nonprofit%20or%20for%2Dprofit%20organizations.
10. Fleenor, L. (2022, December 6). Students challenged to develop sustainability solutions. UGAToday. https://news.uga.edu/students-challenged-to-develop-sustainability-solutions/#:~:text=On%20Dec.,a%20panel%20of%20Delta%20executives.&text=%E2%80%9CWe%20are%20really%20energized%20by,Fletcher%2C%20Delta%27s%20chief%20sustainability%20officer.
11. Fogle, D. (2022, April 19). Claflin STEM Majors to Begin Full-Time Positions with Zoom Communications Following Year-Long Internship. Claflin University. https://www.claflin.edu/news-events/news/2022/04/19/claflin-stem-majors-to-begin-full-time-positions-with-zoom-communications-following-year-long-internship
12. Fuller, J. & Raman, M. (December, 2022). The Partnership Imperative: Community Colleges, Employers, and America's Chronic Skills Gap. American Association of

Community Colleges; Harvard Business School. https://www.hbs.edu/managing-the-future-of-work/Documents/research/The%20Partnership%20Imperative%2012.12.2022.pdf
13. Gatta, M., Finley, A., & Green. P. (2024, April). The Integration of Career Readiness Into the Curriculum. National Association of Colleges and Employers; American Association of Colleges & Universities; Society for Experimental Education. https://naceweb.org/docs/default-source/default-document-library/2024/publication/free-report/nace-2024-faculty-attitudes-and-behaviors.pdf?sfvrsn=5bbadc40_3)
14. GlobeNewswire. (2020, June 30). Zoom and Claflin University Launch Five-Year Strategic Partnership. Yahoo Finance. https://finance.yahoo.com/news/zoom-claflin-university-launch-five-140310461.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuYmluZy5jb20v&guce_referrer_sig=AQAAAJCOGkMhtznaow2K_NDDVNGkoTmKOGns5qEkefdvsyycdkrBu9OwQBGWhDlP7rKc_c0XOJo1JR0JlndcnrwhzlmPVImEQF57L_jf3fC3Tf_-1ptbkrw1279IsirUb3ebDvxsG-rwB506mhPdVpJs-Xl1TYYtlV3EyAUYYnTbxidT
15. Gray, K. (2022, April 4). Community Colleges are Valuable Partners for Employers Looking to Build their Talent Pipeline. National Association of Colleges and Employers. https://naceweb.org/talent-acquisition/best-practices/community-colleges-are-valuable-partners-for-employers-looking-to-build-their-talent-pipeline/
16. Gray, K. & Koncz, A. (2025, January 28). The Attributes Employers Look for on New Grad Resumes—and How to Showcase Them. National Association of Colleges and Employers. https://www.naceweb.org/about-us/press/the-attributes-employers-look-for-on-new-grad-resumes-and-how-to-showcase-them
17. Jobs for the Future. (n.d.). Registered Apprenticeships. Jobs for the Future. https://info.jff.org/earnandlearn-registeredapprenticeships
18. Jobs for the Future. (2020, May 30). Youth Apprenticeship. JFF Apprenticeship & Work-Based Learning. https://www.jff.org/youth-apprenticeship/
19. Johns Hopkins University. (n.d.-a). Clinical Exposure/Experience. Johns Hopkins University Pre-Professional Advising. https://studentaffairs.jhu.edu/preprofadvising/pre-medhealth/relevant-experience/shadowing/
20. Johns Hopkins University. (n.d.-b). Customized Academic Learning. Johns Hopkins Undergraduate Program in Public Health Studies. https://krieger.jhu.edu/publichealth/experiential-learning/customized-academic-learning/
21. Johns Hopkins University. (n.d.-c). Customized Academic Learning: Research, Internships, and Independent Study. Johns Hopkins Krieger School of Arts & Sciences Undergraduate Advising. https://advising.jhu.edu/research-internships-and-independent-study/
22. Marinescu, I., Bettinger, E., Jacob, B., & Baker, R. (2017, May 11). Major decisions: How labour market opportunities affect students' choice of subjects. Centre for Economic Policy Research VoxEU. https://cepr.org/voxeu/columns/major-decisions-how-labour-market-opportunities-affect-students-choice-subjects#:~:text=The%20probability%20of%20having%20a,is%20often%20not%20statistically%20significant.
23. National Aeronautics and Space Administration. (n.d.). NASA Pathways. NASA Careers. https://www.nasa.gov/careers/pathways/
24. National Association of Colleges and Employers. (2024, September). The 2024 Student Survey Report. National Association of Colleges and Employers. https://naceweb.org/store/2024/2024-nace-student-survey-four-year

25. National Association of Colleges and Employers. (n.d.) Better Together: How Industry and Academia Can Co-support Students' Career Readiness. National Association of Colleges and Employers. https://naceweb.org/career-readiness/competencies/better-together-how-industry-and-academia-can-co-support-students-career-readiness/
26. National Center for Education Statistics. (2023). Most common undergraduate fields of study. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/fastfacts/display.asp?id=37
27. NorthcentralPA.com. (2022, October 20). 'Intern to Hire' program offers fast-track to state jobs. NorthcentralPA.com. https://www.northcentralpa.com/education/intern-to-hire-program-offers-fast-track-to-state-jobs/article_1dbcaa7c-4f66-11ed-95f5-b30fab1088d8.html
28. Nolan, M. (2021). A two-way street. Rollins Magazine. https://publichealthmagazine.emory.edu/issues/2021/fall/features/a-two-way-street/index.html
29. O*NET OnLine. (2024a, November 19). Social skills. Soft Skills Custom List. https://www.onetonline.org/skills/soft/
30. O*NET OnLine. (2024b). Technology Skills. Actuaries. https://www.onetonline.org/link/summary/15-2011.00
31. O*NET OnLine. (2023). Technology Skills. Statisticians. https://www.onetonline.org/link/summary/15-2041.00
32. Parker Dewey. (n.d.). Partnering with Parker Dewey. Parker Dewey. https://www.parkerdewey.com/universities
33. Rueger-Miroewski, D. (2022, July 6). Micro-Intern Success: Exposure, Exploration, and Experience. Parker Dewey. https://www.parkerdewey.com/blog/exposure_exploration_experience
34. Samra, K. & Grammar, T. (n.d.) Pearl Celix: Federal Work Study, "gave me the tools I needed to become the person I am." Pima Community College. https://www.pima.edu/news/stories/current/202206-13-pearl-celix-fws.html
35. SAS Institute. (n.d.). SAS® Joint Certificate Program. SAS Institute. https://www.sas.com/content/dam/SAS/en_us/doc/other1/sas-joint-certificate-program-107021.pdf
36. State University of New York at New Paltz. (n.d.). SAS® Joint Certificate Program. State University of New York at New Paltz School of Business. https://www.newpaltz.edu/schoolofbusiness/businessanalytics/sas-joint-certificate-program/
37. Strada Education Network. (2019). Changing the Value Equation for Higher Education. Gallup. https://cdn.prod.website-files.com/6777c52f82e5471a3732ea25/67edaa4001459393c9e8db1c_Strada_EducationValueEquation_Report_11182019.pdf
38. Synchrony. (n.d.) Programs. Synchrony University. https://www.synchronyuniversity.com/programs
39. Trident Technical College (n.d.-a). Charleston Regional Youth Apprenticeships. Trident Technical College. https://www.tridenttech.edu/career/workforce/car_youth_apprentice.htm
40. Trident Technical College (n.d.-b). Youth Apprenticeship Success Stories. Trident Technical College. https://www.tridenttech.edu/career/workforce/car_youth_apprentice_stories.htm
41. University of Maryland. (n.d.). SAS Joint Certificate in Health Analysis. University of Maryland School of Public Health. https://sph.umd.edu/academics/departments-units/department-epidemiology-and-bi

ostatistics/degrees-and-programs-epidemiology-and-biostatistics/sas-joint-certificate-health-data-analysis
42. University of California, Los Angeles. (n.d.). UCLA School of Nursing Pre-Licensure Bachelor of Science FAQ's and Things to Know. https://nursing.ucla.edu/sites/default/files/media/documents/BS-faq.pdf
43. University of North Carolina at Chapel Hill. (n.d.). Micro-Internships. University of North Carolina at Chapel Hill Career Center. https://careers.unc.edu/employers/micro-internships/
44. University of Pennsylvania. (n.d.). Corporate Partners. Mack Institute for Innovation Management. https://mackinstitute.wharton.upenn.edu/corporate-partnership/
45. U.S. Department of Labor. (n.d.-a). Apprenticeship Industries. Apprenticeship.gov. https://www.apprenticeship.gov/apprenticeship-industries
46. U.S. Department of Labor. (n.d.-b). Explore Approved Occupations for Registered Apprenticeship. Apprenticeship.gov. https://www.apprenticeship.gov/apprenticeship-industries
47. U.S. Department of Labor. (n.d.-c). Registered Apprenticeship Program. Apprenticeship.gov. https://www.apprenticeship.gov/employers/registered-apprenticeship-program
48. U.S. Department of Labor. (2025, March). Explore Registered Apprenticeship. Apprenticeship.gov. https://www.apprenticeship.gov/sites/default/files/DOL_IndFactsheet_Apprenticeship101_v31125.pdf
49. Watson Spiva, Y. (2020, December 17). Leveraging Promise Programs to Connect Students to Careers. College Promise. https://www.collegepromise.org/newsandinsights/leveraging-promise-programs-to-connect-students-to-careers
50. Wendell, B. (2020, February 27). Through Bucknell's Externship Program, Students Get Inside Look at Life on the Job. Bucknell University. https://www.bucknell.edu/news/through-bucknells-externship-program-students-get-inside-look-life-job
51. Western Arizona College. (n.d.). Google IT-AWS Joint Certificate. Western Arizona College. https://www.azwestern.edu/degrees-and-certificates/occupational-certificate/google-it-aws-joint-certificate
52. Work for Illinois. (n.d.) Intern to Hire. illinois.gov. https://careers.illinois.gov/carsrvcs/intern-to-hire.html
53. World Economic Forum. (2025, January). Future of Jobs Report. https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf
54. Yello Sourcing. (2024). Top 100 Internship Programs of 2024. National Intern Day. https://www.nationalinternday.com/2024-top-internship-programs