# Policy Brief

COLLEGE PROMISE

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# Advancing In-Demand Skills to Address Cost-Value Challenges of Higher Education

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Over the post decade, the public perception of higher education has been met with increasing skepticism and a substantial decline in confidence (Brenan, 2023; Brown, 2018; Fry et al., 2024; Kelderman, 2023). While the declines in confidence in higher education are shorpest among those without a college degree (-25 percent), the declines are universal and also include those with a post-graduate degree (-17 percent) (Brenan, 2023).

Generally, increasing skepticism and declining confidence appear to center around (1) the rising cost of attendance, (2) skepticism about whether the skills learned in college adequately prepare students for early career success, and (3) the perceived long-term return on investment of the time, effort, and financial expenditures required to complete a degree over working more for pay in the short-term. These concerns are often linked: If the cost of attendance for students increases at a foster rate than the return on investment of career earnings, then the cost-value relationship declines, placing an increased focus on what training and skills higher education provides. Consequently, it should come as little surprise that prospective students are more deliberative in exploring their options of (1) attending college, (2) obtaining educational services elsewhere, or (3) forgoing additional education entirely.

Among the three factors of cost-education-value, higher education arguably has greater control over the ability for students to learn and develop skills. However, in a recent survey only 34 percent of students feel prepared for the labor market upon graduation (Crabtree, 2019). Perhaps more concerning than only one-third of students feeling prepared at graduation is that a similar study found that only 11 percent of business leaders strongly agreed that graduating students have the skills their businesses need (Busteed, 2018).

If higher education is not teaching the skills that hiring managers and employers value, then what skills or experiences are in demand? The skills most coveted by employers are often overlooked by higher education: social skills. Social skills are the most valued set of in-demand skills (91 percent) in the contemporary labor force (Strada Education Network, 2022). This brief explores what social skills are, why they are even more sought after than STEM skills, how they translate to long-term economic opportunity, and how Promise Programs are filling the gaps to better address the cost-value challenges currently facing higher education.

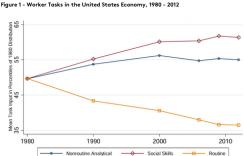
#### The Increasing Significance of Social Skills

Social skills are a set of learned abilities that enable an individual to interact competently and appropriately in a social context (American Psychological Association, 2018). While most can recognize the ability "to interact competently and appropriately," researchers have sought to measure social skills in key greas: (1) coordination (adjusting actions in relation to others), (2) negotiation (trying to reconcile differences), (3) persuasion (persuading others to change their minds or behavior), and (4) social perceptiveness (understanding why others react as they do) (O\*Net. 2024).

There is a common adage that social skills, often termed "soft skills," are the "hardest to learn" because they are often not incorporated into specific curriculum. Instead, as the concepts above indicate, social skills are often acquired as part of a broader set of learned abilities. The economist David Demina (2022) argues that it may be more appropriate to refer to social skills as "higher order skills." The notion of a higher order harkens back to the highly influential Bloom's Taxonomy (1956), which sought to establish a pyramid of cognitive processes from very basic at the bottom, like knowledge and comprehension, to more complex, like synthesis and evaluation at the top. Similarly, Deming (2024) asserts that some social skills, like teamwork and decision-making, draw upon multiple sets of learned abilities.

This research suggests that social skills are often not well incorporated into formal education because they involve multiple interconnected abilities, making their integration more complex. However, their importance in higher education could be more justified if the labor market increasingly prioritized jobs requiring social skills over others. In this case, higher education could play a pivotal role in equipping students with these skills, alianing educational outcomes more closely with workforce demands. and enhancing the value of the investment in education.

Beginning in the 1990s, economists (Autor et al., 2003; Deming, 2017a) found that as the use of computers and technology surged, middle-skill, routine occupations like secretaries and paralegals began to be hollowed out in the United States labor market. The decline of these occupations meant an increasing focus on skills and tasks that could not easily be substituted away by automation are generally complemented by the increasing use of technology.



As Figure 1 from Deming (2017b: 1626) illustrates, between 1980 and 2012, occupations that were social skill-intensive grew by 24 percent (red diamond in Figure 1), while non-routine analytical positions (blue circle), which require strong math skills but low social skills requirements grew by only 11 percent, and have declined since 2000. During this time, routine occupations (orange square), like Sales, Office Assistants, Construction and Extraction, and Installation and Maintenance jobs declined more than 10 percent from the peak in 1980. Taken together, these data (comparing the final points in Figure 1) indicate a substantially widening gap between routine occupations that require few social skills and in-demand occupations that require social skills.

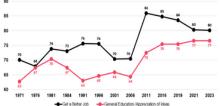
In subsequent analyses studying the same period of time (1980-2012), Deming (2017b) found that employment and wage growth was particularly strong in occupations with high math and social skill requirements, but employment declined in occupations with high math but low social skill requirements, including many STEM jobs. In short, while math and social skills are often important requirements for many occupations, when comparing occupations that have high math skill requirements, employment and wage growth is higher in the fields that also require social skills.

## Students, Social Skills, and Long-Term Economic Opportunity

Social skills are important because the sectors with the fastest growing jobs also tend to pay higher wages, even when including jobs that also require STEM skills. This trend will likely continue for the remainder of the decade as researchers have consistently found that jobs requiring a high-degree of non-routine social interaction have proven the most difficult to replace (Autor, 2015; Deming, 2017a). Thus far, our analysis in this brief reads as top-down: Higher education is perhaps not as well aligned with the most pressing needs of hiring managers and the labor market, which increasingly places a premium on social skills.

An alternative approach would be bottom-up: the core deliverable for higher education, the training and refinement of students, should focus on the needs and interests of students. Each year, for the past five decades, researchers at the University of Colifornia Los Angeles have asked tens of thousands of students across hundreds of institutions entering higher education why they chose to go to college.

Figure 2 - Percent of First-Year Students Reporting Reason as "Very Important" in Deciding to Go to College, United States, 1971 - 2023



As Figure 2 indicates, at no point over the previous five decades have first-year students prioritized going to college to gain a general education or an appreciation of ideas over going to college to get a better job (black line) (Eagan et al., 2020; Cooperative Institutional Research Program, 2024). If students aim to attend college to enhance their career opportunities, it may be beneficial for faculty, education professionals, and supporting educational organizations to consider this multi-decade research on student motivations for pursuing higher education and explore ways to better align student adols with the competitive, in-demand skills needed in the labor market.

Another important facet of the "bottom-up" approach to understanding the labor market is to better understand what students and early career employees want. That jobs exist in a particular sector, and pay better than others are not necessarily the most compelling reasons for why educators or researchers should recommend students enter certain occupations. Perhaps stronger justifications would be if certain occupations selected by students with in-demand skills help them achieve their goals (e.g. fulfilling the "better job" wants of students in Flagure 2).

Researchers (<u>Cartes, 2019</u>: <u>Deming, 2017a</u>: <u>Deming, 2022</u>) have found that individuals with stronger social skills tend to sort into "cognitive non-routine" occupations. Essentially, this means that professions like law, management, architecture, and design are appealing to students with strong social skills. Since these fields require a greater degree of coordination, negotiation, persuasion, and perceptiveness, and the tasks required tend to have a greater degree of variation, these are attractive to individuals seeking intellectual stimulation in their profession (<u>Edcor, 2024</u>).

It is also important for many students to believe that their education helps them reach personal goals. This finding is critically important because recent research has found that it matters more to recent graduates to achieve goals than the money they earn or their overall assessment of whether their education was worth the cost (<u>Clayton and Torsey-Saboe, 2021</u>).

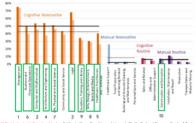
Figure 3 - Education to Career Connections Correspond to Better Perceived Outcomes

Figure 3 indicates that the greater the likelihood of earning more than \$40,000 annually increases by 37 percent (29 percent to 66 percent), while the greater the coreer connections, the more likely students are to believe education is worth the cost. As the red line indicates, when paired with education, it helped achieve goals, and the perceived outcomes of education jumped 27 percent (from 59 percent to 86 percent).

Thus far, we have seen that social skills are valuable to both employers who value them in the labor market and students who sort into occupations where social skills are in demand. These occupations also tend to pay higher early, mid-career, and late careers.

Figure 4 - Top Occupations, Role, and Earnings, United States, 2023

Darker shaded bars indicate Managerial positions v. Individual Contributor positions



"The Growing Skill Divide in the U.S. Lobor Market," Maximiliano <u>Dvorkin</u> and Hannah Shell. Federal Reserve Bank of St. Louis, 2017

Figure 4 provides a representation of mapping "cognitive non-routine" occupations that require social skills with the rank order of occupations in the United States economy. Nine of the top 10 highest-earning occupations in the labor market, boxed in green, require Cognitive Non-Routine skills.

Perhaps the most important feature of Figure 4 is not just the highest earning occupations requiring social skills, but the significance of the darker bars associated with each occupation.

In addition to earning high solaries at the start, Deming (2017a) also found that workers in Cognitive Non-Routine fields are substantially more likely to advance to managerial positions, setting up long-term success in the labor market, and career mobility.

Another advantage to focusing on social skills is that the long-term value of training on social skills does not appear to "fade out" or extinguish, which is a common pattern for many early interventions like math or evidenced-based reading education (<u>Buckley et al.</u> 2018: Sackett and <u>Kuncel. 2018</u>). Indeed, research on social skills (<u>Heckman et al. 2013</u>) finds that the long-run impacts on employment, earnings, and criminal activity were primarily mediated by programs that focus on social skills.

# Promise Programs Aid in the Development of Social Skills

Social skills are a valuable and teachable asset at any stage of life, from preschool through college and beyond (Heckman et al., 2013). Many Promise Programs interact with students early in their educational journeys, making the College Promise movement an ideal intervention site to support the growth and refinement of these essential skills. The following offers three recent examples of social skills development (1) prior to college, (2) during college, and (3) at scale across all Promise programs.

Lynchburg Beacon of Hope. Founded in 2010, Lynchburg Beacon of Hope is a Promise Program based in Lynchburg, Virginia, that has expanded from providing scholarships to supporting students throughout their educational journeys, beginning in Grade 6 to coreer placement. What makes Beacon of Hope an innovator relative to many Promise Programs is a model focused on high school student outreach. Many Beacon of Hope students graduate from Title I high schools, which is why it is crucial to share that these students have apportunities to attend college in the region, often for free. Beginning in Grade 6, Beacon of Hope invests in students in their community through college preparation, social skills training, internships and training programs.

# COLLEGE PROMISE

As Executive Director Leidra McQueen notes, "We are intentional in providing greater educational opportunity to those who might not have thought they could attend college. We also partner with them to provide them the educational and social skills they will need to be successful in college and, later, in the workforce."

Alamo Promise. Founded in 2020, Alamo Promise is a Promise Program based in San Antonio, Texas, that has enabled 20,000 students and their families to attend college for free. The provision of the scholarship is but one step in a longer journey to support Alamo Colleges students. As Chancellor Mike Flores notes, "The Alamo Promise program continues our aim to end decades of generational poverty in our community." In addition to the scholarship, Alamo Colleges offers students a guaranteed course schedule so students can get the courses they need when they need them, co-requisite courses to strengthen student retention, a first-year experience that provides financial literacy education, social skills training, and micro-internships and/or internships for students.

While serving 20,000 students in five years and growing the impact to 5,500 in the most recent year are impressive numbers at scale, equally impressive is the impact the Alamo Promise has had on individual students. Four years ago, Jennifer Tolado was a 14-year-old with limited proficiency in English. Through Alamo Promise, Jennifer was able to attend college, and now, Jennifer is a member of the Phi Theta Kappa Honor Society, mentors other students, and is on pace to graduate with a degree in Teaching. Commenting on her growth, Jennifer notes, "AlamoPROMISE has relieved a significant burden and made it possible for me to achieve my educational goals without undue financial stress. This support has not only lightened my burden but has also reaffirmed my belief in the power of community and collective investment in education." Reflecting on her growth, Toledo noted, "My academic achievement is a testimony to the power of resilience and an immense belief in one's ability to succeed no matter what challenges one faces (Alamo Colleges) Strict., 2023."

College Promise: Training Promise Programs at Scale. In 2024, College Promise held three national convenings across the United States in Arizona, Massachusetts, and California, providing technical assistance to more than 250 Promise Program leaders and practitioners. In addition to speaking with programs about the value of social skills from an educational and economic perspective, these convenings also provided training on developing social skills through narrative and storytelling.

We have seen how higher education faces increasing skepticism of the value related to the cast-value challenges. While many higher education institutions have focused on better aligning the cost of education to prospective students and policymakers, there is a tremendous opportunity to focus on the economic value of an education by delivering social skills, a foect of higher education that has not been well interpreted into formal education to date. Despite the challenges of educating students, particularly those that are first-generation and low-income, Promise Programs, already a leader in the value conversation of higher education, has sought to improve the value of education by better aligning the wants of students ("I want to go to college to get a better job") with the needs of employers ("I want early career tolent that has the requisite skills to be successful at hire"). Emphasizing social skills offers a crucial opportunity to enhance students' skill development, meet employers' demands for increasingly sought-offer social skills, and highlight the enduring value of education for students, programs, and communities.

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