Policymakers, advocates, parents, and students are all increasingly asking important questions about the value of college education. In response, the Biden administration finalized its gainful employment rule in late 2023, which requires the US Department of Education to more systematically gather data and report on the earnings and debt of college graduates and to enforce accountability for nondegree credentials, such as certifications and licenses, and degrees issued by private, for-profit institutions.

Preliminary analyses by the Urban Institute suggest important occupational patterns in the types of credentials that are likely to fail the gainful employment test. A significant share of nondegree credentials in health care professions and personal services acquired at both public and private institutions has median earnings lower than those of recent high school graduates (Delisle and Cohn 2022). Similar analysis of earnings for master’s degrees relative to those of early career workers with bachelor’s degrees shows that a large share of mental health, counseling, and teacher education programs would have similar difficulties passing the test (Delisle and Cohn 2023).

This presents a dilemma for how to think about credential transparency and accountability. Many communities are already experiencing shortages of workers in fields like health and education that require credentials with low market value. Moreover, educational institutions do not control the dynamics of the labor market, including the credentials employers require, wages paid, and the policies and larger market factors that shape these practices. For this reason, solely focusing on institutional accountability for particular credentials may not address the underlying challenges.
Rather than focusing on debt and earnings for graduates for particular programs or institutions, this brief starts with occupations themselves, describing their typical level of education required at entry and examining the degree to which they pay an earnings premium for higher educational requirements. The brief also explores the types of occupations where the greatest challenges lie and discusses the types of multifaceted, sector-based approaches needed to ensure positive ROI for college education, address labor shortages, and improve job quality.

Methodology

Data on jobs and median wages for detailed occupations comes from the 2022 Occupational Employment and Wage Statistics national data.1 These data are supplemented by adding information on the typical education required at entry from the Employment Projections program at the US Bureau of Labor Statistics.

To derive a median wage for each level of required education at entry, I weighted the medians for all the detailed occupations falling in each educational category by their total number of jobs. I then compared the median wage for individual detailed occupation at each level of education to the weighted median wage of all occupations at the level just below it. For example, I compared the median wage for each occupation requiring an associate’s degree to the weighted median wage of all occupations requiring a nondegree credential.

Findings

Jobs in occupations that require more investment in education generally pay more.

The added value of the next highest degree tends to increase at each level of investment (figure 1). For example, a person in an occupation that requires a nondegree credential (50 occupations) earns about $6,100 more than someone in an occupation that requires only a high school diploma. This difference more than doubles to $13,400 when comparing jobs that require associate’s degrees (49 occupations) with those that require nondegree credentials; it grows to more than $20,000 when comparing jobs that require bachelor’s degrees (179 occupations) with those that require associate’s degrees. However, the difference between median wages for jobs that require a bachelor’s degree and those that require a master’s degree (39 occupations) is remarkably small—less than $300. This pales in comparison to the more than $50,000 difference in median wages for jobs that require a master’s degree and those that require a doctoral or professional degree (72 occupations).
Significant shares of jobs at all levels do not pay an earnings premium for more education to the average worker.

As shown in figure 2, 35 percent of jobs in occupations that require a postsecondary nondegree award (e.g., certificate or certification) typically do not pay more than the median wage for jobs that require only a high school diploma. Among jobs that require a master’s degree, this share is even higher: almost 50 percent of jobs in occupations that require this level of education typically do not pay more than the median wage for jobs that require a bachelor’s degree.
FIGURE 2
Large Shares of Jobs Are in Occupations That Do Not Pay an Earnings Premium for More Education to the Average Worker

Share of jobs in occupations that have lower median wages than those requiring degrees a level lower at entry

Source: Author’s analysis of 2022 Occupational Employment and Wage Statistics national data on median income for full-time work for detailed occupations, weighted by total employment; as well as typical education required at entry from the Employment Projections program. The numbers in parentheses are the total number of occupations requiring each level of education.

Most jobs that do not pay an earnings premium for more education to the average worker are in health care, education, and social services.

Overall, there are about 9.2 million jobs that do not reliably pay an earnings premium for additional education. Figure 3 shows that nearly 80 percent of these jobs are concentrated in occupations that serve the public good: health practitioners, technicians, and support occupations (34 percent); educational instruction and library occupations (28 percent); and community and social services occupations (19 percent). These are all jobs that are heavily concentrated in the public and nonprofit sectors or financed with public dollars.
FIGURE 3
Most Jobs That Do Not Pay an Earnings Premium for More Education Are Concentrated in Health Care, Education, and Social Services

Number of jobs with no earnings premiums by level of education required at entry

Source: Author’s analysis of 2022 Occupational Employment and Wage Statistics national data on median income for full-time work for detailed occupations, weighted by total employment; as well as typical education required at entry from the Employment Projections program.

In health care occupations, the majority of the more than 3 million jobs that do not have a clear earnings premium are those that require short-term nondegree credentials, including nursing assistants, medical assistants, medical transcriptionists, emergency medical technicians, psychiatric technicians, ophthalmic medical technicians, and phlebotomists.

In educational instruction and library occupations, trends for the roughly 2.5 million jobs with unreliable wage premium are quite different. More than 80 percent of these jobs require a bachelor’s degree or higher. Many of them are in a postsecondary educational setting—particularly those requiring a master’s degree or higher—but they also include jobs in early education (e.g., pre-school and kindergarten) and adult career and technical education that may require less education.
In community and social services occupations, all the approximately 1.75 million jobs that may not yield an earnings premium typically require bachelor’s or master’s degrees. The bachelor’s degree–level occupations include social workers and counselors of different varieties, probation officers, social service specialists, and religious workers. The master’s degree–level occupations are mostly educational, guidance, and career counselors and advisers; marriage and family therapists; rehabilitation and other counselors; and specialized social workers in health care, mental health, and substance abuse.

Discussion

The analysis in this brief shows that even the very best educational institutions and programs will struggle to ensure earnings premiums for the training and education currently required for many key occupations. This would be true even if the degrees were free. The magnitude of the problem increases when debt is added to the equation. Debt can negate the very modest earnings premiums for occupations requiring a bachelor’s degree, such as earnings for teachers in elementary school ($61,690), middle school ($61,810), and high school ($62,360) that have median earnings only slightly above those of occupations requiring an associate’s degree ($60,570). Debt can also seriously exacerbate the economic challenges of working in the occupations in health care, education, and social services highlighted in this brief, where people are unlikely to receive any financial reward for investing in additional education.

It is important to think about cumulative student debt—not the marginal debt for each additional credential that is currently the focus of most conversations about gainful employment. Many people take out loans for multiple credentials over their lifetime. For example, about half of the people who completed associate’s degrees (51 percent) and bachelor’s degrees (47 percent) also invested in a nondegree credential, such as educational certificates and professional licenses or certifications (Hanson 2021). Furthermore, all who completed a master’s, professional, or doctoral degrees carry with them the investments they made in their bachelor’s degrees. So when thinking about college debt, it is important to see it as something cumulative.

This accumulation of debt is a serious problem, particularly for professionals in educational and social service occupations that tend to require bachelor’s degrees or higher. For example, for master of social work graduates, total educational debt typically amounts to about $66,000, nearly $50,000 of which is to obtain a master’s degree (Salsberg et al. 2020). About two-thirds of all educators—pre-K, K-12, and higher education levels—typically take out more than $25,000 in debt to pay for their education, and about a third take out more than $65,000 (Hershcopf et al. 2021). This often reflects not only the cost of a bachelor’s degree but also the required certification programs and licensing tests in most states, as well as master’s and doctoral degrees in some cases.

Many of the health care, education, and social service occupations most affected by gainful employment issues are vital to basic community functioning, and they are also experiencing acute shortages of professionals pursuing and staying in these careers. Within the next five years, the US
faces a projected shortage of more than 3.2 million lower-wage health care workers, such as medical assistants, home health aides, and nursing assistants (Bateman et al. 2021). The pandemic exacerbated preexisting staffing shortages in the K–12 education, and there is still a deficit of 40,000 workers in child care. Moreover, there are persistent shortages of clinical, counseling, and school psychologists; mental health and substance use disorder social workers; school counselors; and marriage and family therapists (HRSA 2016).

It is also important to address gaps in equity in these occupations. Women and people of color are overcrowded in health care, education, and social services jobs, where their investments in education are not likely to help them get ahead.4

**Sector-Based Solutions**

When thinking about ways to ensure that communities have the workers they need and that people pursing credentials to work in these careers are not financially overburdened, the focus should be on developing much more comprehensive sector-based approaches, not on eliminating programs and pathways at particular institutions. In the sections below, I describe what these approaches look like.

**Bring together diverse stakeholders in key sectors and assemble local data.**

These complex challenges require the combined efforts of many stakeholders within different sectors, such as health care, education (specific to different levels), and social services. They may be major employers in a given sector, unions or other worker organizations, state licensing officials, state and local policymakers, local workforce boards, colleges and higher education institutions, and in some cases leadership from K-12 education. There is also a need for a national sectoral advocacy and leadership to align federal policy and funding to support state and local efforts.

In workforce development, there is a long history of sector-based initiatives, but they are usually about the design of nondegree and short-term credentials. They do not usually examine more systemic issues around the ways employers hire and compensate workers and how states and localities regulate professions. Broader sector-based strategies can learn from existing models, but they must address a much broader set of market challenges.

Sector-based strategies must also have an understanding of the issues that affect low or unreliable earnings premium jobs—starting with even the very basic analysis described in this brief at state and local levels. But these strategies can and should be supplemented by data on occupations with shortages of workers, job listings, and knowledge of licensing requirements, as well as data on the cost of local programs and student debt.
Reexamine licensing requirements.

Licensing often imposes strict education and training requirements for workers who want to enter certain professions, in addition to adding other testing or licensing fees. These requirements have increased over time. In 1950, only about 5 percent of occupations required licenses; now it is in upwards of 25 percent (Kleiner and Krueger 2013). Careers in health care and education are heavily regulated: 80 percent of health care practitioners report holding a license, and more than 60 percent of support workers in health care hold licenses; among workers in education, nearly 60 percent hold a license.

Ostensibly, licensing is meant to ensure quality for the public; that is, it is meant to certify that workers have the proper training to maintain the health, safety, and well-being of the people they serve. However, the evidence that licensing laws improve outcomes is mixed at best (White House 2015).

Critics of licensing laws often point to the ways they exclude low-income people and many people of color from entering certain professions. This was the impetus for an initiative by the Obama administration, which put forth a number of policy recommendations on licensing best practices for states and local communities. Moreover, in the context of this brief, there is an argument to be made that licensing may encourage overinvestment in education and training, and thus unsustainably bidding up the cost of entry for key in-demand professions.

Sector-based initiatives should reevaluate licensed occupations and the education and training required for entry alongside concrete data on earnings for these occupations and the cost of meeting these licensing requirements.

Address other types of degree inflation in hiring.

The share of people with some sort of college education has ballooned over the last century. So, in some ways, the population is more qualified for jobs than ever before. At the same time, much of the job search has gone online, multiplying the number of applications employers receive while human resources departments have shrunk in size (Capelli 2012). In practice, to address this challenge and hire who they perceive to be the most qualified, many employers are increasingly using ever higher-degree requirements to filter down the applicant pool and make the selection process more manageable.

Studies of job listings over the last several decades bear this out: the share of jobs requiring four-year college degrees and other credentials has dramatically increased (Fuller et al. 2022).

These degree requirements may or may not align with the skills and competencies needed to perform the job. For example, an estimated 27 percent of jobs that require a college degree need people with core skills that are generally not taught in any college degree programs. A movement has emerged in recent years to eliminate unnecessary degree requirements and promote skills-based hiring. As with the work to reexamine licensing, the impetus for this movement stems from a concern about equity and how Black, Hispanic, and other BIPOC workers are being excluded from opportunities. More skills-based hiring, particularly for jobs with low or unreliable earnings premiums, would help fill these important positions in communities that need them and lessen the costs of entering these occupations.
Degree inflation is particularly acute in public sector labor market, where almost twice as many jobs require postsecondary education compared with the private sector (Guber 2022). The federal government took leadership on this issue in 2020 with Executive Order No. 13932, "Modernizing and Reforming the Assessment and Hiring of Federal Job Candidates." Some states have also taken action to remove unnecessary degree requirements, including Maryland, Colorado, and a number of others.

When writing job descriptions, both the public and private sector employers should evaluate the merit of specific educational requirements, not only in terms of skills and competencies but also in the context of the salary offered and the costs of meeting those educational requirements.

**Reinvent the ways people are educated and trained for these careers.**

One way to better align earnings with investments in education for occupations with unreliable earnings premiums is to think creatively about how skills, competencies, and experience can be embedded within a lower, less costly degrees or credentials.

This practice is currently in place for some health care occupations in high school career and technical education, although scale is limited. The National Healthcareer Association offers eight nondegree credentials, which high school students can earn for free alongside their high school diploma. There may be ways to leverage and subsidize existing high school dual enrollment programs with community colleges to focus on high-demand and low earnings premium jobs requiring an associate’s degree, such as pre-school teachers. This theory could be applied to training and education for jobs that require bachelor’s or master’s degrees, and additional certifications as well. For example, programs at the associate’s or bachelor’s degree levels could embed on-the-job practical experience and advanced coursework needed to develop skills for teaching, counseling, or social work at a much lower cost to students and shorter timeline for communities trying to fill these positions.

It is also possible to use apprenticeship models for some careers. Teacher apprenticeship is still new and small in scale, but 29 states and Puerto Rico now have registered apprenticeships for teachers (US Department of Education 2023). Moreover, the United Kingdom has a social work degree apprenticeship—a part time, two-and-a-half-year program—that awards graduates with a social work degree as well as an apprenticeship certification approved by Social Work England with which they can apply to become a registered social worker.

**Target student debt relief and subsidize education and training for jobs that do not offer an earnings premium.**

In addition to aligning educational requirements and designing more cost-effective training and education, there may be a need to subsidize the cost of programs and/or to expand targeted student debt relief, particularly for people who are going back to school and cannot take advantage of the more streamlined programs and pathways described in the section above.
There are a number of federal student loan relief programs to build on, such as the Public Service Loan Forgiveness, Teacher Loan Forgiveness, federal loan cancellation, and others. These programs may need to be recalibrated to further assist people working in the kinds of occupations highlighted in this brief. Lawmakers can consider passing proposed legislation that allows employers to make nontaxable payments toward employees’ student loans.

State and local governments can also assist people pursuing careers without earnings premiums, including subsidizing costs for licensed occupations by waiving fees or providing vouchers to cover those fees and offering stipends to participants in high-demand occupations.

**Use policy levers to raise wages and improve working conditions in key sectors.**

The federal government has a key role to play in raising wages for many of the occupations in health care, education, and social services. For example, it could improve wages for those working as medical assistants, nursing assistants, home health workers, and others by raising reimbursement rates for Medicare and Medicaid (McDermott and Goger 2020). Additionally, wage pass-through Medicare/Medicaid rules that channel "additional long-term care funding directly to compensation of lower-skill nursing workers" have shown to increase wages (Baughman and Smith 2010).

For early education careers, the federal government could create wage parity for head start teachers with kindergarten teachers in the next Head Start reauthorization. It could also authorize states to use Preschool Development Grants and other federal preschool funding to address wage disparities within their public early education programs, and require that they add compensation and benefit standards to their Quality Rating and Improvement System for early childhood occupations (Ullrich, Hamm, and Schochet 2017).

States could also take the lead. In 2023, to address a serious labor shortage, West Virginia passed legislation allowing the Bureau of Social Services flexibility in the way it compensates child welfare workers. The Bureau of Social Services is now exempt from the policies of the state’s Division of Personnel and charged with developing its own independent merit-based system that allows for compensation adjustments and retention incentives. Recently, four other states have set higher standards for nursing home wages (Musumeci, Childress, and Harris 2022). Moreover, states can play an important role in establishing wage boards that bring together businesses, workers (often represented by unions), and the executive branch to negotiate wages and working conditions for a whole industry (McDermott and Goger 2020).

Many of these policy levers can be used to improve the quality of jobs more holistically as well. Wage is only one of the many factors that make work worthwhile; other elements of job quality have even greater weight on job satisfaction when wage premiums are low (Biu et al. 2023). Health and safety, autonomy and scheduling, and career development are some of the elements that matter to workers in fields like health care and social services (Athanasakopoulos et al. 2022; McDermott and Goger 2020; Sick 2022).
Conclusion

Labor shortages combined with low wages and mounting student debt and college costs pose significant challenges for local communities to meet their workforce needs. The gainful employment rule raises important questions about ROI in education and highlights the need to reinvent the way people who do important work in health care, education, social services, and other sectors are trained and compensated. Communities can successfully address these issues by bringing policymakers, employers, and others alongside colleges and training institutions.

Notes


2 Currently available data on debt come from the college scorecard that measure program quality. This scorecard only tracks debt incurred for a specific program or credential, not the total debt that a student incurred across programs or credentials. https://collegescorecard.ed.gov/


7 Visit Opportunity@Work website for more information about STARs (Skilled Through Alternative Routes) Data Dashboard. “Make the Shift to Skills-Based Hiring with Stellarsight,” Opportunity@Work, accessed February 28, 2024, https://opportunityatwork.org/.


9 Ally Schweitzer, “Maryland Will No Longer Require Four-Year Degrees for Thousands of State Jobs,” NPR, March 16, 2022, https://www.npr.org/local/305/2022/03/16/1086860660/maryland-will-no-longer-require-four-year-degrees-for-thousands-of-state-jobs#:~:text=Maryland%20will%20no%20longer%20require,thousands%20of%20state%20jobs%20%3A%20NPR%text=Hourly%20News.-%20Maryland%20will. And see States Consider Elimination of Degree Requirements (nsci.org) for a full listing of states taking action to eliminate four-year degree requirements.


14 See Hannah Putman, “How States Are Making Licensure Tests Free to Aspiring Teachers,” National Council on Teacher Quality, updated September 22, 2023, https://www.nctq.org/blog/How-states-are-making-licensure-tests-free-to-aspiring-teachers. The Baltimore Public Health Pathways Program offers a $1,000 per month stipend for certified nursing assistant (CNA) trainees, with tuition assistance and a guaranteed job upon completion. The Georgia CNA Career Pathway Initiative provides $5,000 stipends to 500 students, paid in three milestones: at the start of training, after completing the training, and after six months of employment.

15 Although three-quarters of head start teachers now have a bachelor’s degree, they earn $31,242 annually, which is less than the average kindergarten teacher salary by at least $20,000.


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About the Authors

Molly M. Scott is a principal research associate in the Income and Benefits Policy Center at the Urban Institute. Her work centers around the systems changes needed to ensure that all people are valued for their skills and abilities, can signal their competencies effectively in the labor market, and able to enjoy a good return on their investments in education and hard work. Her recent research has focused on redesigning mainstream high schools to be more supportive of young people with adult responsibilities, incentivizing postsecondary institutions to take more competency-based approaches to education, and evaluating initiatives to promote broad-based credential transparency. In addition, Scott has collaborated with employers to document forward-thinking practices in hiring and advancement for frontline workers that promise to be good for people and businesses.
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