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Learn & Earn: Career Pathways for Youth in the 21st Century

Anthony P. Carnevale and Andrew R. Hanson *

The U.S. postsecondary education and training system features four major components of career pathways: formal postsecondary education programs, industry-based certifications, internships, and employer-based training. In theory, the components of these pathways are followed in a linear fashion as in the following scenario:

A young student graduates from high school, enrolls in a postsecondary institution such as a university or community college, completes an internship and passes a certification exam during a course of study, and graduates with a postsecondary credential. The student enters the labor market and becomes employed—her employer provides a six-month training regimen that teaches her the career-specific skills she needs to thrive in the workplace.

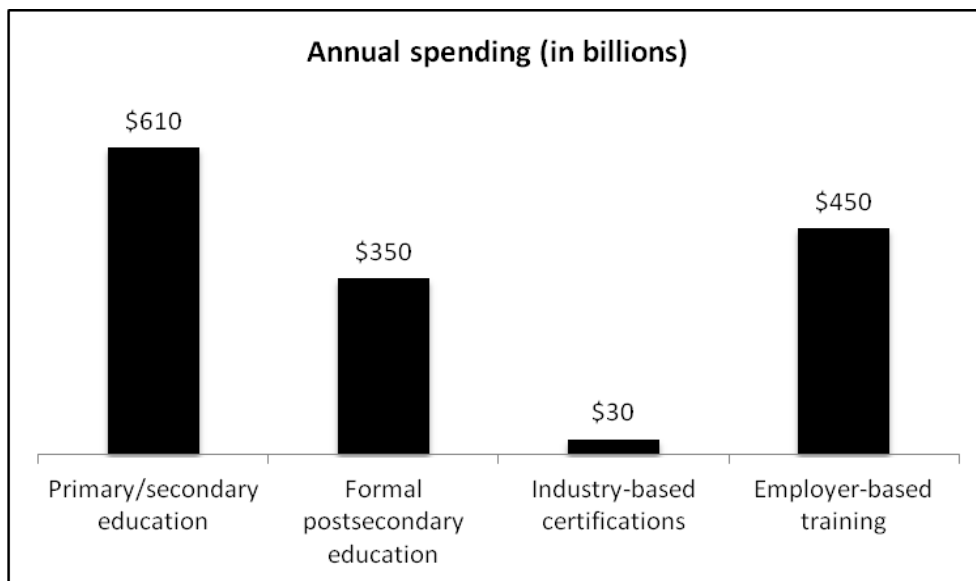
In practice, it is rare for individuals to follow this particular pathway. Instead, they complete multiple formal postsecondary programs in different fields, earn certifications and partake in employer-based training before getting formal postsecondary education, and complete internships after holding mid-level jobs. There are few rules that govern the way individuals mix and match the various components of career pathways and there is no single, linear track. Although this model is a simplification, it is the clearest way to understand the role that industry-based certifications and internships play in the U.S. education and training system.

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1. U.S. Annual Spending On Education And Training

Altogether, education and training comprises \$1.5 trillion in spending each year, roughly equivalent to 9 percent of the United States' gross domestic product (GDP). As shown in Figure 2, \$610 billion of this spending is on primary and secondary education at elementary, middle, and high schools. This spending is almost entirely financed by state and local governments, primarily through property taxes. Employer-based training is the second largest component of education and training spending at \$450 billion per year, followed by formal postsecondary programs (\$350 billion), and industry-based certifications (\$30 billion). To date, there is no good estimate of spending on internships, though new research is arising that explores their cost.¹ These costs are frequently divided between employers and postsecondary institutions, such as four-year colleges and universities.

Figure 1. The United States spends roughly \$1.5 trillion on education and training each year



Source: Georgetown University Center on Education and the Workforce analysis of data from U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS), the U.S. Department of Labor's Employment and Training Administration (DOLETA), the American Association of Community Colleges (AACC), the U.S. Education Department's

¹ Tigas, Mike and Blair Hickman, "Calculating 'The Price of an Internship,'" *ProPublica*. December 2013. <http://www.propublica.org/nerds/item/calculating-the-price-of-an-internship>.

Office of Vocational and Adult Education (OVAE), Survey of Employer Provided Training (DOL), and Bureau of Labor Statistics (BLS).

2. Formal Postsecondary Programs of Study

Formal postsecondary programs include classroom-based programs at public and private four-year colleges and universities, as well as community colleges and vocational schools. There are three major kinds of formal programs of study: postsecondary certificate, associate's degree, and bachelor's degree. These programs are structured to award a postsecondary award, either a degree or certificate, upon the completion of required coursework, certified by regional accreditation bodies. They can feature either traditional, academic education or job training, but more frequently offer a combination of the two, though the relative amount of each varies across programs. Students who enroll in formal postsecondary programs concentrate in a field of study (or major) that is listed on their postsecondary award and serves as a signal of their specific knowledge and skills to employers.

Postsecondary certificates, associate's degrees, and bachelor's degrees are not exclusive and not linear, but they are hierarchical: A bachelor's degree is considered a higher level of attainment than an associate's degree, and an associate's degree is higher than a certificate. However, students enrolled in associate's degree programs can complete certificates on the way to an associate's degree and those in bachelor's degree transfer programs can and do earn associate's degrees on the way to completing bachelor's degrees. It is possible but rare for students in bachelor's degree transfer programs to complete certificates, however. Another possibility, which was rare until the recent economic downturn, is for bachelor's degree-holders to return to college to earn a certificate, particularly those interested in getting career-specific training they can leverage in the labor market.

The Organization for Economic Cooperation and Development (OECD) classifies postsecondary certificate programs as "postsecondary, non-tertiary education." These are the informal, market-based cousin to the European apprenticeship model, though less costly and more similar to traditional degree programs than the apprenticeship model. Postsecondary certificates are short-term; more than 90 percent take less than two years to complete, and they focus primarily on career preparation and occupational training, and less on traditional academic coursework.²

² Carnevale, Anthony P., Stephen J. Rose and Andrew R. Hanson. 2012. *Certificates: Gateway to Gainful Employment and College Degrees*. Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/certificates>.

The OECD classifies associate's degree programs as "tertiary B education." Associate's degree programs require two years of full-time coursework. There are two primary types, which vary by purpose: (1) general, academic programs to prepare students to transfer into bachelor's degree programs at four-year colleges and universities and (2) terminal, career-focused degree programs that prepare students for a specific career field, so they are prepared to directly enter the labor market after graduating. Roughly two-thirds of the students currently enrolled in associate's degree programs in the United States are programs that prepare them to transfer to a four-year college, while one-third are enrolled in programs that are terminal and career-focused.³

The OECD classifies bachelor's degree programs as "tertiary A education." They are four-year degree programs that typically have a strong general education component. Most students enrolled in bachelor's degree programs in the United States are enrolled in regional open-access public colleges and universities, as opposed to selective, private, nonprofit colleges and universities or flagship state universities, which receive the majority of the public's attention. Among the three types of formal postsecondary programs, bachelor's degree programs are the most traveled by young adults in the United States.

3. The Relative Prevalence of Certificates, Associate's Degrees, And Bachelor's Degrees

- *Enrollment.* About 90 percent of undergraduate students are split evenly between associate's degree and bachelor's degree programs (42 percent and 46 percent, respectively), while 8 percent enroll in certificate programs. Recall that two-thirds of the 42 percent of students enrolled in associate's degree programs are preparing to transfer to a four-year college after completing their associate's degrees.⁴
- *Awards.* Four-year colleges and universities award 1.8 million bachelor's degrees each year, the most traveled form of formal postsecondary education in the United States.⁵ While five times as many students are

³ Georgetown University Center on Education and the Workforce analysis of National Center for Education Statistics, Beginning Postsecondary Study 2004-09 using NCES DataLab. <http://nces.ed.gov/datalab>

⁴Ibid.

⁵ Georgetown University Center on Education and the Workforce analysis of data from Integrated Postsecondary Education Data System (IPEDS) <http://nces.ed.gov/ipeds/datacenter/>.

enrolled in associate's degree programs as certificate programs, the number of awards granted by institutions differs by only 10 percent. These differences result for three primary reasons: (1) certificate programs take less time to complete than associate's degrees; (2) many students in associate's degree programs drop out after completing a certificate, but before completing an associate's degree; and (3) many students in associate's degree programs who plan to transfer into a bachelor's degree program do so before completing an associate's degree.

- *Workforce.* One-third of U.S. workers have a bachelor's degree, compared to 11 percent with an associate's degree, and 13 percent with a postsecondary certificate.⁶ Postsecondary certificates, associate's degrees, and bachelor's degrees all offer substantial wage premiums (the relative difference in earnings) over a high school degree: 20 percent; 44 percent; and 86 percent respectively.⁷ Historical data show that the wage premium of a bachelor's degree over a high school degree increased substantially in the 1980s and 1990s, 40 percent to 86 percent.⁸ By comparison, the associate's degree-wage premium has remained relatively constant over the same time period.
- *Occupations.* Students who earn certificates most commonly work in blue-collar, manual labor occupations that have traditionally been filled by men.⁹ Commercial drivers; heating, ventilation, and air conditioning repairpersons; and aircraft mechanics are three of the most common occupations for certificate holders.¹⁰ Associate's degrees most frequently lead to mid-level professional occupations, such as registered nurses, veterinary technicians, and financial managers.

⁶ Carnevale, Anthony P., Stephen J. Rose and Andrew R. Hanson. 2012. *Certificates: Gateway to Gainful Employment and College Degrees*. Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/certificates>

⁷ Georgetown University Center on Education and the Workforce analysis of data from U.S. Census Bureau, Survey of Income and Program Participation, 2004 and 2008 panels.

⁸ See, for example, Carnevale, Anthony P. and Stephen J. Rose. 2011. *The Undereducated American*. Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/undereducated>

⁹ Carnevale, Anthony P., Stephen J. Rose and Andrew R. Hanson. 2012. *Certificates: Gateway to Gainful Employment and College Degrees*. Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/certificates>

¹⁰ Carnevale, Anthony P. and Nicole Smith. 2013. *Recovery: Job Growth and Education Requirements Through 2020*. Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/recovery2020/>

Bachelor's degree-holders are typically able to access to high-paying professional occupations, such as financial advisors, real-estate agents, and engineers.

4. Industry-Based Certifications

Industry-based certifications are test-based credentials that, unlike certificates, associate's degrees, and bachelor's degrees, aren't tied to formal programs of study. They are highly specialized and are typically earned after an individual completes formal postsecondary education, though they do not always require a postsecondary certificate or degree. IBCs are administered and accredited by third-party, private sector firms and require little involvement from the public sector, though they are sometimes tied to public regulations at the state and local level. While administered outside of postsecondary institutions, IBCs drive curriculum decisions within formal postsecondary programs in some cases. For example, community colleges sometimes structure certificate programs to prepare students to master the content assessed by certification exams.

Industry-based certifications arose over the past decade as employers sought a more precise, reliable indicator of job candidates' skills, due in part to perceived grade inflation at postsecondary institutions. The advantage of IBCs relative to formal postsecondary education is that they are low-cost and flexible — they can be easily adjusted to reflect new industry standards. The U.S. Census Bureau only recently began to examine the prevalence of industry-based certifications and in its major surveys. The most recent wave of the Survey of Income and Program Participation (2008 panel) shows that 46 million adults (22%) have a certification or license¹¹, and a back-of-the-envelope estimate by the Georgetown University Center on Education and the Workforce suggests that around 4 million certifications are awarded annually. While postsecondary certificates and degrees last a lifetime, certifications typically last a decade at most, so certifications consist of both new certifications and renewed certifications. While the available data on the labor market value of certifications is not yet very robust, real-time online job

¹¹ Ewert, Stephanie and Robert Kominski. 2014. Measuring Alternative Educational Credentials: 2012. U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. <http://www.census.gov/hhes/socdemo/education/data/files/p70-138.pdf>

advertisement data show a high prevalence of certifications listed as requirements on job advertisements, suggesting they have labor market value.¹²

5. Internships: Size and Scope

In the United States, internships refer to entry-level positions that function as an important form of vocational training and pre-employment screening. In theory, interns do not provide any significant level of productivity to their employer; instead, their main role is to learn on the job and gain relevant work experience that will prepare them for occupations in a particular industry or career field. Interns also acclimate themselves to a professional setting, acquire letters of recommendation for future entry-level jobs and graduate-level programs of study, and form professional networks they can potentially leverage into high-paying jobs later in their careers. Internships also serve as an opportunity to test whether particular career fields are of interest for them at minimal cost to themselves or their employers.

Internships are tailored mostly to four-year college goers while they are enrolled or shortly after they graduate and enter the full-time labor market. Colleges and universities typically award academic credit for internships and frequently match students to internships and provide oversight over the intern-employer relationship. Roughly half of college seniors nationally said they completed an internship while enrolled, suggesting that roughly one million college students are employed as interns.¹³ The Economic Policy Institute estimates that there are one million more non-college students employed as interns.¹⁴ Interns, therefore, represent 1.3 percent of the 155 million workers in the U.S. labor force.

6. Paid v. Unpaid Internships

There are substantial differences in the economic benefits of and public policy concerns about paid and unpaid internships. Roughly half of the internships in

¹² Carnevale, Anthony P., Tamara Jayasundera and Andrew R. Hanson. 2012. *Career and Technical Education: Five Ways That Pay Along the Way to the B.A.* Georgetown University Center on Education and the Workforce (Washington, D.C.). <http://cew.georgetown.edu/ctefiveways>

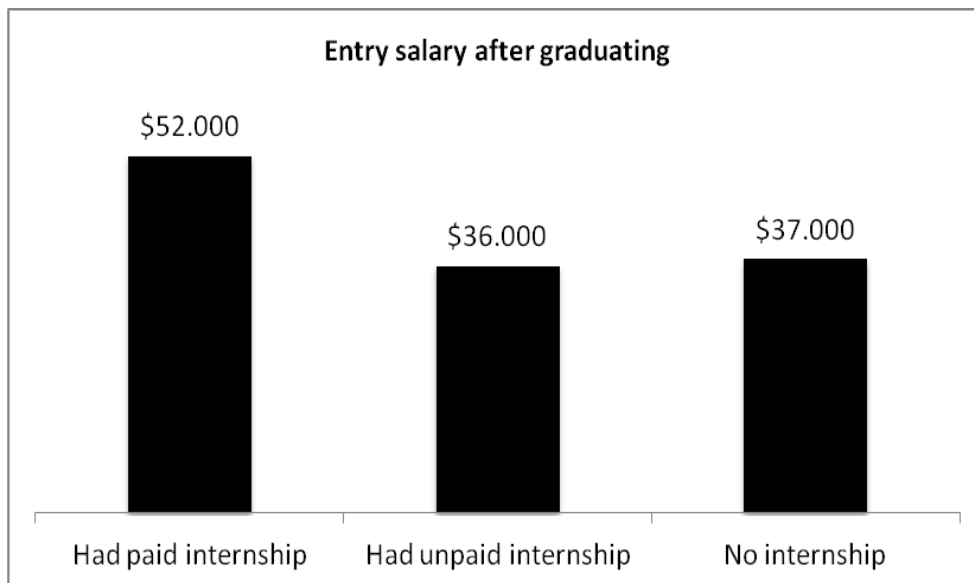
¹³ National Association of Colleges and Employers. 2013. *2013 Student Survey*. <http://www.nacweb.org/s05292013/paid-unpaid-interns-job-offer.aspx>

¹⁴ Edwards, Kathym A. and Alexander Hertel-Fernandez. 2010. "Not-so-equal protection: Reforming the Regulation of Student Internships." Economic Policy Institute (Washington, D.C.).

the United States are paid and half are unpaid, but the distribution varies by economic sector. In the private for-profit sector, seven out of 10 internships are paid, compared to half of internships in the public sector, and one out of three internships in the private nonprofit sector.¹⁵

Paid internships are, on average, more beneficial than unpaid internships across fields of study. Surveys by the National Association of Colleges and Employers and consulting firm Intern Bridge show that college students who completed paid internships enter the labor market with substantially higher rates of receiving job offers and starting salaries than their peers, while there was no difference in the outcomes of students who completed unpaid internships and those who had no internship.¹⁶ The same trend occurred across majors (fields of study).

Figure 2. The starting annual salary for college graduates who completed a paid internship was \$52,000, compared to \$36,000 for those who completed an unpaid internship and \$37,000 for those who did not complete an internship

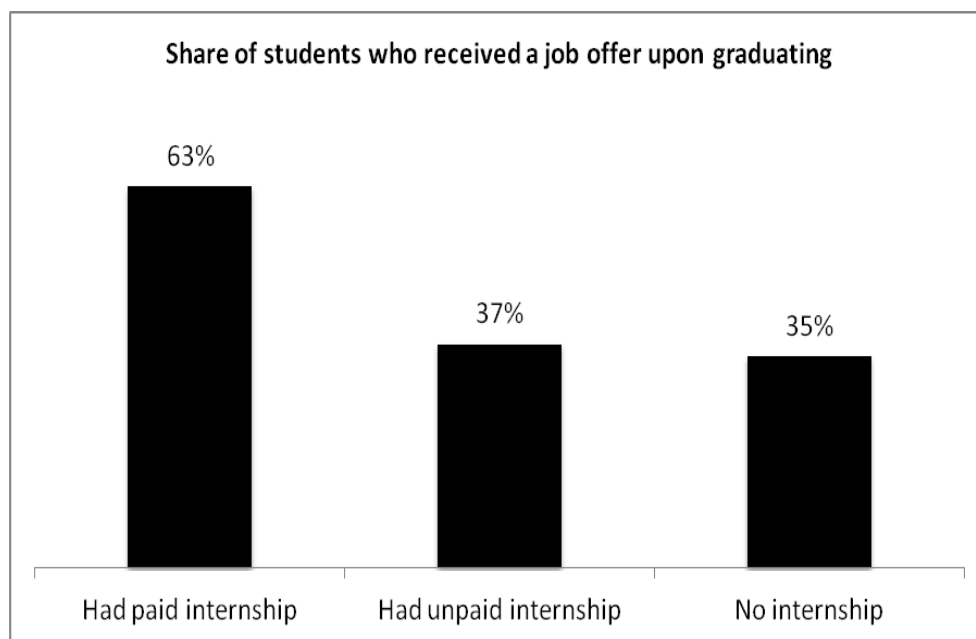


Source: Georgetown University Center on Education and the Workforce analysis of data from the National Association of Colleges and Employers, 2013

¹⁵ Ibid.

¹⁶ National Association of Colleges and Employers. 2013. *2013 Student Survey*. <http://www.naceweb.org/s05292013/paid-unpaid-interns-job-offer.aspx>

Figure 3. The share of college graduates who received a job offer was 63 percent for those who completed a paid internship, compared to 37 percent for those who completed an unpaid internship and 35 percent for those who did not complete an internship



Source: Georgetown University Center on Education and the Workforce analysis of data from the National Association of Colleges and Employers, 2013

This evidence does not necessarily demonstrate that college students do not benefit from unpaid internships. In some fields, such as politics, policy, arts, entertainment, and journalism, there is strong anecdotal evidence that unpaid internships are crucial to gaining traction. Instead, it suggests that there is a large range in the quality across unpaid internships, and that a significant share of unpaid internships are not better than alternative time investments in, for example, paid non-internship jobs, coursework, or extracurricular activities. Many critics of unpaid internships have alluded to the coinciding rise of internships alongside the so-called contingent workforce — which comprises interns, part-time, temporary and contract workers and now constitutes 30 percent of the U.S. workforce — to suggest that internships are an elegant name for unpaid temporary positions.

7. Internships and Public Policy

Almost all of the concerns about internships are about the governance of unpaid internships; paid internships are generally considered unproblematic as they are regulated the same as other employment relationships. Critics of unpaid internships believe that internships should be subject to the wage and employment regulations in the Fair Labor Standards Act of 1938, which established a minimum wage among other wage and employment regulations. As of 2009, the federal minimum wage was increased to \$7.25 per hour for hourly employees.

In response to public concerns about internships, the Department of Labor's Wage and Hour Division (DOLWHD) published Fact Sheet #71¹⁷, which includes six criteria that must be met for unpaid internships in the private for-profit sector to be considered legal. The six criteria are:

1. the internship resembles an experience that would be provided in an educational environment;
2. the internship primarily benefits the intern;
3. the internship does not displace regular employees;
4. the employer does not derive an immediate advantage from the intern's activities;
5. the intern is not necessarily entitled to a job at the end of the internships; and
6. both the intern and the employer understand that the intern is not entitled to wages.

The criteria in Fact Sheet #71 do not necessarily apply to other economic sectors. There is disagreement among legal experts over the question of whether unpaid internships at nonprofit organizations. Nonprofits are legally allowed to have volunteers, but courts have not yet established that the volunteer exception applies to unpaid internships. However, the existence of the volunteer exception makes regulating unpaid internships at nonprofit organizations more difficult. The Fair Labor Standards Act exempts government employees, and the Congressional Accountability Act, which regulates congressional employees, specifically exempts interns from wage regulations. The DOLWHD has publicly stated it is reviewing the need for additional guidance in these sectors, but has not had a director since the

¹⁷ U.S. Department of Labor, Wage and Hour Division. 2010. "Fact Sheet #71." Washington, D.C. <http://www.dol.gov/whd/regs/compliance/whdfs71.pdf>

beginning of the Obama administration in 2009, so action in the near-term is unlikely.

Based on the criteria in Fact Sheet #71, many unpaid internships in the United States are illegal, though it is unlikely that they will be curtailed due to the lack of a sufficient enforcement mechanism at the DOL/WHED. The primary mechanism for curbing illegal internships is lawsuits filed by the interns themselves, though these are uncommon for several reasons. First, interns are mostly young entry-level workers who are unfamiliar with their rights as workers due to their lack of experience. Second, lawsuits can be prohibitively expensive for current and former interns and yield relatively small benefits. An intern who works over the summer at the minimum wage rate can make as little as \$1,000 to \$2,000, which many consider not worth the potential monetary costs as well as the risks to one's public reputation, which could damage the interns' future career prospects.

There is an additional question over whether the criteria listed on the fact sheet are sufficient for determining the legality of an internship. To date, this question has not been resolved by the courts. In *Glatt v. Fox Searchlight Pictures Inc.*, a federal judge ruled that the criteria were sufficient, while in *Xuedan Wang v. The Heart Corporation*, a different judge said both the criteria and other factors should be considered. Going forward, the direction that future rulings are headed toward is unclear, but it will be difficult to assess the future of internships in the United States until the courts clarify current regulations.

Further, because unpaid internships do not legally constitute an "employment relationship," they are not afforded workers' rights designated under the Civil Rights Act, enforced by the U.S. Equal Employment Opportunity Commission. This is particularly concerning because interns are typically young and entry-level workers, who are especially vulnerable to these offenses, as they are less familiar with their rights in the workplace. However, company policies as well as state and local laws do, in many cases, afford interns these rights, though federal law does not protect them. The state of Oregon, for example, passed a law extending protections to unpaid interns against sexual harassment as well as discrimination and wrongful termination based on race, religion, gender, disability, and sexual orientation.

Last, there are concerns about equal access to high quality unpaid internships in specific industries, such as politics, policy, arts, entertainment, and journalism. In these sectors, unpaid internships are a necessary right of passage for entry-level workers. However, there are strong allegations that these internships are prone to nepotism and that, because young adults from low-income family backgrounds cannot afford to take unpaid positions, their access to careers in these industries is limited. The Economic Policy Institute has

proposed to subsidize unpaid internships for students from low-income families through the Federal Work Study grant program to address these concerns.¹⁸

8. The Future of Internships in the United States

Despite the rarity of lawsuits filed by interns overall, many high-profile lawsuits were brought against firms such as The Hearst Corporation, Fox Searchlight, and The Nation Institute. The highest profile suit, brought against Fox Searchlight by former interns who worked on the set of the film *Black Swan*, was successful — the court ruled that the interns should have been paid the minimum wage.

The recent public scrutiny of unpaid internships has sufficed, in some cases, to encourage employers to either pay their interns, as the Nation Institute and Atlantic Media did, or end their internship programs altogether, as in the case of the mass media company Condé Nast. Under the assumption that internships are mutually beneficial employers, postsecondary institutions, and interns themselves, these new trends represent a cause for concern. However, recent evidence questioning the value of unpaid internships suggests their decline may not carry a significant negative impact.

Whether the decline of unpaid internships would be beneficial or harmful depends, to a large extent, on what replaces them. If they are replaced by paid internships, the costs will likely be minimal. However, if they are replaced by more classroom learning or higher barriers to entry in the labor market, their decline could be problematic. The U.S. education and training system spends a disproportionate amount of time on academic, classroom-based learning, while devoting less time to providing learners with meaningful work experiences. If unpaid internships are replaced by more classroom learning, which is frequently more expensive than internships in the United States, students may lose out on critical workplace knowledge. Given these risks, the best solution may be to build stronger connections between education and work at earlier stages in students' education and promote full employment, so that workers have more leverage in the labor market.

¹⁸ Edwards, Kathryn Anne, and Alexander Hertel-Fernandez. 2010. "Paving the Way through Paid Internships: A Proposal to Expand Educational and Economic Opportunities for Low-Income College Students." Washington, D.C.: Demos and The Economic Policy Institute.

9. Employer-Based Training

Even for individuals who complete formal postsecondary education, a certification, and an internship, human capital development doesn't end there. Employer-based training accounts for the most spending among the four major components of career pathways in the United States.

Labor economists classify EBT into two types: formal training that often features a curriculum and can last anywhere from a few weeks to up to two years and informal, on-the-job training that mostly consists of job shadowing and rarely last longer than a few months, and can often be completed in a few days or weeks.

Employer-based training is a complement, not a substitute, for other kinds of human capital development. The more educated an individuals are, the more likely they are to receive long-term, formal EBT because they are more likely to engage in complex work tasks. Conversely, high school graduates are typically limited to informal, on-the-job training.

Over the past few decades, employers in the United States have increasingly outsourced education and training to third parties and education institutions, as the old model where employees worked their way up the company ladder has been replaced. However, employer-based training remains an indispensable component of the U.S. education and training system.

10. Advantages and Disadvantages of the U.S. Education and Training System

The strengths of the U.S. education and training system are the decentralization provides institutions the flexibility to innovate and respond to change in the labor market and that, because pathways are not linear or uniform, students bring a diverse array of perspectives and fresh thinking into postsecondary programs and firms, which fosters an intellectually rich, creative, and innovative environment.

The weaknesses of the U.S. system are that, because young adults are not given clear guidance about what comes next, many get lost, change their minds, and find these systems difficult to navigate on their own. Consequently, it often takes longer for students to get through the education and training system with the skills necessary to find employment than if their choices were constrained or less flexible. Its other primary weakness is that it produces a great deal of racial and class inequality. These inequalities occur because of many factors,

such as racial and class stratification in postsecondary education¹⁹, but also because disadvantaged students lack the necessary support to help them navigate the complexities of the system.

11. Public Policy Reforms to U.S. Education and Training

Many young adults are being left behind in the U.S. labor market. Some are unable to find full-time work, while others are unable to find any kind of work at all. In the United States, contra Europe, there are not institutional mechanisms necessary to plan hardline occupational tracks, and such an approach is unlikely to gain political traction. Instead, four courses of reform are likely to be successful:

1. **Data Systems.** The development of robust data systems that track outcomes at the program level at postsecondary institutions to understand the economic value of the different components of education and training, such as college degrees, certificates, certifications, and internships.
2. **Transparency.** Using data systems to promote transparency through information campaigns and easy-to-use tools that inform students, families, educators, policymakers, and public officials about the value of different education and training programs, so they make informed choices about what and where to study.
3. **Outcome standards.** Tying public funding of education and training to outcome standards based on labor market value, so the public increases the real impact of its investments.
4. **Learn and earn.** Promoting models that allow students to participate in education and training programs while gaining work experience in fields that relate to their field of study, so the practical work skills they gain in the workplace aids the long-term acquisition of relevant career skills.

Building upon the strengths of U.S. education and training will accelerate the connection between education and careers and help young adults thrive in the 21st century.

¹⁹ Carnevale, Anthony P. and Jeff Strohl, *Separate and Unequal: How Racial Stratification in Higher Education Perpetuates Racial Inequality*. 2013. <http://cew.georgetown.edu/separateandunequal>