How Can Innovative Finance Expand Training Opportunities and Transform the Postsecondary Education System?
Acknowledgments

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About Financing the Future

JFF’s Financing the Future is a policy initiative reimagining financing for postsecondary education and skills development. Launched in 2020, the initiative takes a big-tent approach, bringing together perspectives from across the stakeholder spectrum, with input from educators, policymakers, investors, philanthropic organizations, employers, and students themselves. By spurring conversation and action across an array of innovative financing options, Financing the Future aims to cultivate an education financing ecosystem that promotes opportunity and equity.

About Jobs for the Future

Jobs for the Future (JFF) drives transformation of the U.S. education and workforce systems to achieve equitable economic advancement for all.

About JFF’s Language Choices

JFF is committed to using language that promotes equity and human dignity, rooted in the strengths of the people and communities we serve. We develop our content with the awareness that language can perpetuate privilege but also can educate, empower, and drive positive change to create a more equitable society. We will continually reevaluate our efforts as language usage continues to evolve.
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Introduction

In today’s rapidly changing economy, workers must continually acquire new skills in the face of both gradual evolutions and sudden disruptions to the labor market. Whether they are young workers just starting their careers or experienced workers transitioning to a different industry, reentering the labor market after a period of caregiving or incarceration, or seeking to keep their skills sharp and current, postsecondary education can help workers advance in their career and navigate difficult transitions. An educated and high-skilled population also produces several economic benefits, such as lower unemployment rates and higher wages, and better health and civic engagement. Many of these benefits spill over to the broader society, including those without additional education.¹

Yet workers are expected to cover a greater share of the rising cost of postsecondary education that may neither provide the boost in earnings that justifies its cost nor fit the diversity of learning styles and life situations of today’s learners. Nearly half of adults under 30 with bachelor’s degrees—and over 60% of those with associate’s degrees—believe that the benefits of college are not worth the costs.² This disillusionment likely contributes to the fact that college enrollment has been consistently declining for the last five years.³

The Biden Administration’s recent attempt to cancel student debt reflects a growing sentiment across both parties in Congress that the way we finance postsecondary education is broken. Solving this problem requires a multifaceted approach, including better data transparency, stronger and smarter regulatory oversight over the entire market, better-funded college completion efforts,
and greater access to high-quality short-term education programs. And importantly, we need innovative new ways to pay for education.

JFF launched the Financing the Future initiative to explore new ideas for financing postsecondary education that could promote greater access, affordability, higher quality, more diverse options, and better employer engagement. This report by Financing the Future is intended to help changemakers better understand what innovative financing options are available, their upsides and risks, and how they can play a powerful role in transforming the postsecondary education system by promoting greater access, affordability, quality, and equity.

Our research has identified the emergence of five broad categories of innovative financing solutions: outcome-based financing, pay for success programs, lifelong learning accounts, employer training incentive programs, and employment-connected training. These solutions spread the cost and risk across a variety of stakeholder entities, including education providers, employers, government, community-based organizations, and private investors, thus creating incentives for additional investment and hardwiring accountability into the market itself.

We open this report with an articulation of the enormous potential that innovative finance offers. Next, we describe each model in detail, and include examples and discussions of their advantages and disadvantages. We then outline the ways in which stakeholders could take steps toward realizing the transformative potential of these new models. After a brief conclusion, we provide a graphic that presents the landscape of actors in this market.

It’s important to acknowledge that innovative financing models are relatively new and thus their track records are limited. Moreover, there are risks associated with each of the models we discuss. In some cases, they may fail to perform as expected. In others, unscrupulous financing providers may misrepresent the nature of their offerings
and take advantage of unsuspecting learners, or the accountability incentives may encourage cream-skimming—in which schools only admit privileged or high achieving students—rather than improving the quality of the education itself. Among other recommendations, our stakeholder section firmly recommends rigorous data collection and evaluation, diffusion of best practices, and strong and clear regulatory guardrails to ensure that innovative finance is designed and operated in a way that is learner-centered and promotes equity and economic advancement for all.

Despite the risk, innovative finance offers the potential to move the postsecondary financing system toward one that ensures workers can adapt to the changing demands of the labor market, advance in their careers, and succeed in a variety of roles throughout their lifetimes. As noted above, the current system of education and training is woefully inadequate and inequitable and fails precisely those students who need it most, so the risks of new models must be weighed against this backdrop. For the sake of current and future generations of learners, we have an obligation to explore these innovative financing options to see if this transformative potential can be realized.

**Terminology**

This report uses an expansive definition of the phrase “postsecondary education” (or sometimes shortened to “education”) to refer to both traditional two- and four-year degrees from accredited institutions as well as both formal and informal career and technical training through programs that are often short term and do not grant degrees (though they may build toward degrees). This education could be delivered by a four-year college or university, community college, career or technical school, or even by an employer. Innovative postsecondary financing has a range of potential applications in all of these contexts.

Moreover, this report uses three different terms to refer to individuals. “Learner” refers to any individual currently enrolled in postsecondary education and is used because “student” can imply youth and exclude adult learners. “Worker” refers to individuals in the context of their careers and employment relationships. “Borrower” refers to individuals who are using an education financing instrument and are in the repayment period. These categories are not mutually exclusive, and an individual can be in multiple categories at once, depending on the circumstances.
Systemic Obstacles

The way we educate workers and prepare them for the labor market is fundamentally flawed.

The federal government currently stands as the largest financer of education and training in the US, serving 13 million learners through $120 billion annually in grants and loans, $14 billion on employment and training programs, and $39 billion in annual tax incentives to provide education and training activities. Unfortunately, federal postsecondary education financial aid fails to keep up with rising cost of attendance. For example, in 1980 the Pell Grants maximum award represented nearly 80% of tuition, fees, room, and board at a four-year public school but has since fallen to about 30%. Federal spending in employment and training has declined over the last two decades. Additionally, many learners do not qualify for federally backed loans due to a lack of taxable or scorable income.

State governments also play a key role in providing institutional funding, grants, training funds, and tax incentives targeted at helping individuals pursue postsecondary education and training. Combined state and local government higher education spending totals about $113 billion annually, most of which directly funds public institutions. This includes initiatives like “college promise” programs, which typically provide two or more years of tuition-free or debt-free college to eligible learners. Several states also offer grants, such as Indiana’s Workforce Ready Grant, to help learners pay for workforce training for in-demand careers. However, over the last four decades, the state share of the cost of education has fallen, shifting more of the financial burden to the learner. States also have difficulty sustaining education spending during economic downturns because they must balance their budgets every year, leading to tuition hikes when learners can least afford it.
Employers play a key role in training and developing their workers, with available data suggesting that employers are the largest source of funding for worker training. Such support can range from on-the-job training to continuous upskilling opportunities to tuition reimbursement assistance. Yet two factors constrain employers from investing more in their workers’ professional development. First, they may be worried that once trained, their employees may leave the company for a competitor. And second, they may lack the financial resources to make a greater investment. Additionally, available data shows that of the investments employers make, a disproportionate share goes towards workers who already have a postsecondary degree rather than workers who earn low-to-moderate wages—who stand the most to gain from additional training opportunities.

The failure of these stakeholders to sustain—let alone expand—education investments has meant that more of the burden is falling on learners to upskill and reskill themselves. Learners are personally on the hook for roughly 45% of total postsecondary education spending in the United States, more than double the average of other industrialized countries. Most learners must now borrow federal student loans to afford higher education, with the average bachelor’s degree graduate leaving school with $29,950 in loans, and one in four of all federal student loan borrowers defaulting within twelve years of starting school.

Moreover, many now-declining government investments flow through the traditional higher education system of degree-granting colleges and universities, which itself is fundamentally broken. While education is extremely expensive, on average the value of the education justifies those costs. However, for
too many learners (and especially those that do not complete), their education does not lead to a well-paying career, leaving them and often their parents saddled with debt burdens they cannot pay off.17

The system is also inflexible, largely centered on traditional two- and four-year degrees pursued in classroom settings. Career and technical training may offer cheaper and faster routes to postsecondary credentials, which can be particularly useful for learners juggling jobs and caregiving responsibilities, but these programs are often ineligible for federal financing options, requiring learners to use more expensive private financing or pay tuition out-of-pocket and upfront. Moreover, concerns regarding quality and effectiveness are even greater among short-term training and other education programs that are not subject to the federal accreditation system and instead are typically regulated at the state level, with varying levels of rigor.
The Potential of Innovative Finance

Innovative finance is, for the purposes of this report, an array of emerging models to finance postsecondary education. These models represent new ways to spread the cost and risk of education across a variety of stakeholder entities, including education providers, employers, government, community-based organizations, and private investors. This report highlights five categories of financing models:

**Outcome-Based Financing:** Financial instruments where the availability and pricing is determined by the outcomes of a school, group of schools, or education program, and where learners’ payment obligations are usually contingent on having sufficient income after completing the program.

**Pay for Success:** Partnerships that fund effective education or other social services through performance-based contracts (also known as Pay for Performance or Social Impact Bonds).

**Lifelong Learning Accounts:** Structures that consolidate and leverage contributions from multiple sources that can be used by the learner to pay for qualified education and training.

**Employer Training Incentives:** Government incentives that encourage employers to increase education provided to workers.

**Employment-Connected Training:** Training programs, such as apprenticeships, that combine job training with paid employment.
These five innovative finance models have the potential to promote more and better postsecondary education.

Innovative finance can expand access to postsecondary education in two ways. First, innovative finance can lower the cost of education to the learner. Learners who have exhausted traditional loan options, do not qualify for existing federal aid options, or are particularly debt-averse face challenges accessing education. Innovative finance models expand access because the education is either entirely free to the learner or the available financing de-emphasizes or entirely ignores measures of individual creditworthiness. These factors can particularly improve access for learners with lower incomes and those who have historically or currently face discrimination.

And second, innovative finance can expand the supply of education itself, giving learners more opportunities. Many potential investments in learners’ education provide high benefits to society but lower returns to the investing entity, leading to underinvestment. Models like lifelong learning accounts, employer training incentives, and employment-connected training hold the potential to incentivize these investments by reducing their up-front costs. Similarly, outcome-based financing has the potential to induce education providers, investors, governments, and employers to increase their investment in education because it promises a return on their investment if the education has positive outcomes. Relatedly, pay for success programs could induce governments and employers to expand their investments by only requiring payment if the education is successful.

These emerging innovative finance models do not simply represent new ways to expand access to training. Rather, they offer the potential to transform the entire system of postsecondary education by reducing risk to the learners and improving quality, ensuring affordability, and promoting racial and gender equity.
Making education investments less risky for learners and improving education quality

While postsecondary credentials significantly boost earnings on average, learners currently assume significant risk that the benefits those credentials provide might fall short of the high—and rising—price of education. Half of all workers with a bachelor’s degree earned less than 28% of associate degree holders, 23% of workers with some college, and 16% of high school graduates, suggesting that a bachelor’s degree does not guarantee higher income. A separate analysis found that across 30,000 bachelor’s degree programs, the median financial payoff is over $300,000 across a learner’s lifetime, but 16% of bachelor’s degree programs have no financial payoff and may leave learners worse off. Relatedly, one-third of college graduates—and nearly two out of five recent graduates—are working in jobs that do not typically require a college degree. As previously noted, concerns regarding quality and effectiveness are even greater among career and technical education programs that are often not subject to the federal accreditation system and instead are largely regulated at the state level, with varying levels of rigor.

This risk could be due to variations in quality—while many colleges and training programs are high quality, outcomes are often variable and opaque to prospective learners. While enabling positive outcomes is partially the responsibility of the education providers by providing quality instruction and aligning programs to labor market needs, there are also a variety of other factors outside the school’s control, including structural shifts in the labor market, recessions, and public health crises.

Innovative finance can make education investments less risky for learners by shifting the risk of poor outcomes onto schools, employers, and the government. All innovative finance models ensure learners do not bear the full cost of their education and training if it does not lead to sufficiently high post-enrollment earnings. Some models do not require learners to pay for education and training even if they do have good outcomes.

Outcome-based finance models and pay for success explicitly align the financial incentive of the school (or the third-party finance provider) with the learner’s outcomes, giving schools an incentive to improve the quality of their education and ensure their curriculum is aligned with job openings and career pathways. This alignment also encourages schools to provide wraparound services and robust career support services, which
are essential for helping learners who are at risk of dropping out to persist through completion and find employment.\textsuperscript{23}

The underwriting of outcome-based finance products also encourages accountability. By offering cheaper credit terms to learners at higher-performing schools, learners may naturally gravitate toward those schools and away from schools that perform poorly. Incorporating quality metrics into the price signal should force schools to compete on the basis of the quality of their education rather than the size of their marketing budget.

While lifelong learning accounts, employer training incentives, and employment-connected training do not explicitly align incentives with outcomes, each of these models give employers—who are better able to evaluate the quality of the training—a stake in the learner’s outcomes and the power to ensure the training is designed to maximize learner success.

**Ensuring education is affordable for learners at all income levels**

As tuition and student loan burdens have skyrocketed, many learners have found postsecondary education unaffordable, especially learners who do not complete their program or who cannot find a well-paying job after completion. In the last thirty years, annual tuition at four-year public schools has ballooned from just over $4,000 to nearly $11,000, while tuition at private nonprofit four-year schools rose from just over $19,000 to roughly $38,000, after adjusting for inflation. Total cost of attendance, including housing and transportation costs, has skyrocketed as well.\textsuperscript{24}

As a result, the share of households with at least some student debt has nearly tripled, from 8\% in 1989 to 21\% in 2019.\textsuperscript{25} And while it is true that much of the overall student debt is held by higher-income households, low-income households have also seen rising debt burdens: adults in the bottom half of the income distribution with any student debt have seen their average debt-to-income ratio more than double in the last 20 years, with average debt burdens now exceeding average income.\textsuperscript{26} Federal student loans account for most of the total $1.74 trillion in outstanding student debt, with private student loans representing just under 8\%.\textsuperscript{27}
Innovative finance models have a unique potential to make education more affordable. Many of these models achieve affordability simply by making the education mostly or entirely free to the learner. Other innovative finance models, such as income contingent financing, only require payments if the learner makes sufficient income, and payments are set as a share of the learner’s income. While these models aren’t inherently affordable, their design features offer the tools necessary to guarantee affordability, which is more difficult in a traditional loan context.

**Centering the postsecondary education system around equity**

The postsecondary education system’s problems with lack of access, risk, quality, and affordability disproportionately impact learners of color, first-generation learners, and learners who earn low wages. White adults are more than twice as likely to have bachelor’s or higher degrees compared to Black and Latine adults, and while the composition of recent graduates has become more diverse, Black and Latine learners are still underrepresented in postsecondary education.28

Compared with their white and Latine peers, Black learners are more likely to need loans to pay for school, and both Black and Latine learners are far more likely to default on their loans.29 Coupled with a persistent racial wage gap, Black and Latine learners are likely paying a far larger share of their earnings in loan payments, even as their lower graduation rate means they’re less likely to reap the full benefits of education.30

Innovative finance holds the potential to reduce these systemic inequities. Learners that face labor market discrimination and lack generational wealth are most likely to benefit from education with tuition that is either free, discounted, or only requires payments if earnings are high enough, as well as benefit from education financing that de-emphasizes credit score and past income.

Aligning the school’s financial incentives with their learners’ outcomes can also encourage schools to improve educational quality, better align their curriculum with labor market demands, and expand their wraparound and career services. Doing so would particularly benefit Black, Latine, and female learners who are disproportionately harmed by low-quality and predatory schools and who experience high non-completion rates.31
Overview of Innovative Financing Models

Each of the innovative finance models featured in this report are unique in how they operate, how they shift the cost or risk away from learners and across stakeholders, what role government plays, and what benefits and risks that they present. These models also vary in how prevalent they are in the postsecondary education market and how many variations exist within each model. For example, outcome-based financing appears to be the most prevalent model and features a wide diversity of approaches.
Outcome-Based Financing

There are multiple variations of outcome-based financing, including income contingent financing, income-based repayment, education insurance, and merit-based lending, but the common thread is that they all use outcome-based underwriting. That is, under each approach, finance providers look at the outcomes of a school, group of schools, or education program to determine whether to offer the financial product and at what price.\(^{32}\)

Many also feature monthly payment obligations calculated based on income and automatic expiration after a fixed number of months, with longer durations usually corresponding to longer and/or more expensive education programs. These design features have the effect of aligning incentives between educators, learners, and, if relevant, funders.
Outcome-based financing is often offered by schools or third-party organizations to learners across multiple schools. It is also increasingly used in the context of Pay It Forward programs, which are fully or partially sustainable revolving funds established by government or philanthropic organizations that offer affordable education financing to learners.

Under **income-contingent financing**, learners’ monthly payments are based on their earnings. Most income contingent financing require no monthly payments if the learner earns below a specified threshold, usually between $30,000 and $50,000 in annual earnings. If a learner’s earnings exceeds the threshold, the monthly payment may be calculated in a number of ways depending on the financing agreement: a single fixed amount, tiered fixed amounts that rise with earnings, a single income percentage, or tiered income percentages. The financial obligation ends once a learner’s total payments reach a specified amount or cap, when a learner makes a certain number of payments, or once a specified period of time elapses.

There are a variety of names for income contingent financing instruments, including income share agreements (ISAs), deferred tuition agreements, or outcome-based loans. These names generally correspond to specific contractual features: for example, those featuring payments calculated as a percentage of income are often referred to as ISAs, those featuring a single fixed payment are often referred to as outcome-based loans. But there is no universally agreed upon set of definitions, and what one financial provider may call an ISA, another may refer to as a deferred tuition agreement or outcome-based loan. While the choice of name may impact how learners or regulators view the financing instrument, all these forms of income contingent financing operate very similarly.
Examples of Income-Contingent Financing

American Diesel Training Centers offer learners an intensive five-week diesel mechanic training program. Learners who make less than $30,000 following completion of the program pay nothing, those who make between $30,000 and $40,000 pay $187/month, and those making more than $40,000 pay $317/month. The obligation ends after 48 months, regardless of how much has been paid.61

Better Future Forward offers learners financing to cover gaps they face—after they’ve exhausted grants, scholarships, and federal student loans—in covering tuition, fees, and living expenses. This financing is available to students participating in nonprofit college access and success organizations and attending a range of public and nonprofit colleges and universities. Learners pay a percentage of their income when earning over $45,800. For example, a learner who receives $10,000 in financing will have monthly payments equal to 2.7% of their earnings. The financial obligation would end when they’ve made 120 payments (10 years of payments) or once 20 years has elapsed, regardless of how much they have paid.62

Pursuit offers learners a 12-month software development training program. Learners pay back 5% of their earnings if they make between $50,000 and $59,999, 10% of their earnings if they make between $60,000 and $69,999, and 15% of their earnings if they make $70,000 or more. A learner’s financial obligation ends once they make 48 payments or eight years elapses, regardless of how much has been paid.63
Examples of Income-Based Repayment

The federal income-driven repayment program only requires payments if income exceeds 150% of the federal poverty line (FPL), caps monthly payments at 10–20% of income, and forgives debt after 20-25 years. But this model is beginning to be used outside of the federal government.

The Rhode Island Student Loan Authority offers income-based repayment to learners with private loans, with a 150% FPL threshold, 15% of income payment, and forgiveness after 25 years.

A loan with an income-based repayment plan is a traditional loan but with protections for learners with lower income that operate similarly to income contingent financing models. Like a traditional loan, monthly payments are set as a fixed dollar amount but cannot exceed a specified percentage of the borrower’s income and no monthly payment is required if a borrower’s income falls below a certain threshold. The principal is forgiven if it is not paid off within a certain period of time.

**Education insurance** protects the learner against the risk of low income. This category includes Loan Repayment Assistance Programs (LRAPs), which make monthly loan payments on behalf of the learner if their income falls below a certain threshold. Similarly, Degree Insurance is a company that makes a payment directly to the learner if their income falls below a certain threshold, regardless of whether they financed their education with a loan or not.

Example of Education Insurance

The company Degree Insurance works with Augustana College to provide learners an insurance policy if their earnings fall short of a certain threshold. After five years, the school pays the learner a lump sum equal to the sum of the shortfall over that period of time.

A merit-based lending product operates as a traditional loan to the learner, but merit-based lenders may also use outcome data in deciding the price and availability of the loan (i.e., underwriting). Like the aforementioned approaches, this usually means greater emphasis on the expected value of the specific institution and/or program the learner is enrolled in and less emphasis on the learner’s credit history.
Example of Merit-Based Lending

Meritize lends to learners based on three factors: industry dynamics, school performance, and individual credit/merit-based history. Only certain schools are eligible, and Meritize uses a risk-sharing approach to ensure the schools have skin in the game.

Evaluating Outcome-Based Financing Models

The common thread of these models is outcome-based underwriting, where the lender determines whether to offer the financial product—and at what price—on the basis of the outcomes of a school, group of schools, or specific education program. This “forward-looking” underwriting is in contrast to the backward-looking underwriting of traditional private student loans, which is largely based on a learner’s credit or earnings history. Most of these models also incorporate some combination of income contingent repayment.

These financing models offer significant potential not only to individual learners but also to the postsecondary system as a whole. First, due to their outcome-based underwriting, most of these models can increase access to credit for learners who have exhausted traditional federal student loan options, do not qualify for existing federal aid options, or are particularly debt-averse. And because they often de-emphasize credit scores, net assets, past income or employment, or other measures of individual creditworthiness, outcome-based financing models can improve access for learners with lower income and those that have historically faced discrimination in the private market.

These models can also increase affordability by limiting payments as a share of monthly income, exempting learners from making any payments at all while they experience low income or unemployment, and automatically ending the obligation after a set period of time.
Additionally, these models align incentives of the actors in the system. Outcome-based underwriting means that schools who improve their outcomes will have cheaper credit available to their learners, which makes the school more attractive and can boost enrollment. If the financing model incorporates income contingent repayment features, the school or funder will also be financially “on the hook” if the learner doesn’t get a well-paying job. By aligning funding with learner outcomes, institutions and their funders will be encouraged to innovate and develop programs that lead to more successful learner outcomes.

However, outcome-based finance also entails a variety of risks. First, these financial obligations are relatively new, and learners may have difficulty understanding the terms and how much they may repay, complicated by the fact that their repayment is contingent on their future, unknown, income. Learners may also have difficulty comparing these options to each other, or to traditional loans that may also be available to them.

Second, realizing the aforementioned benefits of these models depends on whether the financial instrument is well-designed. A bad-faith provider could design an outcomes-based financing instrument to overcharge learners or only give the appearance of shifting risk away from the learner without actually doing so. Income contingent financing providers, for example, should set the earnings threshold significantly higher than average earnings prior to enrollment.

Finally, while outcome-based underwriting holds the potential to improve equity, the actual equity impact is relatively untested. A poorly designed outcome-based financing instrument could actually exacerbate rather than improve equity. A recent JFF research report found no evidence that ISAs are being priced in such a way that would result in Black, Latine, or female learners paying more than white and male learners, but much more research is necessary to guide providers and other stakeholders.

Moreover, a lack of clear regulation regarding outcome-based underwriting and income contingent financial instruments has both held back the market from realizing its full transformative potential and put learners at risk for abuse. The Consumer Financial Protection Bureau’s (CFPB) recent compliance plan with ISA provider Better Future Forward is a step forward toward greater clarification of how providers of ISAs (which suffer from the most regulatory uncertainty) could comply with the Truth in Lending Act, but comprehensive guidance has yet to be provided at the federal level and treatment under state law remains murky and inconsistent across state borders.
Pay for Success (PFS) programs, also known as Pay for Performance programs, are unique public-private partnerships that fund education and training (or other social services) through performance-based contracts. PFS programs can be applied to a wide range of social challenges, and those aimed at workforce development typically involve providing job training, career coaching, and other employment supports to unemployed and at-risk populations.
Several key actors are involved in PFS programs:

- Governments identify problems to target with the PFS program and repay investors if and when the program achieves outcomes that generate public value. Employers can play this role as well.

- Service providers deliver evidence-based social programs, such as skills training.

- Funders provide upfront capital to launch or scale the work of high-quality service providers and receive a return if the program achieves agreed-upon goals. Private impact investors that provide funding may receive investment returns if outcomes are achieved, but if not, they may take losses. Government may also choose to fund a PFS program instead of a traditional spending program to better ensure that its funds produce the desired outcomes. In rare cases, the service provider does not need a funder because it can fund the service itself.

- Intermediaries facilitate a collaborative, multi-stakeholder process to design and monitor the PFS program and to identify high-performing education programs, price the PFS instrument, guide evaluation, and oversee implementation.

- Independent evaluators assess whether results of the PFS programs achieve their goals.
Examples of Pay for Success

The Massachusetts Pathways to Economic Advancement is a partnership between the Commonwealth of Massachusetts, Jewish Vocational Service (JVS), Social Finance, and JFF. JVS provides English language classes, integrated with job search assistance and coaching, to assist limited English-speaking adults in making successful transitions to employment, higher wage jobs, and higher education. The Commonwealth will repay investors only if JVS successfully achieves positive outcomes for participants.

Virginia’s FastForward program and Comcast’s Philadelphia Works are interesting variations on the PFS model. Under the FastForward model, the state government is effectively in a permanent PFS arrangement with its own community college system: the state pays for two-thirds of the tuition for non-degree training if the learner completes the course and earns the credential (with the learner paying the remaining one-third), but if the credential is not earned, then the school and learner must split the cost.65 Under the Philadelphia Works program, the local workforce board funds the upfront cost of training, and Comcast (rather than the government) promises to pay for training only if learners are hired and retained for six months.66

Evaluating Pay for Success Models

PFS models provide benefits that are similar to outcome-based financing models. First, the PFS model aligns incentives between providers and funders. While funders may provide some initial capital to support a service provider’s project, the provider and funder usually only receive full repayment if the intervention has the desired impact, with clear and measurable metrics identified in the PFS contract and verified by the independent evaluator.40

PFS also offers governments and employers a less risky investment in skills training because they do not have to pay if the intervention does not achieve its desired effect. With an effective “money back guarantee,” governments and employers are likely to be more willing to invest in worker training.

While the PFS model may offer key benefits through its performance-based structure, it also presents downsides. The complex structure of these partnerships can limit scalability, increase costs, and make monitoring and evaluation more challenging, though new approaches to PFS are attempting to address those challenges.41 As an emerging model, PFS models are generally limited to proven interventions, such as those that have undergone randomized control trials, which allow for a better understanding of how outcomes impact particular groups of learners or stakeholders.
Lifelong learning accounts, also referred to as training accounts or matched savings accounts, consolidate and leverage contributions from multiple sources to pay for approved education and training offered by qualified providers. Workers can make contributions (often pre-tax) at their discretion or on a set schedule facilitated by their employer. Employers can also make contributions, either as a share of earnings or to match worker contributions. Many proposals also require government contributions directly into these accounts. A recent Government Accountability Office report convened experts that recommended the establishment of lifelong learning accounts to promote continuous learning.  

The model is popular internationally: for example, France’s Personal Training Account program provides workers with at least 600 euros per year, funded with contributions from employers (and from workers themselves if they are self-employed). Singapore, Canada, and Scotland also operate lifelong learning account programs.
Example of Lifelong Learning Accounts

Since 2013, Earn to Learn has been operating a lifelong learning account program in Arizona to help learners with low income pay for postsecondary education. The organization matches a learner contribution of $500 with an 8:1 match for a total scholarship of $4,500 per learner. Over the past decade, Earn to Learn has served over 2,000 learners with a combination of university, public, and philanthropic funding. Multiple bills to create federal lifelong learning accounts have also been introduced in the U.S. Congress.57

Evaluating Lifelong Learning Accounts

Lifelong learning accounts have the potential to radically alter how education and workforce training funding is delivered to learners. Employer-funded training is often focused on skills that are relevant to the employee’s current job and may not be transferable from job to job, lessening the value to the worker. In contrast, lifelong learning accounts leverage employer contributions in a way that provides workers with a wide variety of choices, including those that help them shift jobs or careers. The portability that these accounts offer also allows workers to follow a long-term training strategy that spans multiple employers, and the training account’s user interface can help workers choose education programs.

Moreover, the “co-investment” feature of lifelong learning accounts—wherein a single training investment can be funded from a combination of employer, worker, and government—holds the potential to unlock greater training investment by making viable certain investments that each individual entity may be unwilling to fund on its own.

Though lifelong learning accounts offer the potential to expand access to investment for individuals’ education and training, they also carry potential risks. By placing the responsibility for education and training on the individual, the utilization of lifelong learning accounts may be inaccessible to those workers who have faced the greatest challenges in the labor market. If not designed with adequate support in place, those with lower levels of formal educational attainment and income may not have the experience, resources, or connections needed to select the most promising training options. Additionally, lifelong learning accounts may be costly for the government to both operate and contribute to.
The government can offer financial incentives to encourage employers to increase their training investments in their workers. These incentives may take a number of forms.

A levy-grant requires employers to contribute to a fund, which is distributed back to employers to cover training costs. For example, California’s Employment Training Panel (ETP) is a levy-grant scheme that uses revenues from an employer tax to reimburse employers that invest in approved training. The United Kingdom operates a similar program, where employers pay a 0.5% tax on the amount of annual payroll expenses that exceeds $3 million, with training expenses going specifically toward an apprenticeship program. France, Italy, Korea, the Netherlands, and Poland also use levy-grant schemes.

A levy-exemption applies a tax on employers that can be partially or fully avoided if the employer provides training. For example, the Canadian province of Québec charges businesses with at
least $2 million in payroll a 1% tax, minus
their training expenditure.\textsuperscript{47} In other words, a
qualifying business would pay nothing if their
training expenditure equaled at least 1% of
its payroll. Spain has a similar model, in which
businesses pay a 0.6% tax on their payroll
expenses (and employees pay another 0.1%) and can be eligible for a credit against that
tax if they choose to train their employees.\textsuperscript{48} Australia, Belgium, and Greece also use levy-
exemptions.\textsuperscript{49}

**Tax incentives** can be offered to employers
to partially or fully offset training costs.
These can be tax credits or deductions
and can apply to the increase in training or
the entire cost of training. For example, the
Aspen Institute’s Future of Work Initiative has
proposed a tax credit equal to 20% of the
annual increase in qualified training expenses,
mirroring the policy design of the popular R&D
Tax Credit.\textsuperscript{50}

In addition, several states offer tax incentives
to encourage employer-provided training,
including Connecticut, Georgia, Kentucky,
Mississippi, Rhode Island, and Virginia. These
incentives range between 5% and 50% of
eligible training expenses.

**Evaluating Employer Training Incentives**

Government incentives can play an important
role in unlocking employer investment in
worker training. One key obstacle to greater
employer investment is that employers are
unable to capture the full returns on the
training investment because the benefits
of training ultimately reside with the
worker rather than with the employer. As
a consequence, businesses underinvest in
their workers. Moreover, businesses may be
tempted to free-ride training investments
made by other businesses by poaching their
already-trained workers. By creating financial
incentives for training through a levy-grant,
levy-exemption, or tax incentives, employers
have an incentive to expand their training
investments, and less of an incentive to free-
ride off their competitors.

While incentivizing employers to invest in
their workers can carry significant benefits,
there are potential downsides. Businesses
may expand training simply to enjoy the
benefit of the incentive while paying little
attention to whether the training is high
quality and provides relevant skills. Moreover,
businesses may choose to spend their now
publicly subsidized training budget on their
executives and other high-wage workers
rather than their frontline workers. Finally, the
incentives may end up subsidizing training
investments that employers would have done
anyway, leading to an inefficient use of public
resources. These incentives should include
strong quality assurance mechanisms, only
apply to workers with low and middle wages,
and attempt to minimize subsidizing pre-
existing training.
Employment-connected training programs couple hiring and training workers as an intentional step toward progressing them along a career pathway. Learning incorporates both formal education and on-the-job training through employment. The program is often jointly developed by employers, education providers, and intermediaries, such as an apprenticeship intermediary or talent development firm. Employers play an important role in either directly or indirectly funding the training. An intermediary is not always used, as in the case of an Employment Social Enterprise (ESE).
**Apprenticeship programs** are perhaps the most well-known version of employment-connected training. These programs combine on-the-job learning and formal classroom or online instruction, providing learners with both enhanced skills as well as a pathway to well-paying careers. Apprentices are also paid employees, giving them a measure of financial security as they are acquiring skills.

Apprenticeships are widely prevalent in European countries, such as Germany, Austria, and Switzerland. While apprenticeships are less common in the US, registered apprenticeships have grown 70% in the last ten years and youth apprenticeships have more than doubled. Moreover, while apprenticeships in the United States used to be based on a single employer or involve a trade union (a limiting factor in a country where only 10% of workers are union members), intermediaries are emerging to establish apprenticeship programs across multiple employers and schools.

**Hire-Train-Deploy (HTD)** can provide another example of employment-connected training. Under HTD, a company invests heavily in training new hires and then places them with client companies. If the client companies then choose to hire the workers permanently—that is, if the training succeeded in providing the workers the necessary skills—then the client company’s payment effectively reimburses the staffing agency for the training expense. While similar to apprenticeships, a key difference is that HTD training is more intensive and is sequenced before joining the workplace, whereas apprenticeships largely consist of on-the-job training beginning on day one of a program with complimentary classroom instruction.

The training program also includes the following:

- **Examples of Employment-Connected Training**
  - Apprenticeships for America was recently launched to foster collaboration between intermediaries and promote policies that support apprenticeship, including a federal pay-for-performance pilot.
  - Revature—a hybrid between a coding bootcamp and staffing agency—is an example of the HTD approach. Revature recruits recent college graduates, trains them in a 10-14 week software development training program, provides them minimum wage during the training period, and staffs them on client projects after completing training.
Evaluating Employment-Connected Training

Both apprenticeships and HTD training incorporate innovative finance concepts that are also prevalent in other models. Training is not only largely free to the workers, but the worker is also paid while in training, making it both affordable and accessible to workers of all backgrounds and life situations. Because the workers are already employed, they take on less risk that the training won’t lead to a job. Employer investment in this model is also de-risked, both because the employer is involved in the design of the training and because, in the case of the HTD training model, employers get to “try out” the workers before they pay for the training and are reimbursed if the worker leaves prematurely. In both cases, the training provider is accountable to the employer for the quality of the education. Because the investment is de-risked, employers may be willing to invest more in worker training, and workers may be more likely to enroll. Studies show that registered apprenticeships provide a positive return on investment for employers and surveys suggest they find registered apprenticeships serve their business needs.55

That said, there are several potential downsides to this model. The role of the employer in dictating the curriculum makes it more likely that the training will provide workers with firm-specific skills rather than general skills that workers could use across multiple employers. (This is less of a concern for registered apprenticeships, which represent roughly half of total apprenticeships and must lead to an industry-recognized credential.)56 These training programs may also require significant engagement from employers and an ability to anticipate their long-term skill needs, which makes scaling the model difficult.

Additionally, HTDs often include employment contracts that can impose substantial penalties for workers who leave their job within a defined period of time, thus limiting the ability of employees to quickly advance to a better job. For example, Revature’s employment contract requires workers to pay substantial penalties if they quit their placed job within two years.57
Opportunities for Stakeholders

Stakeholders should establish bold and responsible innovative finance programs that are coupled with rigorous research to build the evidence for what works and what doesn’t.

**Government** can play an important role in leveraging public funds, ensuring consumer protection, and investing in the broader innovative finance ecosystem.

Specifically:

- Policymakers, as well as education, workforce, and economic development agencies at the federal, state, and local level, should consider using funding from the workforce system, American Rescue Plan, and other sources to establish and expand innovative finance programs, such as outcome-based finance (i.e., Pay It Forward programs), lifelong learning accounts, pay for success contracts, and employer training incentives.

- Policymakers and regulatory agencies at the federal and state level should clarify the regulatory framework of outcome-based finance, especially ISAs. Such a regulatory framework should ensure that learners are able to easily understand the cost of outcome-based financing and compare it to other available financing options.

- Policymakers at the federal, state, and local level should invest in career navigation services to help learners choose their education, wraparound services to help learners access and complete their education, and data systems that highlight the value of skills and credentials in the labor market and reveal the earnings and employment outcomes of education providers.
Philanthropies and impact investors can play a vital role to crowd-in private investment and expand the knowledge base.

- In this early stage of innovative finance’s development, the cost of private capital is quite high. Philanthropic and impact investors can provide affordable capital in the near term, allowing innovative finance providers to avoid having to pass along the cost of more expensive capital to learners during this developmental phase. As innovative finance continues to grow and mature—thanks in part to philanthropic and impact investors’ funding—investments will be de-risked and private capital will become cheaper.

- Additional research into the upsides, risks, and best practices of innovative finance can advance the industry while helping ensure learners are protected and equity is centered. While the benefits of research are diffuse, innovative finance providers—especially new entrants who have not yet established themselves—may not have the capacity or incentive to fund research on their own. Philanthropic and impact investors should fund research about innovative finance more generally and work with individual providers to better understand how their specific products and services impact learners and equity.
**Employers** can play an important role in testing and funding innovative finance approaches. Each approach should target frontline workers and those with little postsecondary education, and employers should seek to involve local workforce development boards where practical.

- Employers can use innovative finance approaches to invest in their own workers by creating lifelong learning accounts for their employees and launching apprenticeship programs.
- Employers can also invest in the broader workforce by establishing Pay for Success partnerships with training providers and partnering with other employers to create a sectoral training fund that provides tuition-free training in exchange for income contingent repayments.
- Employers can advise innovative finance programs on what kinds of training will be valued in the labor market.

**Education and finance providers** can remain leaders in innovative finance through continued implementation and evaluation of new models and interventions, and ensuring they are designed and operated in a learner- and equity-centered way.

- Providers should carefully monitor the impact of the financing and education they offer by regularly studying their internal data on learner outcomes and repayment patterns and by soliciting learner feedback on their programs.
- When designing outcome-based finance, providers should review existing principles and student bill of rights documents, including those drafted by the Aspen Institute, Social Finance, and the San Diego Workforce Partnership.59
- Education providers should report outcomes, disaggregated by gender, race, and ethnicity, using a standardized framework.60
- Providers should partner with researchers to ensure their innovative finance programs are designed to produce research, including through robust data collection and experimental designs like randomized control trials.
Researchers can improve our understanding and evaluation of the various innovative financing models by exploring outstanding research questions. Including:

- How can an innovative finance fund or program achieve financial sustainability?
- How do innovative finance approaches change the willingness of government, employers, and philanthropy to invest in education and training?
- How do innovative finance models impact racial, gender, and economic equity?
- Do innovative finance models—particularly those with explicit outcome data linkages—induce quality improvements, and are there specific approaches and conditions that strengthen this effect?
Conclusion

Our postsecondary education system is not up to the task of truly preparing all American workers for the jobs of the future. While the innovative finance models mentioned in this report may remain important stand-alone solutions, each offers significant potential to be the transformational centerpiece of a more bold, equitable, affordable, high quality, and universally accessible lifelong learning system.

JFF aims to promote new solutions that have an established evidence base and the potential to scale to system transformation. By planting enough seeds, guiding their growth, cultivating a favorable climate, and evaluating the outcomes they yield, we can identify solutions that are ripe for adoption, with the ability to transform the system and expand economic opportunity for all.
Appendix: Examples

The examples below are intended to be illustrative, highlighting the range of programs that exist for particular innovative finance models. They each may have distinctive benefits and challenges.

**Outcome-Based Financing**
Student financing that is offered on the basis of a program’s or institution’s learners’ outcomes

- **Income-Contingent Financing**
  - San Diego Workforce Partnership: The Workforce Income Share Agreement Fund
  - University of Utah: Invest in U
  - American Diesel Training Centers

- **Better Future Forward**

- **MentorWorks**

- **SV Academy**

- **Climb Hire**

- **Merit America**

- **YearUp**

- **NJ’s Pay It Forward**

**Income-Based Repayment**

- **Rhode Island Student Loan Authority**

- **Make School: Expanded Income-Based Repayment (EIBR)**

**Education Insurance**

- **ARDEO Loan Repayment Assistance Programs**

- **Degree Insurance**

- **Merit-Based Lending**

- **Climb Credit**

- **Meritize**

**Pay for Success**
Partnerships that funds effective social services through performance-based contracts

- **Massachusetts: Pathways to Economic Advancement**

- **SkillSource and Northern Virginia Workforce Development Board**

- **Comcast and Philadelphia Works**

- **Veterans CARE**

- **Virginia’s FastForward**

- **Colorado Opportunity Scholarship Initiative**

**Employer Training Incentives**
Government incentives that encourage employers to increase training provided to workers

- **California’s Employment Training Panel (ETP)**

- **UK Levy-Grant: Apprenticeship Levy**

- **Revenu Québec: Workforce Skills Development and Recognition Fund**

- **Worker Training Tax Credit**

**Employment-Connected Training**
Training programs that combine job training with paid employment

- **IBM P-TECH Schools**

- **IBM New Collar Apprenticeship Program**

- **CareerWise Colorado**

- **Federation for Advanced Manufacturing Education (FAME)**

- **FareStart (ESE)**

- **Revature (ESE/Staffing)**

- **First Step Staffing (ESE/Staffing)**

- **Optimum Healthcare IT**

- **Cloud for Good**

- **Avenica**

- **BitWise**

**Lifelong Learning Accounts**
Learning accounts that consolidate and leverage contributions from many sources to pay for qualified education and training

- **Washington Workforce Training and Education Coordinating Board: Lifelong Learning Accounts**

- **Maine Lifelong Learning Accounts**

- **France CPF**

- **SkillsFuture Singapore**

- **Canada Learn$ave**

- **Skills Development Scotland: Individual Training Accounts**

- **Arizona: Earn to Learn**

- **Colorado and Utah: Future Workforce Now**
Endnotes


Office of Management and Budget, Table 3.2, Subfunction 504.
https://www.whitehouse.gov/omb/budget/historical-tables/


The Georgetown Center on Education and the Workforce estimates that employers spend $177 billion annually on formal training and another $413 billion through informal, on-the-job training. https://cew.georgetown.edu/cew-reports/college-is-just-the-beginning/


18 Carnevale, Cheah, and Wenzinger, The College Payoff https://cew.georgetown.edu/collegepayoff2021

19 Cooper, “Is College Worth It?” https://freopp.org/is-college-worth-it-a-comprehensive-return-on-investment-analysis-1b2ad17f84c8

This incentive may be direct, as in the case of a school offering outcome-based financing and keeping the asset on its books. In the case of a school issuing and then selling the financing to a third party, or a third party issuing the financing, the incentive may be indirect because the third party won’t continue to buy the school’s financing or issue financing to the school’s learners if their outcomes are poor.


32 Some finance providers that offer products to learners at multiple schools will vary the price of the product across schools, while others choose a group of high-performing schools and offer the same price across all schools.


34 “MyLRAP Homepage,” MyLRAP, accessed October 18, 2023, https://mylrap.org/


The exception is merit-based lending, which is not expected to expand access to credit.


Some PFS contracts include a “bonus fund” to give service providers >100% reimbursement if certain exceptional outcomes are reached.

Forte, for example, has designed their program to address monitoring and evaluation costs by tying the contractual performance measures to the increase in tax revenues from learners who have graduated and are now receiving higher earnings. [https://impactalpha.com/a-resilient-pandemic-recovery-requires-faster-cheaper-pay-for-success-initiatives/](https://impactalpha.com/a-resilient-pandemic-recovery-requires-faster-cheaper-pay-for-success-initiatives/)


Marian Negoita and Annelies Goger, State-level policies to incentivize workplace learning: Impacts of California’s incumbent worker training program (Brookings, July 2020), [https://www.brookings.edu/research/state-level-policies-to-incentivize-workplace-learning/](https://www.brookings.edu/research/state-level-policies-to-incentivize-workplace-learning/)


Their total payments are also capped at $70,000, which they can reach if their annual salary is $117,000 or more for 4 years. “How Pursuit Bond Works,” Pursuit, accessed October 18, 2023, https://www.pursuit.org/fellowship-bond

“College to offer ‘income insurance’ for new transfers,” Augustana College, July 19, 2021, https://augustana.edu/admissions/apply/transferring/assurance


