Working to Learn:

Despite a growing set of innovators, America struggles to connect education and career

Joseph B. Fuller
Rachel Lipson
Jorge Encinas
Tessa Forshaw
Alexis Gable
J.B. Schramm



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HARVARD Kennedy School
MALCOLM WIENER CENTER
for Social Policy

THE PROJECT ON WORKFORCE

About the authors

Joseph B. Fuller is a Professor of Management Practice at Harvard Business School. He co-chairs the HBS Project on Managing the Future of Work and the Project on Workforce at Harvard. He is a visiting fellow at the American Enterprise Institute.

Rachel Lipson is the Director of the Project on Workforce at Harvard. She is based at the Malcolm Wiener Center for Social Policy at the Harvard Kennedy School.

Jorge Encinas is a PhD candidate at the Harvard Graduate School of Arts and Sciences.

Tessa Forshaw is a PhD candidate at the Harvard Graduate School of Arts and Sciences. She is also a member of the teaching faculty at the Stanford University d.school and Harvard University Extension School.

Alexis Gable is a PhD candidate at the Harvard Graduate School of Arts and Sciences.

J.B. Schramm is Founder and Managing Partner of Grove Social Impact Partners. Formerly he founded College Summit (now PeerForward) and New Profit's Learn to Earn fund, the incubator of the Postsecondary Innovation for Equity (PIE) initiative.

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Please direct inquiries to: Rachel Lipson (rachel_lipson@hks.harvard.edu)

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Executive summary 2

The Landscape 6

Overview: Who are the innovators in the education-and-employment sector? 9

Structural characteristics 11

Taxonomy of the education-and-employment sector 23

Conclusion 27

Appendix 29

Executive summary

Context: An expanding field, but not at full potential

As the structure and makeup of the American workforce shift, the education and training system has lagged behind the rate of economic change. Yet, there is a clear appetite among learners, workers, employers, and funders for new models of working and learning. The demand for new models has only accelerated during the COVID-19 pandemic, as Americans indicate more interest in pursuing non-degree options amid economic uncertainty and social distancing.[1] As a result, organizations that train individuals for jobs are expanding, adapting, and attracting new attention.

We call this growing set of for-profit, non-profit, and public programs the "education-and-employment sector." We use this term to be intentionally inclusive of organizations that straddle both the postsecondary education and employment sectors. Many of these new models are emerging from the world of start-ups and social entrepreneurship. These organizations often sit outside the confines of traditional K-12 and higher education systems, and therefore, have proven difficult for education data sources to capture. Though they employ diverse approaches, they share a common goal: to help more Americans achieve economic success through a combination of educational attainment and work experience.

In October 2019, New Profit, a venture philanthropy organization, announced a new initiative, Postsecondary Innovation for Equity (PIE). PIE was designed to support innovative organizations that are helping young people access "postsecondary education and work experience needed to access upwardly mobile careers." Through an open application process, 316 organizations applied for unrestricted grants of $100,000 and capacity building support. 20 organizations were ultimately selected as winners.

These 316 applications serve as the primary data source for this report. Though self-selected and self-reported, the data from the applicant pool provides a richly detailed profile of organizations seeking to connect learners with employment. The data contains descriptive information for each organization, such as headquarters location, year founded, learners served, revenue, expenses, and staffing. In addition, PIE asked applicants to describe various organizational characteristics in more detail. This included their program model, outcomes measurement, objective in participating in the PIE initiative, and how they implement diversity, equity, and inclusion.

While the dataset has some limitations, it provides valuable insight into a growing field. In 2019, the applicant organizations collectively served over 2.6 million learners and generated over $4.1 billion in revenue. Over half of the organizations in the dataset were formed in the prior decade and approximately 25 percent in the last five years. They were also expanding quickly. The average organization had a 31 percent average compound annual growth rate in learners served in 2019. Nearly half of the organizations planned a site expansion in the coming year.

Our analysis employs both quantitative and qualitative measures to better understand this growing sector. We examined the structural characteristics (e.g. organizational size and reach, age and growth, funding sources) as well as program models and delivery approaches, leadership, and program outcomes. Key data points from our analysis are summarized in the box below. Looking across the organizations represented in this dataset, we draw three broad takeaways.

1. Despite a focus on innovation, approaches are slow to change

The PIE competition featured "innovation" in its name and specifically called for social entrepreneurs to apply. Organizations in the applicant set touted their models as cutting-edge. Yet, our

analysis found that their models still primarily operate within the confines of traditional K-12 and higher education practices. Adapting to the changing nature of work did not appear to be a primary focus across the field.

First, delivery forms largely did not leverage technology. Before the onset of the COVID-19 pandemic, the field was heavily skewed towards in-person models. Only six percent of programs were fully online; 11 percent had hybrid models.

In addition, the sector maintains a college vs. career dichotomy, rather than prioritizing both educational and employment outcomes. We found that organizations that worked with educational institutions like high schools or colleges were unlikely to collaborate with employers. Success measurement was similarly siloed between education and employment metrics.

Finally, organizations in the dataset are primarily youth-serving. The PIE application stipulated that New Profit was seeking applicants that served primarily but not only 15 to 30-year-olds. It is interesting nonetheless that many organizations appear to serve a young population exclusively. Few programs include older workers who may need to reskill in their target population. Less than one-quarter of organizations in our dataset primarily served individuals outside the 16-30 age cohort, with 58 percent serving a population with at least 80 percent of learners aged 16-30.

2. While effective models exist, proven success factors are missing from many programs

After two decades of program evaluations and causal studies in the field, there is increasing understanding of program models that lead to sustained earnings and employment gains. Among other characteristics, programs with strong evaluation results feature sectoral focus and robust employer relationships, both occupational *and* soft skills training, and the provision of wraparound services.[2] Yet despite the growing base of evidence, our research found that such proven practices still have relatively little penetration across the field at large. Only about one-third (35 percent) mentioned that they were working directly with employers. Only about one-quarter mentioned providing learning opportunities in workplace environments. Just nine percent of organizations emphasize both job-specific and foundational soft skills. Meanwhile, 13 percent of organizations said they directly provided wraparound services, like housing support, living stipends, mental health services, or transportation subsidies.

One explanation could be the perceived cost of providing such services. Many applicants noted anecdotally the operational challenges of working with employers, teaching soft skills, providing wraparound services, or monitoring outcomes. However, we found no statistical relationship between any of these characteristics and estimates of cost-per-learner. In fact, there was a statistically significant, positive relationship between the programs that involved employers and growth in learners. Programs that involved employers tended to have higher learner growth rates. When coupled with the evaluation literature, our findings suggest that many organizations should reconsider resource allocation and program delivery priorities.

3. The broader evidence base is still nascent, and scale has been difficult to achieve

While some education-and-employment programs could provide evidence of efficacy through independent evaluations or quasi-experimental research designs, our research revealed that most players could not meet high evidentiary standards. The most common success metric tracked by organizations was whether participants completed the program offered by the applicant. In contrast, there was relatively little understanding of impact on long-term employment or educational outcomes. For instance, less than three percent of organizations tracked long-run career progression, and none of the 316 measured learning. Only nine percent of applicants cited an existing study, quasi-study, or external evaluation of the program model in their application. Nearly a third of organizations cited the need to enhance their data and evaluation capabilities as a motivation for seeking funds. Based on this sample, our findings indicate the education-and-employment field needs to invest in evidence if it is to increase its impact for the 71 million Americans with a high school diploma but without a bachelor's degree.[3]

Perhaps it is not surprising then, that this also remains a relatively fragmented field, where individual organizations struggle to scale their programs. The median organization served a few hundred learners each year. One-quarter of the dataset served 135 or fewer learners. Connected to scale, the sector also remains reliant mainly on philanthropic funding. The median organization expected 60 percent of 2019 revenue to come from philanthropy. Significant public funding sources were cited by just five percent of organizations, posing questions about long-term sustainability.

Implications: **Education and employment matter for the future of opportunity**

The correlation between race and educational attainment in the US provides an important backdrop for our work. In 2019, only 26 percent of Black Americans and 19 percent of Hispanic Americans ages 25 and older held a bachelor's degree, compared to 40 percent of white Americans.[4] Degree attainment has been slowly rising, and closing the racial gap on college access and attainment remains a critical national priority. In the interim, however, short-term training programs often provide more accessible pathways to economic opportunity. Prior research finds that low-income students and students of color are more likely to enroll in two-year institutions and certificate programs.[5] In our analysis, we see similar patterns. For instance, we find that over 40 percent of organizations focused on job-specific training are working exclusively with low-income youth and youth of color.

Fortunately, the leadership of this sector appears more representative than many institutions of power in American society. Over 40 percent of the applicants to PIE that chose to respond identified as members or former members of the population that their organization served, and 40 percent self-identified as Black or Hispanic/Latinx. Over one-third of the leaders self-identified as Pell Grant recipients; and over one-third were first generation college attendees themselves. Still, the disproportionate share of Black and brown Americans served by education-and-employment organizations points to the important role these institutions can play in reducing inter-generational racial inequality in America.

Finally, the sector also confronts a great opportunity. Smaller organizational footprints and private and philanthropic funding often mean greater flexibility. These organizations could be at the forefront of reshaping how the American educational system prepares learners for the future of work. Already, a small set of innovators are demonstrating the impact of melding occupational and transferable skills and creating strong models for "learning by doing." The future of mobility and opportunity may well depend on their capacity to influence others. Indeed, success may not ultimately mean the innovators scale on their own. If they can provoke large incumbent institutions to prioritize both education and career, they will leave a lasting mark.

Top Ten Insights from the Education-and-Employment Sector Dataset:

Program Design and Delivery Models

1. 83% of programs were offered fully in person (pre-COVID).
2. Less than 9% of programs emphasize both job-specific and foundational skills.
3. 13% of programs directly provide wraparound services to their learners (including residential support, stipends, food security, mental health services, etc.)
4. One-third of organizations focus on job-specific skills training. But, only half of those programs prioritize employer involvement, even as employer-involved models experienced higher growth in learners than other organizations. In addition, very few programs link to industry-recognized credentials.
5. 60% of the typical organization's expected revenue came from philanthropy. Private family foundations make up the most significant share of large funders.
6. Young people are the priority population - the majority of programs serve a population that is at least 80% composed of learners ages 16-30.

Theories of Change and Measures of Evidence

7. Nearly half of the leaders and founders do what they do because they or their family members were/are members of the audience their organization serves.
8. There is a strong college vs. career divide in the field- only 16% of organizations prioritize relationships with both educational institutions and employers.
9. The overwhelming majority of organizations measure program completion as their primary outcome, and none measure learning as a primary outcome.
10. Only 9% of applicants cite an experimental or external evaluation of the program model in their application.

The landscape

The world of work in the United States has changed dramatically over the last 50 years. The share of manufacturing jobs has declined rapidly, while service sector jobs have grown.[6] Not only have the types of jobs changed, but the knowledge, tools, and skills required to perform those jobs have changed dramatically as well. Increasingly, at least some postsecondary education is needed to access good-paying jobs. As a result, a steadily increasing share of Americans are seeking education and training beyond high school.

As the economy has changed, so has the portrait of the American student. The stereotypical white recent high school graduate seeking a postsecondary education is becoming rarer. Instead, today's postsecondary learner is older, has employment experience, and is increasingly Black or brown. The changing demographic context means that the widely celebrated, one-size-fits-all four-year college experience can no longer be treated as the baseline against which alternatives are weighted. Indeed, as the cost of college has skyrocketed, so has the demand for more flexible, affordable, and work-relevant learning experiences.

To meet the growing demand for this type of learning, organizations have attempted to change the structure and content of educational experiences to better serve a wider variety of students. While attempts to innovate in this space are widely covered in the popular media, researchers have struggled to collect data and understand the characteristics of this relatively diverse and fragmented set of organizations. Additionally, the research community has lacked a framework to contextualize how these organizations are changing the educational sector and how they are interacting with institutions and employers.

This report is an analysis of the education-and-employment sector landscape, using a novel dataset of organizations working at the intersection of education and employment. We answer two broad questions: 1) What are the characteristics of the education-and-employment sector? And 2) What are the most common program delivery methods, audiences, and outcomes?

We ask these questions with an eye towards helping inform the future shape of the field. In particular, we hope to:

- Highlight key opportunities for growth across the organizational landscape.
- Uncover relevant relationships between the design of programs and outcomes achieved by the applicants.
- Support equity by starting to understand demographics of leadership and audiences served.
- Encourage a more widespread use of clear, independently verifiable performance metrics that relate directly to the impact on the communities served.
- Help funders determine criteria and questions to make resourcing decisions.
- Create momentum for evaluation capacity that could more cost-effectively enable outcomes measurement, and eventually, facilitate scaling of successful models.
- Weigh the implications for the education system's capacity to prepare learners for the future of work.

The "education-and-employment sector"

This white paper describes and analyzes a diverse array of service delivery models that we call the *education-and-employment* sector. We sought to define a term that would be intentionally inclusive of organizations that carefully straddle *both* the postsecondary education and employment sectors.

Perhaps it is surprising that no standard terminology exists. That reflects the complexity of a field trying to work alongside and communicate effectively with employers, educators, nonprofits, intermediaries, and aspiring workers simultaneously. Many in the US have traditionally referenced the "workforce development sector." Others use "school-to-career," "education-to-career," or "postsecondary." All those titles are imperfect in different ways. A reference to "postsecondary" alone ignores critical employment services and career objectives. Similarly, "employability" or "employment services" lacks recognition of organizations' educational mission in providing technical and social skills.

In the case of "education-to-career" or "school-to-career," those names convey a strict linear progression from education to an eventual labor market destination. That is misleading at best. It fails to reflect the reality for millions of Americans who upskill on the job, take a break from school to entirely focus on work, return to further their education and training in adulthood, or go through career transitions in middle-age. For instance, 69 percent

of entering community college students work for pay.[7] Thirty-nine percent of undergraduate students and the majority of adult learners study part-time.[8] And adult students (age 25 plus) make up over 25 percent of the US undergraduate population.[9]

Workforce development might appear the closest fit. But as more organizations embrace economic mobility as the ultimate north star, there is a danger in emphasizing the output of services over the *outcomes* an intervention achieves.

In this body of work, we wanted to reflect a holistic view of the field, communicating the feedback loops and interdependencies inherent in the relationship between education and employment. Our hope in using the broadest terms of education AND employment will allow us to capture more fully the set of emergent organizational models and the variety of theories of change and definitions of success.

Why focus on education AND employment?

A well-established body of research confirms the importance of integrating education and career to achieve economic mobility. Our work builds upon a set of existing hypotheses that explain why it matters to connect work and learning.[10] The first theory focuses on the importance of *career exploration*.[11] The idea is that the earlier young people gain exposure to the world of work, the better able they are to define their interests and identify fields and occupations that match their skills and align with their motivations. In addition to local labor market alignment, "job fit" matters for an individual's career success.[12] Theory predicts that when people find a role or trajectory that matches both their interests and abilities, they are likely to perform better, less likely to experience voluntary or involuntary turnover, and more likely to experience upward advancement.[13] Therefore, opportunities that help people "test" out different fields and positions help them understand where they can best take advantage of their talents, aptitudes, and personal assets.

The second theory for why work-integrated learning matters relates to the complexity of *navigating* the labor market. Understanding "how" to get into one's desired field is not intuitive, especially without experience.[14] This challenge is especially stark for young people without family wealth and with limited prior exposure to adults with high-wage job trajectories.[15] Education-and-employment programs can help clarify the pathways to get from a starting point to a desired career outcome. This prepares learners to achieve their career goals and progress to good quality jobs to which they aspire. Additionally, providing access to work environments, education, and career pathways, can help learners access and build the social skills and social networks that are critical in obtaining employment.[16]

A third explanation for connecting education and employment in the literature relates to many Americans' *financial realities* and capital constraints.[17] For families without significant savings, financial security, or confidence in the educational system, simultaneous learning AND earning is often an absolute necessity. For those individuals requiring resources from ongoing employment, it is especially critical to have pathways that weave together learning with a compensated work experience that enable candidates to acquire the skills and build the connections that contribute to economic mobility.

A fourth and final relevant theme from the literature focuses on the relationship between *social skills* and long-run economic success. The job categories growing fastest in the United States over the last thirty years utilize high technical and social tasks.[18] Studies show that on-the-job and work-based experiences are critical for developing social skills. As technology continues to displace repeatable and automatable technical tasks in jobs, educational interventions must increasingly prioritize supporting learners in honing social skills for work contexts.

Our contribution to the literature

Most of the evidence on education-and-employment models finds that the United States lags behind Europe in widespread work-based and work-integrated learning opportunities. For instance, the share of apprenticeships in the US population pales compared to many Organisation for Economic Cooperation and Development (OECD) peers, where 40-70 percent of secondary school students split their time between learning at traditional school settings and learning in a workplace.[19]

The US public sector also plays a much more limited role in catalyzing, implementing, and funding education-and-employment models. The US ranks second-to-last in all of the OECD on spending on active labor market policies.[20] At roughly $30 billion a year, Pell grant funding makes up by far the largest share of post-secondary public funding for education and training in the US, but it only can be used for credit-bearing programs, with fairly stringent requirements on the program's length and number of credits awarded.[21] Many education-and-employment programs, therefore, are ineligible. This context, combined with a robust philanthropic infrastructure, means that the US's non-profit and social sector have taken on a comparatively outsized role in workforce training and work-based learning.

However, to date, scholarly attention and research have lagged behind this reality. There is no unified dataset that encompasses all education-and-employment programs. Relatively little is known about the sector's structural characteristics or the outcomes achieved. While there are discrete examples of individual program evaluations, particularly in sectoral employment programs, those evaluations were not to designed to explain differences in programs' pedagogical approaches, employer relationships, economic sustainability or capacity to scale.[22] Nor do they tell us much about the state of the field at large.

Our research validates the need for more attention to this growing segment of education-and-employment models. The sector is rising in prominence for both individuals and employers. Our dataset of 316 education-and-employment organizations represented over US $4.1 billion in revenue and served over 2.6 million US learners in 2019 alone. As more Americans seek out postsecondary credentials, there is also increasing demand from learners and companies for alternative pathways that are shorter and more targeted. Therefore, this work can help policymakers, practitioners, and researchers understand the emerging types of training and service delivery that seek to integrate learning with careers, and eventually, create frameworks for what "works" based on objective performance metrics and identify replicable program elements that explain success.

This white paper only constitutes a first effort to describe this sector broadly and to evaluate its ongoing impact and potential. Our analysis highlights the challenge of standardization and benchmarking in this field. Despite *self-identifying* as organizations dedicated to improving economic mobility, applicants demonstrated a wide variation in how they defined success and measured progress. Across the board, programs often cited outputs rather than outcomes as the primary tracked metrics. The most commonly cited "outcome" measured was whether a participant completed a program.

In contrast, downstream outcomes such as employment rates and earnings (which are much harder to measure) were rarely cited. We also saw a distinct difference in the *pathways* that organizations had identified as the route to success for their populations served. While some focused on college-centric metrics like persistence and completion, others focused on the labor market and employment metrics like attaining industry-recognized credentials or passage of licensure exams. Of course, while that reflects that there is not a single route to economic mobility, it also exposes the huge gaps and variations in the conception of the "what" workforce development and education-and-employment interventions are trying to achieve. We hope that in unveiling this initial set of findings, we can help catalyze the next generation of research on and evaluation of models that prepare people for the future of work. In the longer run, a framework for evaluation that is both replicable and broadly accepted could lead to refinement of current pathways and to the creation of new models to help millions of Americans realize economic opportunity.

Overview: Who are the innovators in the education-and-employment sector?

Background: New Profit Postsecondary Innovation for Equity

The data for this white paper comes from New Profit's Postsecondary Innovation for Equity (PIE) initiative. Announced on October 1, 2019, PIE is designed to support innovative organizations that are helping young people access "postsecondary education and work experience needed to access upwardly mobile careers." New Profit launched PIE with the support of an initial $4 million from the Lumina Foundation, Siegel Family Endowment, Walmart, the Walton Family Foundation, and one anonymous funder. The resources were pooled for awards that would support twenty of the most promising ideas from social entrepreneurs to help them build their capacity to deepen their impact and scale their operations, especially through improved measurement of workforce outcomes. PIE was funded as part of New Profit's Learn to Earn initiative, a 5-year, $25 million fund designed to spur innovation that helps learners achieve more economic mobility by connecting their learning and earning.

About New Profit:

New Profit is a nonprofit venture philanthropy organization that backs social entrepreneurs who are advancing equity and opportunity in America. New Profit's investment strategy focuses on building a breakthrough portfolio to address entrenched systemic challenges in America. They do this by driving resources and support to Black, Indigenous, and Latino/a/x social entrepreneurs who have unique proximity to solutions, but face stark funding disparities in philanthropy, and by investing in social entrepreneurs with new systems change models across a range of issues.

Through an open application process, any organization that considered itself an innovator in the education-and-employment sector and that helps connect learners with employment was eligible to apply. Winners of the grants would each receive a $100,000 capacity building grant, as well as the opportunity to grow their organization's measurement capacity and receive support from New Profit through participation in a cohort of peer organizations. Organizations selected would serve individuals between the ages of 15 to 30, pledge to improve their measurement of outcomes, and be committed to diversity, equity, and inclusion.

Applications were submitted between October 2, 2019, and October 23, 2019. New Profit received 316 applications for the PIE grants. The applications serve as the primary data source for this report. The applicant pool provides a richly detailed profile of the relatively new and growing education-and-employment sector. The data contains basic information for each organization, such as name, headquarters location, and year founded. It also includes information about the organization's leadership, including whether founders are first-generation college attendees or underrepresented minorities. Also included in the data are descriptive statistics on organization finances, operations, and growth.

In addition, the PIE application asked applicant organizations to describe various organizational characteristics in detail. Those questions included descriptions of the organization's program model, their objective in participating in PIE, and how they implement diversity, equity, and inclusion objectives into their programs. This rich data source allows us to provide descriptive statistics of these organizations and glean insights based on the longer-form descriptions of the organizations' focus and values, and their programs' models and structures.

However, it is important to note that all data featured in this report is *self-reported* from a grant application. Our research does not validate the applicants' entries beyond their responses; the authors have not independently verified if the information the applicants provided is accurate.

Methodology

Our analysis comprises two separate parts: quantitative and qualitative. Three researchers completed all data cleaning and coding with regular inter-rater reliability checks. In our quantitative analysis, we convert the PIE application data to *continuous* variables (which have an infinite number of possible values, like revenue or number of learners) and *categorical* variables (which have a discrete, countable set of possible outcomes, like gender or race). We then provide a variety of summary statistics for all the variables quantified in numbers (for

instance, all metrics around age and funding amounts). The summary statistics include means (averages) and medians. Applicants were not required to answer all the questions posed. Therefore, the data are incomplete in some instances. We report missing data in our descriptive tables (see Appendix for application questions).

We also attempt to quantify several relationships or associations between the different variables in the dataset. Between two sets of continuous variables, we used correlations to measure the strength of relationships. We used contingency tables with chi-squared tests to measure relationships' strength when analyzing relationships between two sets of categorical variables. We employed t-tests when exploring the relationship between binary categorical variables and continuous variables. Finally, we used multinomial logistic regression to quantify associations between variables with more than two categories and continuous variables.

The longer-form answers to the PIE application provided us the opportunity to analyze many organizations qualitatively. We used a mixture of inductive and deductive coding approaches for different sections of the qualitative data. For sections about program models, partnerships, and learning delivery, we used a deductive approach. We looked for specific categories of interest and hypotheses present in workforce development literature. We used an inductive and grounded theory approach to the application questions that pertained to a founder or organizational leader's relationship to the program. This was because there is very little literature informing that topic; we brought no preconceptions as to what the applicants' responses would yield.

As a result of our qualitative method, you may notice language such as "prioritize employer relationships" or "prioritize evidence" throughout this report. This is in an effort to be transparent about the limitations of self-reporting in our dataset. To include a given detail in their application, organizations presumably felt it important or distinctive enough to merit highlighting. If an organization did not mention program features such as employer collaborations, institutional relationships, research, etc., that does not mean that they do not do those things. It merely means that the organization thought it did not merit mention in their PIE application (thus, we say they do not "prioritize").

Structural characteristics

In this section, we summarize key structural characteristics of the 316 organizations in the PIE applicant pool. Across all applicants, we analyzed organizations' age, geographic focus, size, costs, staffing, growth, and leadership to help understand the sector at large.

Size and Reach

Most measures of organization size indicate a quite fragmented sector, with a few large organizations and many small organizations.* That pattern is repeated regardless of the measure we use for organization size, including number of learners, employees, or volunteers. Median measures of organization size show the average organization has higher numbers of volunteers than employees.

A similar pattern is found in the financial measures of education-and-employment organizations. A few well-funded organizations raise the average funds of PIE applicants. However, the median organization has yearly revenues and expenditures of a little over $2.5 million. Most of the organizations maintain balanced budgets; revenues match expenses. However, more than one quarter (81) of organizations had negative cash flow in 2019.

Financial measures also allow us to analyze the cost models of the applicants by constructing an expenditure per learner measure. We estimated cost per learner by dividing number of learners served by total expenditures for the year 2019. However, upon closer review, we identified a mismatch in a small portion of organizations in the dataset. These applicants self-reported total *organizational* expenditures, but reported learners served numbers for a particular small and targeted program housed within the larger organization. In these cases, applicants had unusually large cost per learner estimates. Upon closer review of these outlier organizations, we decided to exclude applicants with calculated measures greater than $50,000 from our cost per learner analysis. We believe that this cutoff, which excludes about 8% of the applicants, provides a more accurate picture of cost models across the sector. Figure 2b shows the distribution of cost per learner estimates in the sample.

*A few large postsecondary institutions applied for the PIE grant, and some of the skew in the size measures comes from including these large educational institutions in the analysis.

Figure 1a: Staffing Size

	MIN Q0	Q25	MEDIAN Q50	Q75	MAX Q100
Number of FTE	0	5	17	52	3,000
Number of Volunteers	0	6	40	150	13,000

Figure 1b: Organizational Reach

	N	MIN Q0	Q25	MEDIAN Q50	Q75	MAX Q100
Number of Learners	315	0	135	525	2,500	300,000
Number of Program Sites	316	0	1	3	9	611

It is still worth comparing this rough figures to reimbursement rates of public funding for workforce training. Under WIOA, workforce investment boards have the discretion to determine funding rates for training vouchers (ITAs). However, in many parts of the country, reimbursement is capped between at between $3,500 and $7,000 per participant, with the average ITAs as low as $1,000 per participant.[23] Some of the programs in the dataset significantly dwarf those expenses. One-quarter of the applicants had cost per learner estimates above $11,500. However, the median organization measured at $4,023 per learner. Lower-cost (and likely lower-touch) models were fairly prevalent, with 25 percent of observed organizations with expenditures under $1,203 per learner.

Organizational reach can also be measured by the number of program sites. That measure implies smaller geographic reach, with the median organization only serving learners at three sites. Several organizations operated in a large number of educational institutions (e.g., public high schools) which raised the average number of programs sites for all applicants. Along with the number of learners served, the number of program sites indicates that organizations are considerably smaller in size than their publicly funded peers in the higher education sectors (e.g., colleges and universities).

Figure 2a: Annual Revenue and Expenses

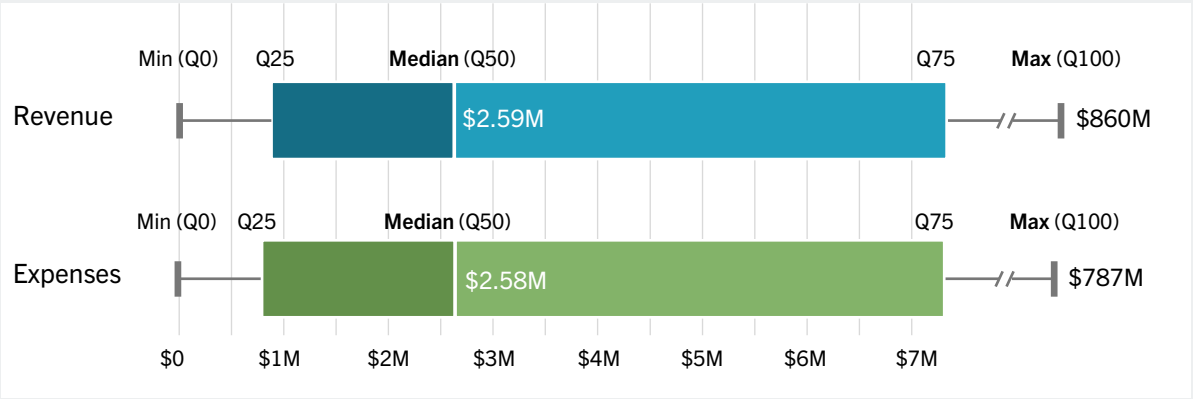
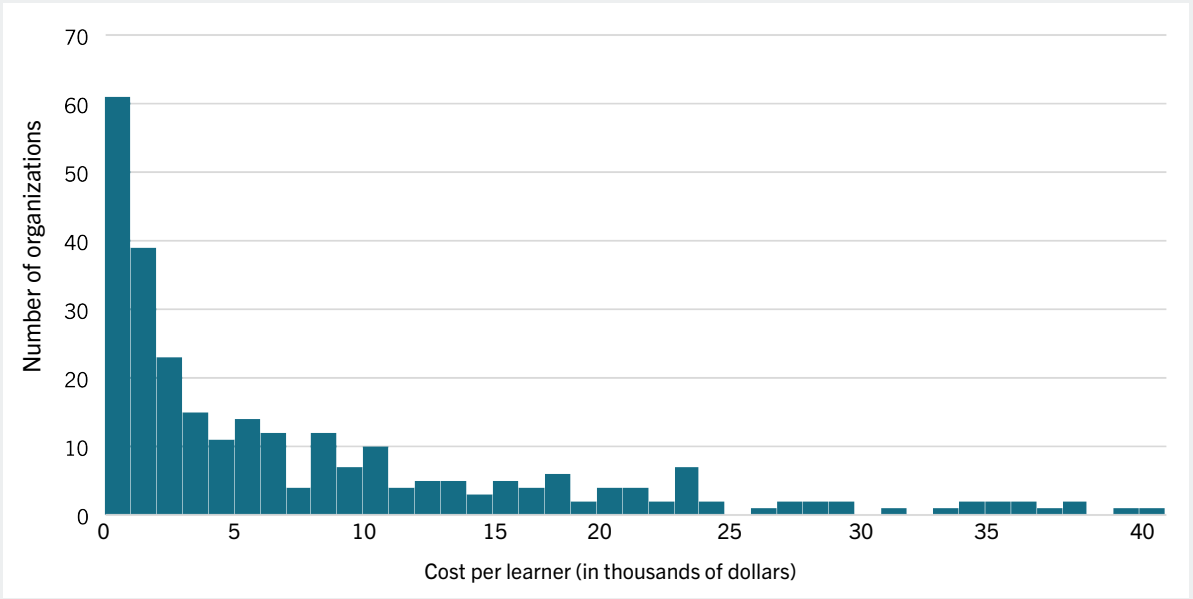


Figure 2b: Distribution of Cost Per Learner Estimates



Organization Age

Venture philanthropy's emphasis on entrepreneurship suggests that many organizations in the education-and-employment sector should be young and innovative. Organizations in the PIE dataset were relatively young, with a steady stream of new entrants (Figure 3a). While there is a wide age range, with the oldest organization founded in 1822 and the newest in 2019, the median year founded for applicants is 2009. Further, the rate of growth in this sector is accelerating. Figure 3b shows the number of organizations founded by year continuing to grow, with almost 25 percent of organizations founded in the last five years.

Figure 3a: Age of Organizations (Time of Application)

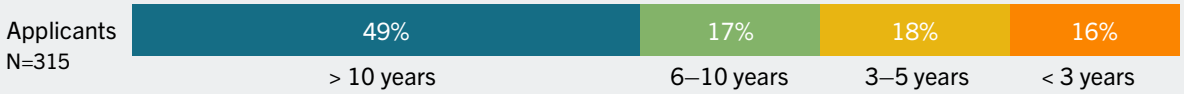
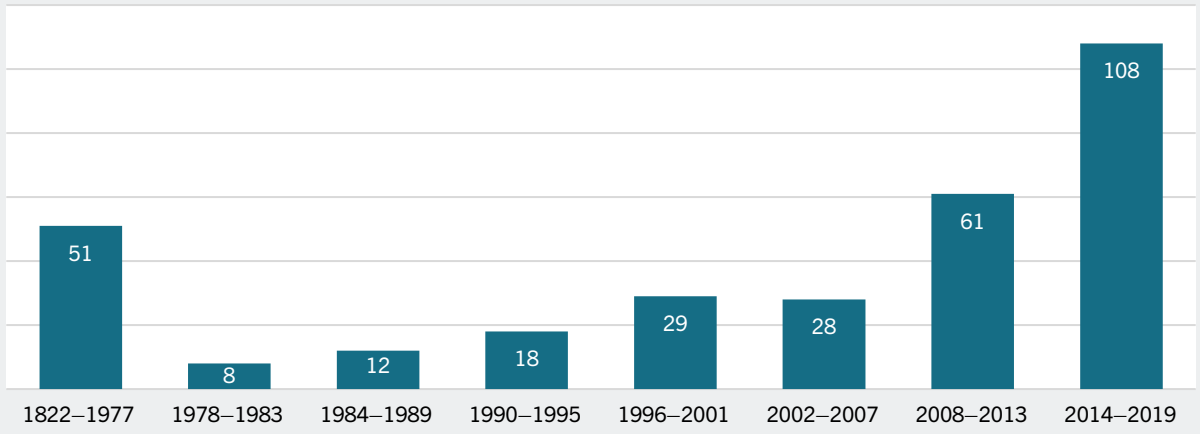


Figure 3b: Year Organization Established



Organization Growth

While most organizations in the sector are small, most are growing, and some are growing rapidly. Figure 4 shows descriptive statistics for the growth measures we employed: compound annual growth rate (CAGR) and new sites planned. Applicants reported revenue, expenditure, and learners served data for 2016 to 2019, allowing us to construct our CAGR measures across those three years. Applicants also reported if the organization was planning to open a program site in the next year (2019-20).

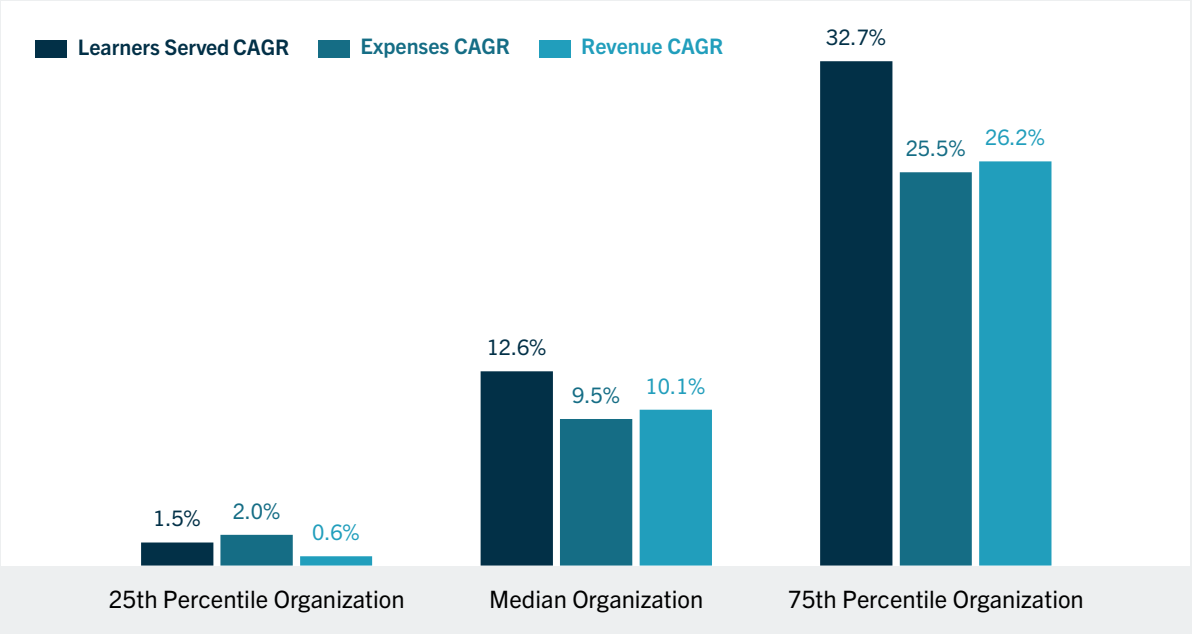
Most organizations are growing over the time period covered by the data. 83 percent of organizations had positive CAGR as defined by learners served. Financially, 82 percent of applicant organizations had positive expenditure CAGR, while 80 percent had positive revenue CAGR. These findings provide some evidence of economies of scale among the sectors, with growth in learners outpacing growth in expenses over the previous three years.

Forty-seven percent of organizations responded that they were planning to open at least one new site in the year 2020, likely reflecting growing demand from employers, individuals, and funders for new models and expansion into additional markets. However, it is important to note that these responses were recorded before the onset of the COVID-19 pandemic, which brought corresponding financial and operational challenges for many of these organizations. In the current data, we did not capture whether organizations could execute on these pre-pandemic expansion plans.

Figure 4a: Growth Metrics Summary Statistics

	N	MIN Q0	Q25	MEDIAN Q50	Q75	MAX Q100
Learners Served CAGR	279	-54.2%	1.5%	12.6%	32.7%	546.0%
Expenses CAGR	297	-43.3%	2.0%	9.5%	25.5%	2,314.6%
Revenue CAGR	295	-63.4%	0.6%	10.1%	26.2%	724.6%

Figure 4b: Organizational Growth (Compound Annual Growth Rate)



Geographic Focus

Most (82 percent) of the organizations that applied for the PIE grants, regardless of the population they served, were headquartered in urban centers.* Only six were headquartered in small towns and four were headquartered in rural locations, together representing under four percent of the applications received. Unfortunately, we did not have any standardized information on whether those organizations served rural, suburban, or rural populations.** Anecdotal conversations with PIE stakeholders indicate that a slightly larger share of applicants did have operations in rural regions that the headquarters data does not capture. However, the data indicates that education-and-employment organizations are primarily concentrated in urban areas.

* We used self-reported headquarters locations and the Census Bureau's designations to determine whether an organization was headquartered in a metropolitan, suburban, town, or rural area.

**The New Profit survey asked for the number and location of program sites. However, organizations responded to this question in such varying ways that made it difficult to come to any conclusions on the geographic location of program sites.

Funding Sources

The PIE application asks organizations about their funding sources, including the percent of their revenue from philanthropic sources and the organization's largest two philanthropic funders. Our findings resonate with the common assumption that education-and- employment organizations are highly reliant on philanthropy. The median organization in the dataset reported that nearly 60 percent of their expected revenue in 2019 would come from philanthropy. Applicants also report the percentage of total revenue from their two large funders. On average, 28 percent of revenue comes from an organization's top two funders, with a median of 20 percent.

We were also able to identify the type of philanthropic funding sources most commonly providing the financial resources. Figure 6b shows that large private foundations and corporate foundations dominate funding for the sector. Figure 6c shows the funders most commonly cited as top two funders of PIE applicants. Notably, a very small share of applicants (5 percent) cite public funding as one of their two most significant sources. It is worth noting that the largest single funder of workforce training, the federal Workforce Innovation and Opportunity Act (WIOA), is largely omitted from the sample. When asked to report "philanthropic" support, PIE applicant organizations tended to exclude WIOA's Individual Training Account (ITA) vouchers that support eligible program participants.

Figure 5: Headquarters Locations of Education-and-Employment Organizations

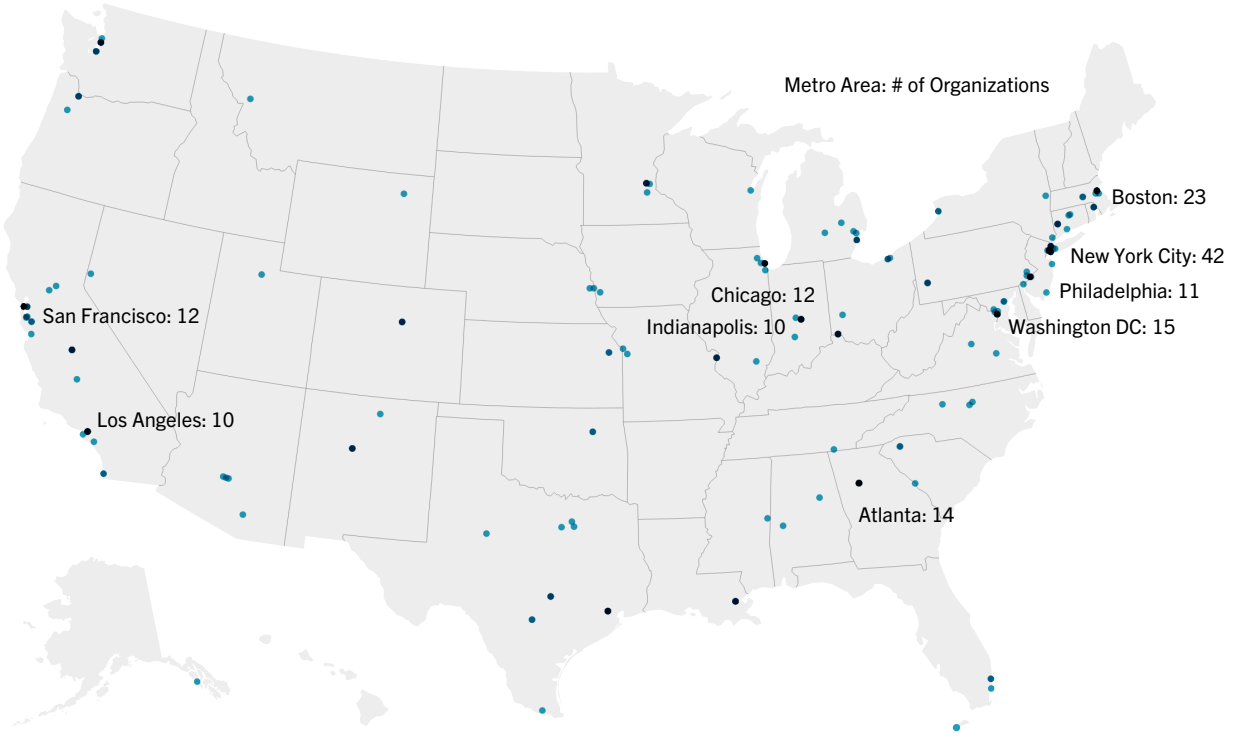


Figure 6a: Philanthropic Revenue

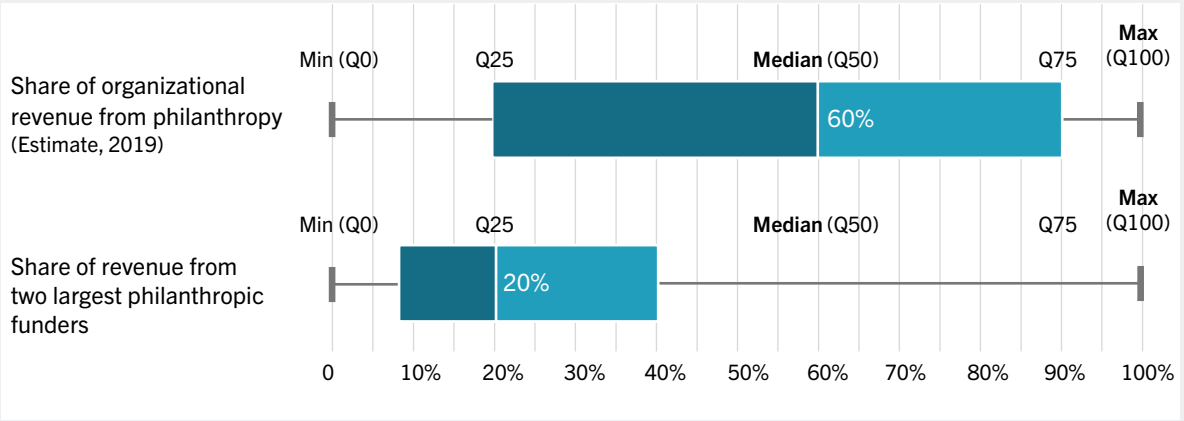


Figure 6b: Types of Philanthropic Funders (Two Largest)

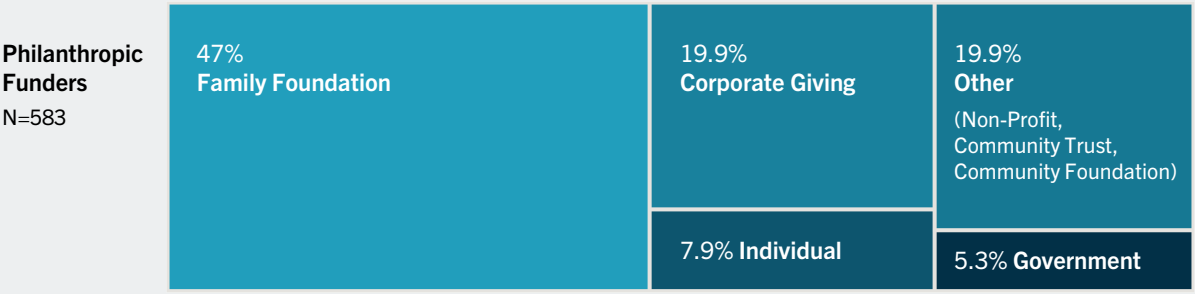


Figure 6c: Most Common Large Funders

Largest Funder	Rank
Bill & Melinda Gates Foundation	1 (tie)
James Irvine Foundation	1 (tie)
Michael & Susan Dell Foundation	1 (tie)
Robin Hood Foundation	2
Ballmer Group	3 (tie)
ECMC	3 (tie)
Lilly Endowment Inc	3 (tie)
Wells Fargo Foundation	3 (tie)
Bloomberg Philanthropies	4 (tie)
New York Community Trust	4 (tie)

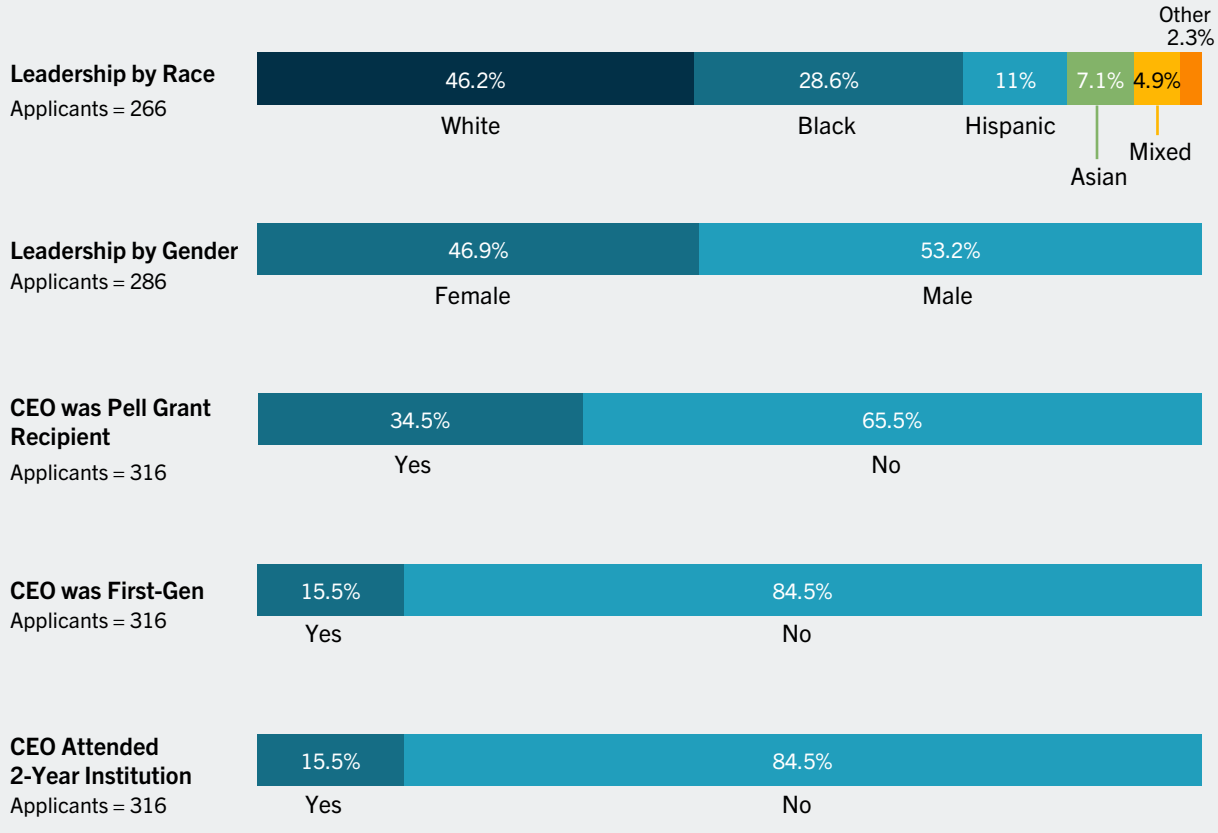
Second Largest Funder	Rank
Walton Family Foundation	1
JPMorgan Chase	2
Wells Fargo Foundation	3
A James & Alice B Clark Foundation	4 (tie)
Ballmer Group	4 (tie)
Charles & Lynn Schusterman Family Foundation	4 (tie)
Heckscher Foundation for Children	4 (tie)
James Irvine Foundation	4 (tie)
Lumina Foundation	4 (tie)
Pinkerton Foundation	4 (tie)

Leadership in the Sector

New Profit places a priority on funding what it calls "proximate entrepreneurs." Those are leaders whose personal experience enable them to understand the range of challenges faced by people seeking opportunity and to develop programs that work effectively for the population they aim to serve. In the PIE application, New Profit collected information about the racial and socioeconomic demographics of the applicants' founders, executive directors, and CEOs, as well as their personal stories of why they had entered the field. In practice, while the information collected often adhered to the question, some grant writers instead shared their own stories rather than those of their organizations' founders, executive directors, and CEOs. We report the data as provided by applicants.

Despite this limitation, the data allowed us to glean insights about the makeup of leadership in the sector more broadly. Findings on leadership are found in Figure 7. We found that the applicants to PIE trended more diverse than the US Fortune 500 - of the respondents that chose to answer the demographic questions in the application, 46 percent were White, 29 percent were Black, and 11 percent were Hispanic/Latinx. However, applicants varied in their proximity to the program audience. Less than half of the applicants self-identified in their personal stories as members or former members of the audience/population that their organization served. Forty-two percent identified as members or former members themselves, and five percent identified as family members of the target population. Thirty-four percent of applicants indicate they were first-generation college students. Thirty-four percent of applicants indicate they were Pell Grant recipients, and 16 percent indicate they attended community college for at least one year. Looking specifically at the leadership of the programs that prioritized employers, those programs were much more likely not to share sufficient data in their statements to explore the "proximity" measure.

Figure 7: Background of Sector Leadership



Program Models and Delivery Approaches

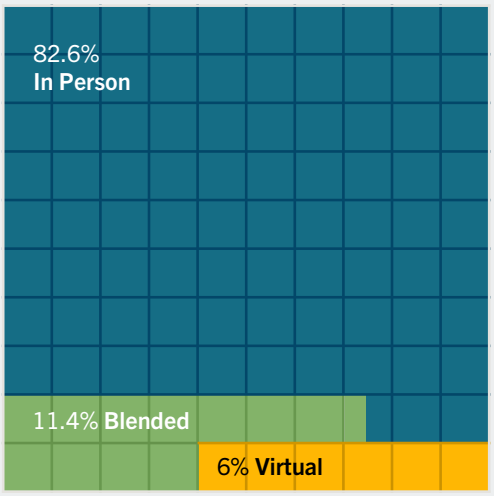
The PIE application asked organizations to describe their program model in 200 words or less. Using text-based analysis, we qualitatively coded applicant responses to identify a common set of delivery approaches. This has also allowed us to describe quantitatively which program models are most commonly seen in the education-and-employment sector. Applicants' programs were multifaceted; most models incorporated more than one delivery method.

At the time of application for PIE funding in 2019, organizations were still vastly skewed towards in-person models for delivering content. Only six percent of applicants featured entirely virtual models, and an additional 11 percent of applicants mentioned a blended approach. Of course, many of these organizations have had to shift this approach in recent months in the face of the global pandemic, but the extent to which in person was the default was striking. There was a strong negative association between the prioritization of employer involvement in a program and whether it has a virtual model (so, the programs that directly involved employers were less likely to be virtual). That was also a statistically significant relationship. An important caveat to these findings is that they were all reported before the COVID-19 pandemic. We would expect many of these organizations transitioned to virtual delivery, at least for the duration of the pandemic. However, organizations that rely on an in-person program delivery were likely to have been unprepared to transition to an online model quickly.

We were also able to glean some information about the age distribution of learners from the applications. New Profit asked applicants what percentage of their learners were between the ages of 16-30, choosing to focus the traditional transition points from education to employment associated with graduation from secondary or postsecondary institutions. Nearly 58 percent of organizations responded that 80-100 percent of their learners were in that age group. Less than one quarter of organizations primarily served individuals outside that age cohort. That suggests that most education-and-employment organizations focus on serving youth at the exclusion of older workers who are long-term unemployed or need to reskill. However, since the PIE program stipulated that applicants should be serving young people, those serving a more demographically diverse set of learners may have been discouraged from applying.

We are also able to identify more granular elements of the applicants' programs. Using the applicants' long-form responses, we initially gathered a detailed description of each applicant's delivery approach. We then consolidated those approaches into 12 common delivery approaches. Most organizations used a variety of delivery approaches in implementing their model. Figure 8 describes each of those approaches in more detail.

Figure 8: Delivery Form

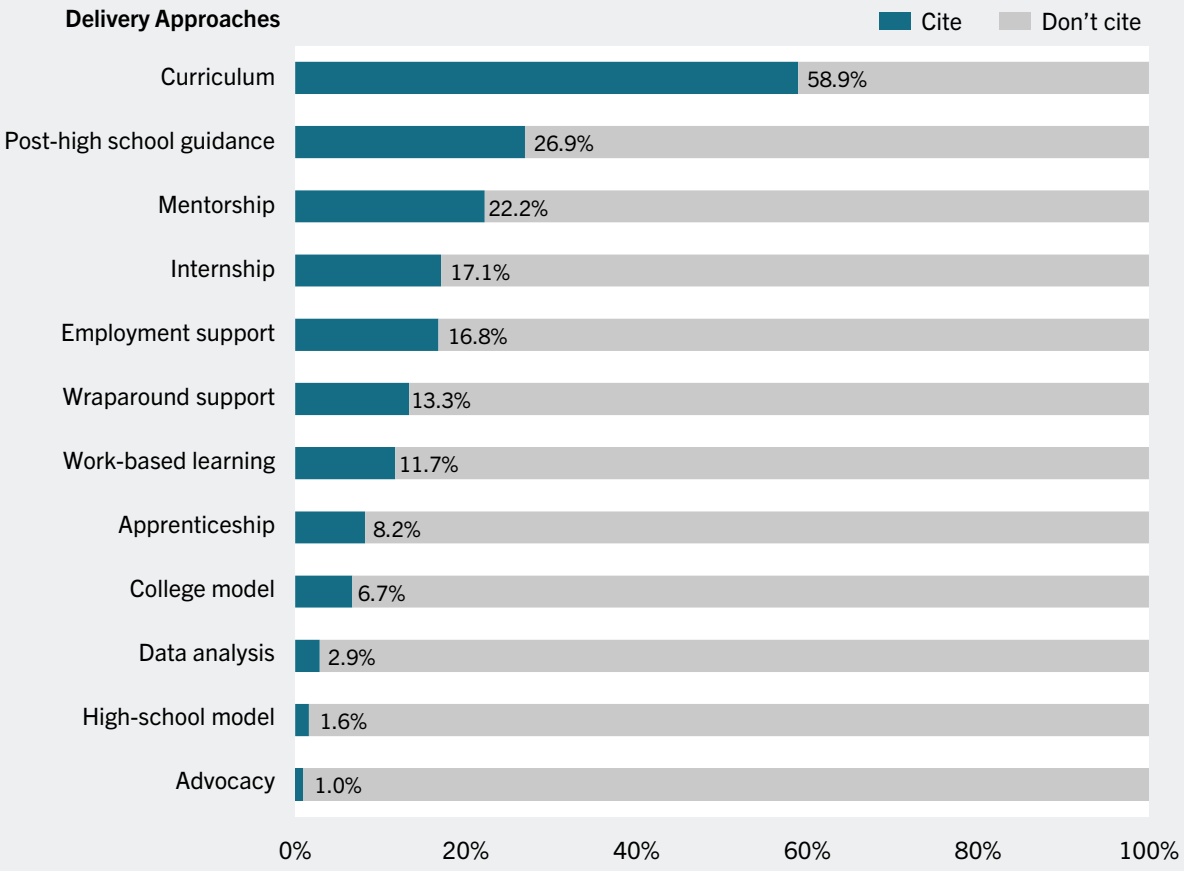


There is a wide variety of delivery approaches education-and-employment organizations have chosen to employ. Unsurprisingly, the most common program delivery approach is a curriculum. Nearly 59 percent of applicant organizations use some form of a curriculum. The next most common delivery approach was the provision of some form of post-high school guidance. Providing either educational or employment mentorship for participants was also very common. Apprenticeships, internships, and work-based learning opportunities were less common delivery approaches. With a focus on employment and career success in the competition, we would have expected a higher number of organizations to provide such work-based learning activities.

Interestingly, only around 13 percent of organizations highlighted offering some form of wraparound support. We defined wraparound support as providing direct support for any non-employment related outcome (for instance, a subsidy for participation or housing, transportation, or childcare).

Individuals struggling to obtain education or stable employment often have various challenges in their lives beyond their educational program. Prior research has found that wraparound supports have a positive impact by providing individuals with the stability needed to achieve educational or employment outcomes.[24] Common supports include help with transportation,

Figure 9: Common Delivery Approaches Among Education-and-Employment Organizations



Definitions

Curriculum
Program offers a set curriculum, which may or may not be nationally recognized.

Post-high school guidance
Program provides information or counseling on college or career pathways to recent high school graduates.

Mentorship
Program provides coaching or guidance in either employment or educational pursuits.

Internship
Program provides a short-term work opportunity with an employer.

Employment support
Program helps individuals secure a new job or succeed in their current job.

Wraparound support
Program aids participants by providing supports that allow learning to occur. Examples include monetary support (e.g., stipends), textbook allowances, and housing and transportation assistance.

Work-based learning
Program provides educational opportunities to individuals via work-applicable projects.

Apprenticeship
Program utilizes apprenticeship models or provides opportunities to work under a professional's tutelage.

College model
Non-traditional degree-granting institutions. Typically, online associate or bachelor's degree-granting institutions explicitly focused on career opportunities for students.

Data analysis
Program focuses primarily on providing information to other entities.

High-school model
Non-traditional diploma-granting institutions explicitly focused on the future of work.

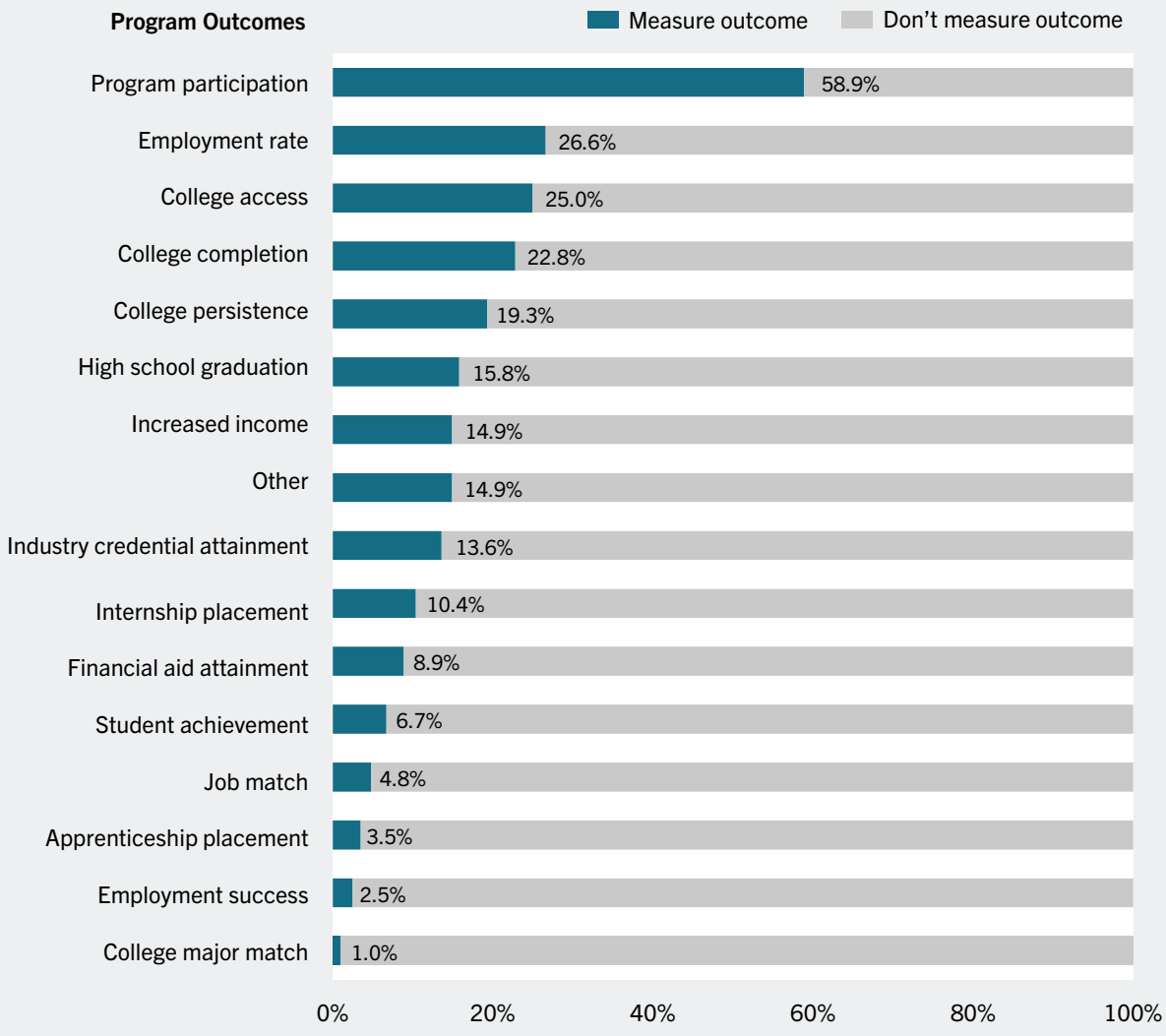
Advocacy
Program focuses on advocating for specific policies or groups of individuals.

housing, or childcare. Providing those services comes with a cost, but interestingly, we found no statistically significant relationship between organizations that provided wraparound supports and estimates of cost per learner. The results suggest that wraparound support models may not be as expensive as one might have expected. Instead, the finding suggests that organizations that provide wraparound support make conscious tradeoffs, limiting other services they might provide in favor of investing in participant well-being and success.

Program Outcomes

Outcomes measurement helps us to understand how organizations define "success." Using the program descriptions provided by applicant organizations, we identified the prevalence of different program outcomes measured by education-and-employment organizations. We continue to use the language of "indication" or "prioritization" to acknowledge that we can only observe the outcomes stated in applications; applicants may also measure outcomes not stated in their applications. We then consolidated these into the following categories found in Figure 10 below.

Figure 10: Most Commonly Identified Outcomes of Interest



Note: This figure only includes program outcomes that organizations specifically mentioned in their PIE application. If an organization did not mention a particular outcome, it does not mean they necessarily do not measure it, but it means they did not think it sufficiently important to mention in their application when asked about results to date and output and/or outcomes data.

Program Outcomes and Definitions

Program participation
Organization measures the number of participants in the program and/or the percentage of participants that completed the program.

Employment rate
Organization indicates that the employment rate of participants is an outcome of interest.

College access
Organization indicates that applying to, being admitted to, or enrolling in college is an outcome of interest.

College completion
Organization indicates that completion of a postsecondary degree, including associate or bachelor's degrees, is an outcome of interest.

College persistence
Organization indicates that helping individuals remain enrolled in college or accumulate credits is an outcome of interest.

High school graduation
Organization indicates that high school graduation is an outcome of interest.

Increased income
Organization indicates that earnings gains for participants is an outcome of interest.

Other
Organization indicates that another outcome is of interest, including securing housing, self-efficacy, or something else.

Industry credential attainment
Organization indicates that industry credential attainment is an outcome of interest.

Internship placement
Organization indicates obtaining an internship is an outcome of interest.

Financial aid attainment
Organization indicates that receiving financial aid for college is an outcome of interest.

Student achievement
Organization indicates that increased student achievement (e.g. GPA or test score) is an outcome of interest.

Job match
Organization indicates that matching participants to jobs in a specific field is an outcome of interest.

Apprenticeship placement
Organization indicates that obtaining an apprenticeship is an outcome of interest.

Employment success
Organization indicates that monitoring participants' long-run success in their careers (e.g. advancement, retention) is an outcome of interest.

College major match
Organization indicates that matching a participant to a college major that meets their future career needs an outcome of interest.

The most prevalent outcome measured was program participation. Measuring the number or share of participants that completed their programs, while important, indicates that many organizations presume that participation will yield lasting benefits in employment and income. Tracking participants' success after completing their programs was far less common. It is also surprising that, despite the espoused purpose for participants to learn something of specific relevance to employment (job skills, tech skills, career skills, etc.), not a single organization reported measuring learning outcomes. Completion doesn't necessarily equate to learning that will result in a successful transition into the skilled workforce.

Other outcomes commonly measured by organizations focused on increasing the educational attainment of their participants, specifically through college matriculation or completion. The other common outcome of interest is employment-based, such as increasing the employment rate of program participants or gaining access to internships.

Interestingly, the most routinely measured employment outcome is whether a participant was employed upon completion of the program (26.6%). This metric was reported by almost double the proportion of organizations that measured income gains (14.9%). Only a tiny share (2.5%) of applicants mentioned tracking longer-run employment success like retention or advancement. Of course, it is tactically more difficult and resource-intensive for organizations to measure salary, wages, promotion, and advancement of their participants over time. Whether a participant secures a job at the end of the program is relatively easier to track. However, if economic mobility of participants is the north star, longer-run income and wage data are crucial to understanding success.

Employer Involvement and Career or College Focus

One of the critical elements of an education-and-employment organization's value proposition is its purported ability to deliver educational opportunities while also providing employer connections. To assess if this was happening in our sample, we looked to see if the organizations that provided employment support to participants involved employers in their program. We also analyzed if education-focused organizations—specifically those focused on achieving an outcome related to college matriculation or graduation—gathered data on employment outcomes for their participants.

Despite the focus on the connection between education and career, we found a strong divide between the organizations focused on labor market outcomes and those focused on college access and attainment. Across the 316 organizations, there was a strong negative relationship between the applicants who cited educational institutions' involvement in their delivery model and those that directly involved employers. Of the 53 organizations that provided employment support, only 22 involved employers in their program. For organizations that focused on college-related outcomes, only 33 percent also prioritized employment outcomes. There was also a strong negative correlation between the organizations that worked with educational institutions and prioritized job-specific skills. Similarly, the organizations focused on college were less likely to focus on specific job roles.

Although applications specifically asked for innovators who connect young adults to the "work experience needed to access upwardly mobile careers" and "workforce-connected postsecondary programs," less than half of the applicants mentioned that they were working directly with employers. Only about 50 percent of the organizations that prioritized job-specific skills also indicated that employer engagement was integral to their programs. This was a statistically significant relationship. There was also a statistically significant, positive relationship between the programs that involved employers and growth in learners (learner CAGR). Applicants that involved employers tended to show higher growth rates in learners served. The programs that prioritized employer involvement were also more likely to measure participants' employment rate, employment success, and income as outcomes measures.

Some of these findings are troubling. They suggest that many organizations do not work closely with employers, even when their primary program outcome is employment-related. It also suggests that educationally focused organizations do not prioritize employment success, even as students are showing ever-increasing interest in programs that offer the promise of providing attractive employment opportunities. While this sector seeks to help participants make smoother transitions between learning and career, the majority of these organizations prioritize only one side of the equation—employment or education. Few organizations attempt to hold themselves accountable to both. Unfortunately, integrated approaches and more seamless pathways are still not the norm.

Taxonomy of the education-and-employment sector

Archetypes

As a final stage of our analysis, we used the quantitative data and our qualitative coding to identify a set of common models pervasive in the education-and-employment sector. The following four archetypes represent distinctive subsets of the organizations in our dataset. They are mutually exclusive and collectively exhaustive, with the exception of five percent of organizations that applied for the initiative without strong connection to the stated mission. The archetypes embody the most important attributes of the relevant organizations. They represent distinct theories of change, and each has its own limitations.

Tech Skills Enthusiasts

Median organization age: 8 years

Median reach: 230 learners

Median revenue: $2.8 million

Leadership: 32% Pell Grant Recipient; 38% self-identified as people of color; 29% self-identified as current or former member of population they serve; 24% self-identified that they do the work due to personal experience

Over the last few decades, the Digital Revolution has led to job growth and rising salaries for careers in coding, data science, cybersecurity, and web design. However, many technology employers have declared a skills mismatch, where the number of job openings far exceeds the number of applicants with the necessary technical skills. 11 percent of the organizations in our dataset focus on closing this tech skills gap.

Though they prioritize job-specific skills, many Tech Skills Enthusiasts work on a stand-alone basis. Only about half of these organizations cite relationships with specific employers or employer-designed training credentials. Because most organizations measure success by program completion, it remains unclear if participants secure jobs in technology or other industries upon completion. Only six percent of Tech Skills Enthusiasts prioritize evidence. Similarly, very few prioritize involvement with educational institutions.

While technological skills can often be learned quickly, the necessary skillset continually changes as technology evolves. Tech Skills Enthusiasts were less likely than other organizations to prioritize foundational career skills. Professional or soft skills, such as adaptability and resilience, can help workers make successful transitions in the face of frequent changes in hard skill requirements.

Job Skill Evangelists

Median organization age: 12.5 years

Median reach: 275 learners

Median revenue: $3.1 million

Leadership: 24% Pell Grant Recipient; 49% self-identified as people of color; 34% self-identified as current or former member of population they serve; 35% self-identified that they do the work due to personal experience

Jobs Skills Evangelists prioritize teaching participants job-specific occupational skills. These organizations, which comprise 23 percent of the dataset, tend to emphasize learning for particular job roles over the foundational skills that may translate across multiple career tracks.

Like Tech Skills Enthusiasts, Jobs Skills Evangelists focus on providing tangible job or hard skills to participants. However, the lack of emphasis placed on social or soft skills may leave their graduates at risk of being displaced in the face of technological change. The Job Skills Evangelists and Tech Skill Enthusiasts archetypes both speak to a distinct dichotomy around how people learn the skills necessary to thrive in the future of work. They place emphasis on the skills required to pursue particular occupational categories, prioritizing development of skills specific to those contexts over investment in general education or soft skills.

Structurally, about two-thirds of Job Skills Evangelists are curriculum-based. About 14 percent offer structured mentorship opportunities for participants. Pairings are predominantly made based on mentors' availability, rather than on the participants' interests or identities.

Job Skills Evangelists display some distinctive characteristics. Over 40 percent of Job Skills Evangelists work exclusively with low-income youth and youth of color. Ninety percent of them offer entirely in-person programs. Furthermore, the 57 percent of Jobs Skills Evangelists

who prioritize employer involvement are unlikely to involve virtual content; only about four percent offer content virtually. There was a statistically significant negative association between Job Skill Evangelists and partnerships with educational institutions; organizations classified as Job Skill Evangelists were less likely to work with colleges or high schools.

Job Skill Evangelist leaders and founders had some common theories of change. Of all archetypes, the applicants in the Job Skills Evangelists category were most likely to attribute their work to their personal beliefs, values, or social views.

College Degree Advocates

Median organization age: 12 years

Median reach: 1025 learners

Median revenue: $2.7 million

Leadership: 41% Pell Grant Recipient; 45% self-identified as people of color; 36% self-identified as current or former member of population they serve; 25% self-identified that they do the work due to personal experience

The third type of organization emphasized that participants should prepare for the future of work by attending college. This archetype was often (though not always) at odds with Job Skill Evangelists; very few organizations prioritized both career skills and general education skills. College Degree Advocates made up 52 percent of our dataset.

In their applications, College Degree Advocates expressed that participants could best prepare for the future of work by earning a college degree. Therefore, the majority of these organizations focus on college admissions and completion as their primary outcomes of measure. Rather than focus on specific career pathways, College Degree Advocates seek to support participants in their pursuit of their unique individual interests. These organizations were also more likely than other organizations in our dataset to prioritize teaching foundational soft skills. While some College Degree Advocates also emphasize occupational skills, most in the sample do not. Interestingly, the organizations that prioritized working with colleges were more likely to have leaders proximate to the population they served.

The efficacy of the College Degree Advocates model hinges on the ability of participants to overcome the barriers that many students confront in completing a four-year degree. Though many College Degree Advocates focus on college completion in addition to access, there is wide variation among College Degree Advocates in how much career guidance and support is provided once a student is enrolled in college. In addition, most of the College Degree Advocates do not prioritize specific programs or tracks, even though the college earnings premium varies substantially based on degree, field of study, and, to a lesser degree, college selectivity.[25]

Work Futurists

Median organization age: 20 years

Median reach: 215 learners

Median revenue: $2.5 million

Leadership: 30% Pell Grant Recipient; 41% self-identified as people of color; 30% self-identified as current or former member of population they serve; 22% self-identified that they do the work due to personal experience

Work Futurists organizations make up about nine percent of organizations in the dataset. Unlike any of the other three archetypes, they prioritize both job-specific and foundational career (soft) skills. In many cases, they rely on both employer and educational partnerships.

Although significantly smaller in number compared to the other three archetypes, Work Futurists are well-poised to expand in the coming years given their structural characteristics. As jobs change quickly, employers are seeking new combinations of skills with a particular emphasis on social skills. Developing skills that are transferable across different contexts will be essential to any worker's prospects and, therefore, essential for improving levels of economic inclusion.

Instead of embracing models based on the college or career dichotomy, Work Futurists draw from core elements of both models. Their approach addresses several of the limitations that appear to inhibit the impact of the other archetypes. In addition to prioritizing job-specific skills and forging employer partnerships, these organizations also make efforts to impart transferable soft skills.

Though there are many benefits to this archetype, the economics of such programs are challenging, as they generally require substantial investment in one-on-one or small group activities and interventions. Moreover, few of these organizations cited evidence of efficacy in their applications. The overwhelming majority measured program completion as their primary outcome.

Leaders of Work Futurists organizations display some differences from the rest of the dataset. They were less likely than the rest of the applicants to be proximate to the population served. In addition, Work Futurists organizations are most likely among the archetypes to be inspired by leaders' previous work experiences. Applicants indicating their professional experience inspired them to found or lead an organization were most likely to prioritize transferable soft skills.

Frontier Trends in the Education-and-Employment Sector

In our archetype analysis of the applications, we uncovered several trends that provide optimism and promise for where the field could go in the future. The three trends are represented in organizations belonging to each of the different archetype categories; they also span applicants of all ages, sizes, and revenue levels. However, these trends are not mutually exclusive or collectively exhaustive. It is important to note that fewer than half of the organizations in our dataset aligned with even one of these trends.

Evidence-Driven Iteration

Median organization age: 13.5 years

Median reach: 1951 learners

Median revenue: $3.7 million

Leadership: 36% Pell Grant Recipient; 36% self-identified as people of color; 43% self-identified as current or former member of population they serve; 32% self-identified that they do the work due to personal experience

While some programs are resistant to change and maintain models that rarely deviate over time, other organizations embrace a culture where evidence drives program design and delivery. Nine percent of the education-and-employment organizations in the dataset embodied this trend. These organizations were able to cite an existing study, quasi-study, or external evaluation of the program model in their application. Programs classified in this category view measurement, research, and evidence as an organizational priority. They evaluate beyond simple metrics such as completion or initial job placement and conduct qualitative, quality assurance, and studies. They then use this data to iterate their approaches based on a steady cycle of data, feedback, and findings. Inherent in this type of approach is an acceptance of the value of continuous learning and comfort with change in organizational models. Organizations engaged in this type of evidence-driven iteration regularly change their programs based on results; they employ "test and learn" models as an integral part of their management systems.

However, while a relatively small share of applicants currently prioritizes evidence-driven iteration, others were moving in this direction. Another 22 percent of applicants were capturing data and extending effort to measure results, but lacked the evaluation maturity to determine causal relationships. In addition, appetite to improve data and evidence exists in the field — an additional 33 percent of applicants specifically mentioned the ability to enhance their data collection and evaluation as a motivation for seeking funds. Anecdotally, many organizations note that while they would like to collect more evidence, it is expensive to develop the capacity internally. Interestingly, though, we found no positive correlation in the data between the organizations that prioritized evidence and cost to serve per learner. However, organizations that embraced evaluation and iteration encountered some difficulty scaling. Prioritizing evidence is associated with lower learner growth.

Holistic Approaches

Median organization age: 20 years

Median reach: 336 learners

Median revenue: $3.3 million

Leadership: 38% Pell Grant Recipient; 45% self-identified as people of color; 38% self-identified as current or former member of population they serve; 43% self-identified that they do the work due to personal experience

"Supporting the whole person" is a phrase familiar to the education-and-employment sector. While it is true that many in the sector practice this implicitly, we found in our dataset that only 13 percent of organizations explicitly prioritize it. Organizations that take Holistic Approaches accept the importance of ensuring that learners are fed, safe, housed, and financially secure in order to maximize the prospect of learning occurring. They reflect this prioritization through financial support of wraparound services in their program models, as described in section III.

Holistic Approaches are common in organizations that prioritize educational institution relationships and foundational skills. However, they are less commonly embraced by those organizations that prioritize employer relationships or job-specific skills. One limitation of this approach is its reliance on in–person interventions. Only seven percent offer blended learning solutions, and none delivered fully virtual content.

Situated Learning

Median organization age: 13 years

Median reach: 310 learners

Median revenue: $3.6 million

Leadership: 32% Pell Grant Recipient; 48% self-identified as people of color; 36% self-identified as current or former member of population they serve; 33% self-identified that they do the work due to personal experience.

While many programs in the dataset relied on traditional classroom-based learning, some more closely mimicked the realities of the workplace. Situated Learning refers to training and learning acquired in the proximity, environment, and context of where the knowledge is applied. Organizations that prioritize situated learning have designed their programs around apprenticeships, internships, and work-based learning. These programs comprise 25 percent of the education-and-employment dataset.

We highlight this trend given its relevance for the future of work. Prior research has found that learning occurring in environments that simulate real work are more durable over time.[26] Situated learning approaches are particularly well-suited to developing soft skills critical for success on a job.

In the dataset, internships are the most common model of situated learning provided by applicants, with over two times the prevalence of apprenticeships. In addition, organizations that practice situated learning were significantly more likely than their peer group to prioritize evidence.

Conclusion

One of the most significant challenges for employment-and-education organizations has been achieving transformation at scale. Impact at scale is an explicit mission of New Profit and other venture philanthropy organizations. Indeed, New Profit describes its founding as being animated by the question, "Why don't the best social innovations scale like commercial innovations do?"[27] Unlike traditional philanthropic models that provide grants for inputs and outputs, New Profit provides unrestricted capital and strategic advice to promising entrepreneurial models, paralleling principles from the venture capital sector. Their premise is that such a model of support will enable important innovations to spread quickly beyond their initial setting.

Social science research has often overlooked scale challenges. In a 2017 working paper, Jonathan Davis and co-authors observe that much of the academic study of social programs relies on the assumption that successful results in randomized controlled trials (RCTs) of interventions at a modest scale (with samples typically in the hundreds or never more than a few thousand) will translate to a larger scale.[28]

However, our work casts serious challenges and questions to the assumptions inherent in that theory of change. As sociologist Peter Rossi has noted, "There is a big difference between running a program on a small scale with highly skilled and very devoted personnel and running a program with lesser skilled and less devoted personnel."[29] Scaling impact eventually requires expanding an organization's operational footprint. Our research shows that this has been difficult to achieve in the education-and-employment field, as demonstrated by the high level of fragmentation in the sample. Most organizations served a few hundred learners at a few program sites. In their written applications, only 29 percent of organizations indicated achieving greater scale as a priority. While organizations did tend to become more successful in raising revenue as they aged, the association was weak.

However, our research also strongly hints at one reason why achieving scale remains difficult. Our analysis of outcomes measurement reveals that organizations in this sector are actually defining success quite differently. Theories of change run across a long spectrum between "a job," "a good job," "a degree" to "completing this program." The wide variety of outcomes tracked indicates that there are still no standardized metrics for quality or impact. This plethora of measures makes it difficult to know which models are most successful in driving better economic and learning outcomes for their participants and to compare the performance of organizations employing different models of intervention.

Similarly, given the fragmentation of success metrics, we aren't able to detect if models that do not consistently produce positive outcomes are gradually are failing to attract resources, like they would in a parallel venture capital model, or, if they persist indefinitely despite their lackluster results. Since only nine percent of organizations were able to cite a causal study or independent evaluation, it is apparent the field has not been able to arrive at a shared basis for evaluating results. That constitutes a major impediment to scaling. In a sector where the volume of new entrants appears to consistently outweigh the number of corresponding "exits," it becomes difficult for consumers, employers, individual learners, and funders to distinguish quality programs from merely well-meaning ones. Finding mechanisms for identifying and disseminating objective insights as to what types of interventions generate lasting results is critical if the education-and-employment sector is to fulfill its mission.

Finally, our work has highlighted a number of key questions for the path forward for the sector in a post-COVID world. This field, understandably, remains understudied. Nonetheless, we posit that there is potential for important learning that will yield corresponding societal impacts. We conclude by highlighting a few priority areas for future research.

Representation and proximity in leadership

The field at present is significantly more racially and socioeconomically diverse in its leadership than the business sector, philanthropy, and higher education. Will education-and-employment organizations continue to shift to look more like the population they serve? How do the life experiences of leaders affect the choices they make for program models, delivery, and financing?

Delivery form and online learning

Pre-COVID, the field was almost entirely reliant on in-person delivery models; only six percent of organizations employed online pedagogy entirely. Yet, during the pandemic, Americans express a growing comfort with online programs.[30] Which elements of remote learning will

persist after COVID? In blended models, which elements are most important for in-person learning? What can be easily moved to online formats and how would that affect the cost to deliver content?

Geographic Diversity

The field remains heavily based in urban areas, with especially strong representation on the coasts. Will geographic diversity increase as remote models become more commonplace in a post-COVID universe? How does the sector ensure that innovation reaches regions in America that are increasingly vulnerable to economic dislocation as the future of work unfolds?

The Reskilling Agenda

As we noted earlier, the PIE competition specifically sought applicants that serve 15-30-year olds. However, Council of Economic Advisors research finds that over 90 percent of public expenditures for education and skills training happens before the age of 30.[31] As we enter an economy in which people work longer and skills become more vulnerable to obsolescence, will these organizations expand to serve older adults dislocated by macroeconomic changes? Which elements of success will hold true across these different populations?

Racial Equity

In recent polling, Black and Hispanic Americans were most likely to indicate plans to enroll in online programs and employer and work-based training programs in the next five years.[32] In light of the murder of George Floyd and a national awakening for racial justice, how will the education-and-employment sector respond as institutions that train a large share of America's black and brown population? How will the leaders of the sector ensure that the system truly delivers on upward mobility, rather than systematically reinforcing the educational and wealth disparities it purports to address?

Foundational and job-specific skills

Research has shown that future jobs, especially those with good wages, will require a combination of foundational, transferable soft skils and job-specific skills. However, organizations appear to struggle with balancing short-run job placement objectives with the longer-run career trajectories. What is the right share of time and attention for organizations to place on these two types of skills? How can the field increase the presence of opportunities for situated learning (currently present in approximately one-quarter of organizations in our dataset) which can help develop both sets of skills?

Employer Relationships

The majority of spending on training for adults actually takes place in the private sector.[33] Yet, only 35 percent of organizations in our dataset prioritize employer relationships. While we see cause for optimism in our finding that the organizations that worked with employers were growing faster than the field as a whole, learners would benefit from more exposure and hiring opportunities with employers. Future research could help us understand the impact of market fragmentation on employer relationships. What could scale models look like that create central points for employers to work with multiple (small) organizations? How can we incentivize collaboration across programs that work with employers, rather than competition for hiring and work-based learning opportunities? What sort of incentives would motivate employers of varying sizes and in different industries to develop talent management pipelines based on compensated, work-based learning programs?

A research agenda that addresses these questions can help forge a path to more broadly shared opportunity in America.

Appendix

Organizational Characteristics

	Mean	Median	Standard Deviation	Min	Max
Organization Size (2019)					
Number of full-time employees	85.85	17	274.31	0	3,000
Number of volunteers	282.39	39.5	1,068.15	0	13,000
Number of learners served (2019)	8,311.9	525	33,668.63	0	300,000
Number of program sites	15.33	3	53.17	0	611
Financial Statistics (2019)					
Revenue ($)	13,051,224	2,590,921	57,619,753	0	860,244,160
Expenses ($)	12,892,466	2,579,927	53,658,772	0	787,275,264
Revenue from largest funders (%)	27.79	20	25.77	0	100
Revenue from philanthropy (%)	55.39	60	35.39	0	100
Growth Statistics					
Learner CAGR (%)	28.99%	12.56%	55.32%	-54.19%	545.96%
Expense CAGR (%)	42.38%	9.52%	176.98%	-43.30%	2,314.57%
Revenue CAGR (%)	30.00%	10.08%	78.63%	-63.42%	724.62%

Application Questions

Organization Information Questions

1. Name of Organization
   (List the name of your organization in full as it appears on your 990 form.)

2. Founder(s) of the Organization

3. Current CEO or Executive Director (ED)

4A. CEO or ED Email

4B. CEO or ED Phone Number

5A. Gender/Gender Identity of the CEO or ED (optional)

5B. Race/Ethnicity of the CEO or ED (optional)

6. Mark as applicable (optional)
   - ☐ CEO/ED is a first-generation college graduate (first in their family to receive a college degree)
   - ☐ CEO/ED attended community college for at least one year
   - ☐ CEO/ED received a Pell grant as a college student

7. Year Founded

8. Location of Headquarters (City, State)

9. # of Full-Time Equivalent (FTE) Employees

10. # of Volunteers

11A. # of Program Sites (if applicable)

11B. Location(s) of Program Site(s) and # of Sites at Each Location (if applicable)

11C. Do you plan to expand beyond your current program locations in the next 12 months? If so, where?

12A. # of Learners Served in 2019 (projected)

12B. # of Learners Served in 2018 (If your organization is less than 3 years old, enter "NA" as appropriate.)

12C. # of Learners Served in 2017 (If your organization is less than 3 years old, enter "NA" as appropriate.)

12D. Age of Learners Served in 2018: What percent of the learners you served in 2018 were between the age of 15 and 30? (Choose one of the following values: 0-20%, 20-40%, 41-60%, 61-80%, 81-100%)

13. Fiscal Year Start Month (Please input the name of the month your fiscal year begins.)

14. Current Fiscal Year Operating Expenses (projected)
    (Please write your answer in the following format: YEAR $X,XXX,XXX)

15. Current Fiscal Year Cash-in Target (projected)
    (Please write your answer in the following format: YEAR $X,XXX,XXX)
    Please provide actual expenses for previous 3 fiscal years:
    (If your organization is less than 3 years old, enter "NA" as appropriate.)

16A. Previous Fiscal Year 1 Expenses
    (Please write your answer in the following format: YEAR $X,XXX,XXX)

16B. Previous Fiscal Year 2 Expenses
(Please write your answer in the following format: YEAR $X,XXX,XXX)

16C. Previous Fiscal Year 3 Expenses
(Please write your answer in the following format: YEAR $X,XXX,XXX)
Please provide actual cash-in for previous 3 fiscal years:
(If your organization is less than 3 years old, enter "NA" as appropriate.)

17A. Previous Fiscal Year 1 Cash-in
(Please write your answer in the following format: YEAR $X,XXX,XXX)

17B. Previous Fiscal Year 2 Cash-in
(Please write your answer in the following format: YEAR $X,XXX,XXX)

17C. Previous Fiscal Year 3 Cash-in
(Please write your answer in the following format: YEAR $X,XXX,XXX)

18A. Please estimate the percentage of your 2019 revenue that will come from philanthropic sources

18B. Organization's Largest 2 Philanthropic Funders

18C. % of Revenue From Largest 2 Philanthropic Funders

19. Supplementary Materials: Upload the following supplemental materials: CEO or Executive Director's resume and/or biography, biographies of members of your Board of Directors, and your most recent audited financial statements with notes.

20. Additional Materials (optional): Please provide any existing annual reports, strategic plans, impact reports, etc. that will help us better understand your organization.

Short answer questions

A. **Program Model (maximum 200 words)**
What is your organization's core program model? Please be specific and explain how your program works in practice.

B. **Innovation (maximum 200 words)**
What is innovative about your model and why have you chosen to pursue this innovation? Please share any relevant data to help us understand the value of your innovation. (Please make sure you have read the discussion about innovation in the PIE FAQ before answering this question.)

C. **Results to Date (maximum 150 words)**
What are your organization's results to date? Please include output and/or outcome data with sample sizes. (150 words)

D. **Future Outcomes Measures (maximum 150 words)**
What outcomes data would you like to be collecting that you are not yet able to collect?

E. **Personal Story (200-400 words)**
Social entrepreneurs need a deep reservoir of commitment and drive. What inspires you to pursue your work? In your answer, please address how your life and work experiences have helped you understand the experiences of young people who have historically been underrepresented in postsecondary education and upwardly mobile careers.

F. **Diversity, Equity and Inclusion (maximum 150 words)**
What is your approach to building a diverse, equitable, and inclusive organization?

G. **Participation Objectives (maximum 150 words)**
If you are selected for PIE, what do you hope to gain from participation in this Cohort of postsecondary entrepreneurs? What do you hope to contribute to the Cohort? (Please make sure you have read the PIE FAQ before answering this question.)

Notes

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