Expanding Economic Opportunities Through Evidence-Based Sector Training

Garrett A. R. Yursza Warfield, Richard Hendra, Kelsey Schaberg, and Brent Orrell

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Introduction

The Workforce Futures Initiative is a research collaboration among the American Enterprise Institute, the Brookings Institution, and the Project on Workforce at Harvard Kennedy School's Malcolm Wiener Center for Social Policy. The initiative aims to develop concise and actionable reviews of existing research for federal, state, and local policymakers. Since August 2021, the group has provided a forum for researchers and practitioners to discuss policy ideas, evaluate evidence, and identify priorities for new research on the future of work and the public workforce system.

As part of the Workforce Futures Initiative, the following reports analyze sectoral programs and ways to replicate and scale these programs by balancing funding from philanthropy, employers, and the federal government and by creating policies that promote fidelity and allow sufficient time for results to be analyzed.

In the first report, *Scaling Year Up to Maximize Access and Impact,* Garrett A. R. Yursza Warfield discusses Year Up, a national workforce development nonprofit that has been key in empowering young adults by bridging the opportunity divide through a blend of training and internships. Recently, the organization expanded its model to include the Professional Training Corps, targeting community college students with valuable technical skills. To accommodate participants' challenges such as family responsibilities and pandemic-related disruptions, Year Up adapted by creating flexible virtual program delivery. This expansion and evolution have underscored the importance of balancing growth with evidence-based practices, continuous evaluation, and enhanced employment outcomes for a wider population of workers.

Responding to Warfield, the second report—*Scaling the Impact of Sector-Based Employment Strategies* by Richard Hendra, Kelsey Schaberg, and Brent Orrell—delves into the potential for scaling evidence-based and research-validated sector training programs such as those used by Year Up. They suggest these programs can enhance economic mobility and address inequality, but the key to effective scaling lies in successful replication, fidelity to the original models, and stable, flexible funding. Facilitating this hinges on documenting and codifying the elements of successful sector programs to maintain quality. However, for the participants to transition successfully from training to employment, these sector programs should be supplemented with comprehensive supports that address non-training needs, such as direct subsidies, childcare, transportation, and mental health resources. By incorporating these principles, such programs could substantially amplify their impact, thereby addressing the economic inequalities and improving employment outcomes more effectively.

Scaling Year Up to Maximize Access and Impact

Garrett A. R. Yursza Warfield

Cascading water echoed in the room as we stood around the Contemplative Court's waterfall fountain at the National Museum of African American History and Culture in Washington, DC, in September 2022. We were reflecting on that morning's tour of the museum's lower levels, full of powerful and poignant stories of how systemic racism has created an opportunity divide that separates millions of talented young adults from life-changing economic mobility.

That week, over 300 Year Up alumni, staff, and corporate, education, and community partners gathered in the nation's capital for our 2022 National Alumni Summit to hear from industry leaders, engage in professional development, and meet with members of Congress and administrators on Capitol Hill to advocate for racial equity and better employment opportunities. There are few better ways to appreciate what it has taken to deliver Year Up's highly impactful[1] workforce development program—and to appreciate the need for drastically scaling our approach—than by spending a week with hundreds of alumni from dozens of cities who all had their own "year up."

Year Up has traditionally offered a yearlong experience—six months of classroom training carefully mapped to labor market demands, followed by a full-time internship at a Fortune 500 company—to most of the 40,000-plus students we've served since 2000. There were, nonetheless, incredibly diverse program and career experiences represented at the alumni summit. A few alumni had graduated 15–20 years ago from Year Up's original "core" model, when we were still a burgeoning program with roots in several northeast cities and a narrower focus on IT careers (compared with the current, wider offerings of finance, business operations, banking and customer success, and software development and support). Many others had graduated from Year Up's Professional Training Corps (PTC) sites between 2015 and 2019, when we rapidly replicated a model co-located with community colleges and with technical training delivered largely through college coursework. Last but not least, there were our most recent graduates, who joined Year Up during the height of the COVID-19 pandemic, experiencing fully virtual or hybrid training delivery, internships, work, and a mercurial job market.

As my colleagues Richard Hendra, Kelsey Schaberg, and Brent Orrell explain well in their companion report—*Scaling the Impact of Sector-Based Employment Strategies*—after decades of mixed results and doubt regarding workforce development initiatives, we have built an impressive body of evidence supporting sectoral programs such as Year Up that can help otherwise excluded or overlooked workers make a better living for themselves and their families.[2] It is true, though, that the path ahead has challenges, including two specific areas where Year Up has deep experience, rich stories, and important lessons.

First, large-scale impact studies providing the robust evidence base for sectoral programs have tested overall effectiveness and not the individual importance of program components. Yet we do have strong past implementation analyses, tremendous firsthand service delivery and corporate experience, and serious investments in ongoing formative evaluation. These experiences, research, and evaluation guided us to preserve, study, and bolster crucial elements of our foundational model when we rapidly replicated our PTC program in college settings.

Second, we make an important distinction between replicating to serve hundreds or thousands more students a year and scaling a program to prepare and connect tens—if not hundreds—of thousands of participants considered "opportunity talent"[3] to career opportunities with employers. In full transparency, even though there's a large order-of-magnitude difference between replicating and scaling, that distinction was sometimes lost on some of us at Year Up while we more than doubled in size, primarily through expanding our PTC model, which happened between when I joined in 2014 (when Year Up had roughly 2,000 enrollees per year in 11 locations) to 2019 (when it was up to 4,700 enrollees per year in 33 locations). The truth is that growing a program at that rate, especially when we're close to it, feels much faster, grander, and more audacious in the moment than in hindsight, as we reflect and anticipate what it will take to close the opportunity divide at a national scale.

In this report, I first share what we learned from our experiences replicating the program through the PTC model and how carefully designed research allowed us to learn while we expanded operations. These experiences have shaped our strong viewpoint on what it will take to achieve our ambitious goal of providing high-quality programming to 40,000 students annually. From there, I focus on two specific aspects of our scaling strategy: (1) adapting our legacy program models in novel ways, such as shortened pathways through training to internships and job placements, and (2) building workforce ecosystems with organizations in mutually beneficial partnerships, referring participants to each other, and leveraging each other's expertise to improve employment outcomes for opportunity talent.

The Promise of a New Model Adaptation: PTC

Despite the big smile on his face and the genuine warmth in his voice as he sat across from me at Year Up's alumni summit in fall 2022, Dominic[4] admitted he had struggled and nearly dropped out of Year Up's PTC program in Philadelphia several times before graduating in 2015. He reflected:

> I became a new father right as I was finishing my coursework and heading to my internship. I sent over half my financial stipend from Year Up every two weeks back home to my son and his mother, who were living in another city at the time.[5]

The technical training in college classes came easy to Dominic; he had an affinity for these subjects and strong foundational knowledge from a high school technology program. His family and financial responsibilities outside Year Up, however, were a constant reminder of why he was pursuing a new career, and they weighed on his heart and mind. So much pulling on his attention outside the program made it tough to consistently attend long days of classes and a full-time internship, but he persevered. After graduating from Year Up, Dominic earned a few different IT roles over the following years, but he was laid off early in the pandemic. By the time I met him in fall 2022, he was proud to share he had landed a new IT role at a private company paying over $70,000 annually and supporting him to earn a short-term technical certification that would boost his earnings to $90,000 in early 2023.

Stories such as Dominic's are common among Year Up's participants. The outcome of a well-paying job is compelling, but balancing family, financial, and life responsibilities with a yearlong training effort is challenging and often requires careful support. The Year Up team had experiences such as Dominic's front of mind when designing the PTC, our first program model adaptation for wider replication that launched initially in three locations between 2010 and 2013.

Compared with our original program model, in which we implemented our workforce development program at stand-alone locations operated solely by Year Up,[6] the PTC model adaptation would instead deliver our program in partnership with local community colleges. All program activities would be embedded in college campuses, and college faculty would provide technical training through college courses. While we adapted the PTC model for replication, we preserved as much as we could from our legacy core model: learning communities, dedicated coaching throughout the full program, financial stipends and hardship supports, a guaranteed internship for all participants who complete classroom training, and placement services into high-quality jobs after completing Year Up. We preserved these components because they were pillars in our original theory of change and they aligned with our organization's core values.[7] They were also our familiar and preferred ways of supporting opportunity talent and providing business-to-business services to corporate partners. These components significantly contributed (or so we believed) to the strong participant employment outcomes and early impacts evidenced in our first experimental impact test of the core model.[8]

In principle, the PTC's design held tremendous promise for replication in three ways.

1. The co-location model would enable young adults to dual enroll in college and Year Up, reducing overall program-delivery costs through shared infrastructure (e.g., classrooms and study and office space) and resources such as faculty and wraparound services. If Year Up could reduce overall costs per student compared with our legacy (and relatively costly) core model,[9] we might achieve a financial break-even point in which the costs of Year Up operations would be fully funded by revenue generated through talent placement services provided to our corporate partners, without relying on private philanthropy.[10]

2. Community colleges are the largest system serving Year Up's target population of opportunity talent in the country, providing a chance for a mutually beneficial enrollment strategy. On one hand, it would bring Year Up closer to a large pipeline of participants interested in education and training. On the other hand, Year Up might attract new applicants or students who had temporarily withdrawn from school with the promise of our program's financial stipend and hardship-support funds to offset some student costs (e.g., textbooks, essential supplies, and living expenses).

3. With dual enrollment, a community college's and Year Up's value propositions would complement each other in creating better student outcomes. Students could attend college classes and accumulate credits toward a later degree, while Year Up could provide enriched student supports to bolster college retention and completion, access to valuable market insights, and direct feedback from employer partners about training relevance and curriculum design at the college. Additionally, the guaranteed internship experience for anyone completing the initial training would provide access to a high-quality work and learning opportunity and a pathway to a job.

Learning While Replicating the PTC

By the time we started to launch and replicate the PTC model in new cities in 2015, we had encouraging evidence for the effectiveness of our original core model from a modest-sized randomized controlled trial (RCT) conducted at three Year Up core sites, showing over 30 percent earnings gains among a Year Up treatment group compared with the control group after graduation.[11]

This initial evidence earned Year Up a spot among eight other career pathways programs in the federal Pathways for Advancing Careers and Education (PACE) evaluation that would deploy a much larger and more robust RCT design,[12] but it would be three more years before Year Up saw its first groundbreaking results from that study.[13] The earlier study and promising early impacts of the core model gave us confidence that preserving key elements of the core model in our PTC model replications was a wise and conservative choice, and we also knew that we had to invest in ongoing learning in two ways.

First, we had to organize Year Up operations in a way that made launching and operationalizing multiple new PTC sites as feasible, efficient, and repeatable as possible. A newly centralized national program team focused on new launches and led the standardization and documentation of program practices to guide local teams responsible for launching and delivering the PTC model in new locations. These practices were checked with homegrown program fidelity and quality processes and measured against key performance indicators: sociodemographic composition of enrolling classes (e.g., age, race, gender, prior education, financial hardship, family and social support assets, and caregiving responsibilities), retention during the classroom training and internship phases of the program, and post-program employment outcomes, especially full-time jobs related to Year Up training that pay above hourly wage targets.

Second, we developed strong researcher-practitioner partnerships that enabled a multiyear learning agenda with formative and summative evaluation methods focused on the PTC replications. This learning agenda would not have been possible without Year Up's significant investment in an in-house research and evaluation department and close partnership with researchers at Abt Associates and the University of Pennsylvania.[14] The speed of program operations almost always exceeds the speed of robust, long-term summative research. In this environment, agile in-house monitoring of practices and outcomes has provided essential day-to-day feedback to program leads. At the same time, our external partners have helped us pioneer more flexible, quicker-turnaround approaches to implementation and impact evaluation, whose results have complemented what we are learning in practice.

In practice and on the ground, learning is an action verb, and activities from ongoing hands-on operations and well-structured evaluations tend to comingle, informing and bumping into each other. Sometimes our evaluation goals were at odds with our program goals or operational priorities. As a prime example, testing an individual PTC program component with a robust RCT design would typically require withholding some aspect of program delivery from some students in a control group for comparison or providing additional, different, or enhanced supports to a random subset of students in a treatment group.

When rapidly replicating PTC models, one of Year Up's biggest challenges was recruiting enough students to fill our classes. Enrollment and recruitment practices were an area ripe for structured research methods (e.g., A/B or multi-arm bandit tests of different outreach and referral channels), but we chose to first prioritize standardizing enrollment-team training and interview practices. At the time, deliberately introducing controlled variability for testing did not jibe with our attempts to achieve consistency across dozens of frontline enrollment staff (many of whom were new hires to the Year Up organization, still learning and training on the fundamentals of our program) in over 10 different cities. We had to pick the right times, places, and focus areas in which evaluation efforts and operations complemented each other. Below, I provide examples of lessons learned from replicating and operationalizing the PTC model and from targeted evaluation projects.

Operational Lessons

Year Up approached standardization of the PTC model from many different angles—for example, a staffing model that prescribed a consistent size and structure of frontline program-delivery teams relative to the number of students served at that location. We also created an in-house "quality delivery inventory" annual process to monitor and understand program performance and challenges, including reviews of performance data on enrollment, retention and employment outcomes, and interviews with students and local program and corporate engagement staff, who were managing relationships with our employer partners.

Setting and adhering to consistent standards and review practices enabled us to compare across locations and identify what was working, what was not, and what was promising in practice. However, we were trying to replicate the same, consistent model in different contexts with different college partners. The community college system is so massive that it is tempting to treat it as a monolith, but it is not. Our many community college partners had vastly different practices and served student populations with variable needs. Some of our early assumptions about partnering with the community college system did not play out as expected in all locations, such as in the following areas.

Recruitment. In some partnerships, Year Up was framed as a way to bolster the college student experience with in-demand training and a paid internship with a top company, so Year Up recruited heavily from the college's actively enrolled student body. In other partnerships, the college expected Year Up's training and promise of a career-track job would attract net new students to supplement the college's own recruitment targets. Especially in new cities where the Year Up brand was not well-known among prospective enrollees, we sometimes struggled to generate enough candidates to meet colleges' expectations for new student recruitment.

Logistics. Year Up carefully maps student-training curricula to the in-demand skills needed to fill open roles with our employer partners. Some partner colleges had limited course catalog options and instructional capacity, so it was difficult to align the content of credit-bearing classes with the skills internships required. In other cases, it was difficult to line up academic calendars with our own training calendar so we could match internship- and work-ready participants to our employers' open roles in time to meet corporate demand.

Finances. While we proved there are many efficiencies to sharing infrastructure and resources with college partners, we have not consistently achieved the desired financial break-even point in our PTC model. We overestimated Pell Grant[15] availability and broader financial aid eligibility to mitigate students' college-related costs. While Year Up does not charge enrollment fees, dual enrollment with college partners requires tuition payments, including back-due fees to college registrars (sometimes from prior experiences with other colleges), who will withhold transcripts from previous classes or rights to enroll in the current semester's classes if payments are outstanding. Year Up has often covered these expenses for students so they can enroll, but these added costs have kept us from relying solely on internship revenue without additional philanthropic support. That said, we have reduced our overhead costs, and we have shown we can serve the same number of students at a relatively lower cost than with the core model, requiring a smaller philanthropic investment. We estimate that for every dollar raised, we can serve three times as many young adults in the PTC compared to with core model.

What Evaluation Taught Us

Year Up's research and evaluation team and I have benefited from working with dozens of external research partners to study and analyze Year Up's administrative data. We have also benefited from gathering direct feedback through observations and surveys, interviews, and focus groups with our PTC staff, students, and corporate partners. Perhaps our most productive effort to date was a suite of studies conducted under an Institute of Education Sciences (IES) Development and Innovation grant co-led by researchers at Abt Associates, the University of Pennsylvania, and Year Up. For this grant, we conducted three mini studies of high-priority program design and implementation challenges, a small initial evaluation of PTC's overall impacts at three sites, and a broader assessment of implementation fidelity and challenges.[16]

The first two mini studies used mixed methods to generate recommendations for how Year Up might promote more consistently high-quality internship experiences with corporate partners and address potential tensions between employment and college completion as program goals. Findings from the internship mini study prompted improvements in Year Up's internship supervisor orientation and online portal to support Year Up intern managers at our corporate partners. The multiple-goals study stimulated Year Up to change its approach to career planning during the program, career goal setting, and longer-term monitoring of employment and education outcomes.

The third mini study used a rapid-cycle RCT evaluation to study academic challenges in PTC college classes. Its findings added important grist to results from the RCT, measuring PTC's overall impacts at three sites.

- **Addressing Academic Challenges.** When launching PTC, we assumed that college faculty would be able to share students' academic performance in a consistent and timely manner, but after several years of operations, we found this to not be the case. Some participants reached midterms or finals without any clear indication of their course performance (e.g., through grades or feedback in learning management systems or directly from instructors) and were caught off guard by poor overall course grades or scores. Poor course performance affected overall retention in the PTC program. In a rapid-cycle RCT, we identified strategies to boost academic performance and retention during the classroom-training phase. The most promising strategy was a modified approach to the Year Up staff-led coaching element of the program with a more intensive focus on academic topics and course performance.[17] Over two cohorts of iterative implementation with students, we found that the treatment group's average retention during the PTC's training phase was 10 percentage points higher than a control group receiving standard coaching. The increased retention was mostly attributed to the second cohort that received the fully implemented and refined coaching intervention. While we did not test if the presence or absence of student coaching—a fundamental component of Year Up's core model that we translated to the PTC context—matters in the overall efficacy of the program, this finding suggests that coaching modifications can influence a crucial program output: training retention. Findings such as these reinforce our belief that we should preserve coaching supports in our new scale models described later in this report.

- **Longer-Term Impacts.** While the original IES grant set the stage for a small-scale, early-impact test of post-program outcomes at three PTC sites, it was a generous follow-on grant from Arnold Ventures that enabled us to track employment and education outcomes for at least two years after the PTC program and extend the follow-up on the academic coaching experiment described above.[18] In the small-scale early test of overall PTC impacts, we found that the treatment group had similar earnings to the control group over two years after the program, even though they had meaningfully higher college enrollment (35 percentage points) during the program and in the second year after graduation (9 percentage points) and higher completion of short-term certificates or credentials (9 percentage points). While this RCT design was robust, it was small and limited to three PTC sites still early in their implementation and maturity; along with our research partners, we believe this is insufficient evidence to generalize to the wider PTC model, which merits more expansive testing. That said, one of the key reasons the PTC sites did not generate large earnings gains in this study was lower-than-expected retention rates, and the academic coaching experiment suggests one possible strategy for bolstering the model's impact and potentially replicating the study en route to wider adoption. Specifically, the cohort that received the fully implemented, modified coaching intervention and had meaningfully higher training retention ultimately earned over $7,400 per year more than the control (standard coaching) group, sustained over three years after the program. This annual earnings increase for the modified coaching group is large and on par with the earnings gains reported in Year Up's PACE evaluation of the core model.[19]

For four years, the PTC was our go-to model for replication, and we achieved tremendous year-over-year growth and more than doubled our total organization size through its expansion. At the same time, it is arguable retrospectively that Year Up was carrying a hammer and seeing only nails by trying to use the same tool to address every unique context and problem. We learned an important lesson: While the community college system will continue to play an important role in our mission, the PTC model is not the best fit nor the only option for every context. There is not one size that truly fits all. We already knew we needed to identify new and nimbler ways of partnering with other organizations and delivering high-quality program experiences when COVID-19 hit in early 2020. While the pandemic presented tremendous challenges to Year Up's students, staff, and operations, it also accelerated our program innovation and forced us to challenge some long-held assumptions about our historically yearlong, in-person program delivery through high-quality virtual, hybrid, and shorter-duration models.

A Strategy for Scaling

After Hector's[20] older siblings moved out, it fell to him to support his mom with rent and living expenses. He always had an interest in IT, but keeping a steady income to make ends meet at home while taking classes was difficult. The additional uncertainty of working during the pandemic made things harder. Sometimes the opportunity cost of forgoing even modest income exceeds the deferred benefit of earning a well-paying job after a year of training.

Fortunately, Hector found Year Up in our Los Angeles market in the first year after the pandemic's onset. We had previously operated a yearlong PTC model in partnership with a local community college in the area but had transitioned to a new, shorter-duration, virtual-program offering, which we now call a "career accelerator" model. Hector was recruited from a local community college IT certificate program, and he participated in an intensive two-week coaching and professional-skills boot camp to prepare for a six-month internship with a corporate partner. Hector earned a full-time, six-month contract role after the program, and he later transitioned to a full-time role doing IT at a university. He shared at the 2022 National Alumni Summit that the relatively shorter pathway to a job made the program workable, but he felt that more peer-to-peer, in-person engagement after the program would help continue the relationships he had started virtually during the program.

Hector is not alone in his feelings. We have repeatedly interviewed and surveyed thousands of Year Up participants since the pandemic's start to better appreciate their experiences with new or virtual offerings. We often hear that virtual participation gives access to some students who otherwise would not participate because of transportation challenges (e.g., long commutes or poor public transit options for getting back and forth to training) or caregiving duties at home. We also have learned that some students find it challenging to focus and digest training content outside of in-person classrooms. It is rare for new program adaptations to be universally positive. The balancing act to "explore new opportunities even as [we] work diligently to exploit existing capabilities" (such as virtual training delivery) is precisely what we believe Year Up must do to scale: We must be ambidextrous, equally good at improving our past models while preparing new innovative models and approaches for the future.[21]

Year Up has set an ambitious goal of increasing the number of students we serve annually tenfold, from 4,000 to nearly 40,000 in the next 10 years. Achieving this requires a clear understanding of our constraints to scaling and targeted strategies for how we might unlock those constraints and create new pathways for connecting opportunity talent to employment. Two strategies I explore below include novel adaptations of our legacy program models and community workforce ecosystems.

Year Up's Constraints to Scaling. Connecting tens of thousands of young adults to top employers will require Year Up to do the following:

- Rapidly access large pipelines of interested, qualified candidates for our programs that exceed our past recruitment capacity;

- Sustainably fund operating costs with earned revenue from employers for talent placements (i.e., serving more young adults while reducing our annual philanthropic need);

- Deliver consistent program quality (such as student training and support) in ways that meet participants' and employers' expectations (e.g., short time frames that reduce opportunity costs for students and wait periods between when employers initially express hiring needs and when new job-ready Year Up participants start work);

- Develop a sales capacity that can secure tens of thousands of job placements annually by growing our legacy corporate partnerships and building new ones; and

- Design and deploy technology, data, and learning systems and processes that support business and program operations to accomplish all the above.

Trying, Testing, and Learning from New Program Models. Year Up's legacy core and PTC models will continue to feature prominently in our portfolio of program models. Additionally, to address the scaling constraints listed previously, we need to innovate with nimbler and shorter-duration adaptations. We have started by piloting "accelerated core" and "accelerated PTC" offerings, whereby participants engage in a shortened professional, technical, and role-specific training period of four months or less (compared with the usual six months of classroom training) followed by a six-month internship. Additionally, we have broadened the definition of the PTC model to include not only college partners but any leading, mission-aligned third-party talent providers who might facilitate role-specific or technical training. Lastly, we are expanding our shortest-duration training, the career accelerator model, which includes any virtual, hybrid, and in-person delivery of skills training in six weeks or less to participants who already have some role-specific or technical-skills training.

Accelerated core, accelerated PTC, and career accelerator models preserve the role-specific, essential-workforce, and career-readiness training; coaching and community building; barrier-reduction supports; and work-based learning experiences (i.e., internships) of the legacy core and PTC models. Despite our efforts to keep these elements consistent, adapting program delivery requires closely overseeing ongoing program quality and performance. In this regard, we have committed to learning while operating similarly to how we approached the PTC. Each new model type has a learning agenda with implementation and fidelity checks designed to help us understand where models are operating as intended and whether our students' and partners' experiences with those models are favorable (e.g., key performance indicators for enrollment, retention, and post-program employment targets and survey feedback about experiences with individual program components and overall satisfaction). We will prioritize formative and developmental methods (including robust quasi-experimental and RCT designs) for learning in the near term and conduct summative impact testing as models evolve and are implemented with good fidelity.

Shorter-duration models push against a long-held orthodoxy at Year Up: Every participant needs a year-long experience to prepare for their post-program job and the start of their career. We believe scaling will require serving a greater diversity of participants, some who will need the maximum amount of preparation and some who might come to Year Up with prior experiences or training that mean they could be ready for an internship or job sooner. Being able to assess which students are more workforce and career ready is no easy task, but we believe it is one of the first challenges we must solve to start realizing our scaling strategy.

There are hundreds of assessment tools across fragmented training assessment and developer marketplaces. These tools are often expensive, disconnected, biased, or not validated. We have partnered with the American Institutes for Research (AIR) to support the development and compilation of custom, reliable, and validated off-the-shelf assessments that will allow us to (1) match students to program models based on their skill and readiness levels, (2) better identify student support and coaching needs, and (3) measure skill growth during the program.[22] As we did with the PTC replication, marrying research and practice is required to learn as we grow.

Future directions for testing at Year Up is a worthy topic, but an extensive account of our ideas is beyond the scope of this report. Here are several examples we are excited about: randomly targeting participants with various coaching enhancements delivered with different modalities (virtual versus in person) and different intensities; head-to-head tests of workforce- and career-readiness classroom training delivered with various intensities to students with different initial skill levels, measured by the robust skill assessments we are developing and curating with AIR; and comparisons of different levels of and mechanisms for in-program financial supports (e.g., ongoing stipends and one-off emergency supports for acute financial challenges) and any associated changes in program retention and post-program outcomes. We have more tests in mind and anticipate others will surface through ongoing discovery and experience with newer program models.

Community Workforce Ecosystems

A wider menu of program-delivery offerings will be insufficient for scaling Year Up if we do not also change the ways we partner with other organizations in what we call community workforce ecosystems. A community workforce ecosystem is a group of interested stakeholders and actors, including funders (such as federal and local government, corporations, foundations, and individuals), service providers (e.g., nonprofit and community-based organizations), educational institutions (such as high schools, community colleges, and traditional higher education institutions), and employers and major initiative leaders (including chambers of commerce, employer coalitions, and state and city governments). These stakeholders come together around a shared interest in improving the employment outcomes for a specific, targeted group (e.g., opportunity talent).

Participants in the ecosystem work toward individual and collective goals, have agreed on key metrics and practices (which have been mapped according to services provided, target populations, and areas of expertise), and agree to share data, resources, and partnership opportunities to serve their shared metrics. In a workforce ecosystem, organizations seek mutually beneficial partnerships, refer participants to other organizations within the ecosystem, leverage each other's expertise, regularly report successes and challenges to the collective, and, importantly, do not seek to compete. Job seekers have access to career maps and pathways, affordable and high-quality education, recognized and stackable credentials, and employment opportunities that offer a living wage.

One of Year Up's greatest comparative advantages is our large and strong employer network and expertise in connecting job-ready talent with work-based learning opportunities that convert into high-quality jobs. Students with technical training from community colleges and other workforce development organizations can come to Year Up for a shortened and direct pathway to a job opportunity through an accelerated core, accelerated PTC, or career-accelerator model. While we are still testing and validating this approach, here are four promising examples of what this looks like in practice.

- In Los Angeles, Year Up partners with a community college to recruit, assess, and upskill "near ready" young adults such as Hector who have already acquired, or nearly acquired, a credential at that college. Then we match them to work-based experiences and support them through their onboarding ramp-up through coaching and continued skill building.

- In Washington, DC, we launched the Talent for Tomorrow Alliance in partnership with four other nonprofits (Per Scholas, Genesys Works, Capital Partners for Education, and New Futures) to help more individuals achieve significantly higher earnings potential—and help employers fill in-demand jobs.

- In Boston, Year Up launched a program in partnership with coalitions of employers and community colleges to build talent pipelines for Massachusetts companies. We worked with the Massachusetts Competitive Partnership (MACP)—a group comprising CEOs of some of the commonwealth's largest businesses—and the Massachusetts Association of Community Colleges (MACC) to cocreate a low-cost, scalable, 18-week training pathway. In this example, MACC works with community colleges and MassHire Career Centers to source and recruit learners, and together, we screen and enroll candidates. Year Up complements the community college coursework with our signature professional-skills training and coaching and then matches participants to work-based experiences with MACP's 16-employer coalition.

- In Detroit, we are partnering with Henry Ford College (HFC) and the Detroit Regional Chamber to launch a talent pipeline for JPMorgan Chase (JPMC) to fill retail and virtual banker roles. We began with analyzing existing curricula to determine alignment with the role requirements identified by JPMC. We then worked with HFC to design the program, curriculum, and training for their instructors. Upon training completion, Year Up will assess, match, and support talent during the work-based learning experience.

Conclusion

Over my nine years at Year Up, I have often been asked, "Should Year Up slow its growth until it gathers evidence about models for further expansion?" I concede that in an ideal world, we would have all the research and evidence needed to make the best decisions to produce great outcomes for as many people as possible. But millions of disconnected workers facing monumental, systemic challenges cannot wait until we have conducted and published the most robust results. Furthermore, in their companion report, Hendra, Schaberg, and Orrell make a compelling argument that we have a solid evidence base for sectoral programs, and the labor market is ripe for scaling now.[23] We do not have to choose between generating evidence through research and taking action in practice.

I hope this report on Year Up's experience has shown it is not only possible but often beneficial to evaluate, study, and learn while we expand our services. Evaluating without regarding workers' urgent needs and the current labor market context would be impractical. Operating without a commitment to robust testing and learning would be irresponsible. To succeed, we must consider the workers' immediate needs while upholding a robust testing and learning regimen.

Scaling the Impact of Sector-Based Employment Strategies

Richard Hendra, Kelsey Schaberg, and Brent Orrell

Decades of experimentation on employment programs designed for low-income individuals showed a common pattern: Programs could help individuals into work but generally did not affect wage rates or long-term earnings.[24] Over the past decade, a series of rigorous experiments have found that sectoral training programs are breaking that pattern. Several studies of these programs have documented impressive and lasting earnings gains.[25] This represents important progress, as we now have an effective model.

Given the promising evidence to date, the workforce development field has increasingly adopted sector strategies to meet job seekers' and employers' needs. Sector strategies train job seekers for high-quality employment in specific industries and occupational clusters that demonstrate strong local demand and opportunity for career advancement. Programs using this strategy go beyond more traditional programs that offer sector-specific training. Sector programs also have strong employer relationships, seek to improve the economic mobility of low-income individuals, and provide support to help participants complete the program.

Most sector programs, however, have been small, and scaling to a level commensurate with economic needs has been elusive. Thousands of job seekers and employers who could benefit from these programs are still outside the programs' reach. This report focuses on how to make the scaling of these programs a reality so more individuals who are out of work or stuck in low-wage jobs can see the benefits.

We Finally Have a Training Model That Can Lead to Upward Mobility

While some previous employment models showed positive impacts, their effects were small, inconsistent, and short-lived, and the successes often stemmed from individuals working more hours rather than receiving higher wages.[26] The evidence for sector strategies is much more promising. Several studies have now provided an existence proof for the model. We have irrefutable evidence that sector programs not only increase earnings but also maintain those increases over time.

Interest in the sectoral approach grew following the Sectoral Employment Impact Study's (SEIS) 2010 findings, which reported earnings gains over a two-year follow-up period for three mature sector programs.[27] One of the first major replications of the SEIS was a WorkAdvance study. The evaluation of WorkAdvance, a sectoral training and advancement model, found encouraging evidence of earnings impacts: The model led to large earnings impacts in one established site (a site that also showed impacts in the SEIS) and smaller (and later breaking) impacts in the other sites that were newer to WorkAdvance's strategy.[28] Earnings impacts persisted over seven years at the most promising site, and all sites showed positive cost-benefit results.[29]

At roughly the same time, impressive impact results emerged from other studies of sector programs. Project QUEST stands out as showing large earnings impacts over more than a decade.[30] Year Up has also proved effective in producing long-term earnings impacts in two rigorous studies.[31] Earnings impacts in these studies are sizable, representing 20–30 percent increases over that of the control group. Additionally, several subgroups of individuals, including people of color, have seen earnings gains.[32] These programs have worked across different sectors including health, IT, and manufacturing. One commonality was the provision of wraparound supports and delivery by locally rooted nonprofits.

Of course, anyone experienced with policy knows there are no silver bullets, and this is true with the latest generation of training programs.[33] For example, the Health Profession Opportunity Grants (HPOG) evaluation—which evaluated programs offering training in health care using a career-pathways framework[34]—found no earnings impacts at the latest follow-up.[35] Nor did six of the seven career-pathways programs that offered target-sector training evaluated as part of the Pathways for Advancing Careers and Education (PACE) evaluation. (Year Up was the exception.)[36] Thus, in a review of programs with a sector focus, Kelsey Schaberg notes that while it is clear these programs can work, pursuing program improvement to help them work more consistently is a priority.[37] This is an important piece of scaling these programs. Additionally, there is a need to better delineate "sectoral" from other modern approaches to job training.

The Labor Market Context Is Ripe for Scaling Sector Programs

If there was ever a good time to scale sector programs (meaning having them serve more individuals), it is now. Despite some macroeconomic headwinds, the labor market continues to be strong.[38] Simultaneously, labor demand is changing in ways that favor sector programs. Employers are focusing less on college degree requirements and trending toward hiring individuals who lack college credentials but are "skilled through alternative routes."[39] Concurrently, sector programs can benefit from federal initiatives such as the CHIPS and Science Act[40] and the reshoring of employment[41] after companies were scarred by supply-chain issues during the COVID-19 pandemic. These trends, coupled with demographic factors, all point to increasing demand for rapid training in the coming years.

Taking just one of these trends—such as employers hiring individuals without college degrees—the current stock of sectoral training is not at the scale necessary to capitalize on this unprecedented opportunity to improve upward mobility. The effective, rapid, and relatively low-cost training provided by sector programs could be the perfect vehicle for capitalizing on this opportunity. But the scale of these programs is nowhere near what is needed for the segment in question, which numbers in the tens of millions.[42] To meet the need and have a transformational impact, the field needs a massive increase in scale. While community colleges are certainly part of the solution, employers are complaining that the community college system misses the mark in some cases.[43]

Good Copying: Replication as a Small Step Forward

One way for sector programs to reach more workers is through replication. As noted above, plenty of positive evidence indicates sector programs can be replicated. As one example, the Per Scholas program showed large earnings impacts in the SEIS and WorkAdvance study. Replications like this, though, are ineffective ways of scaling, as the programs do not necessarily increase the number of individuals served. A further complication is that while many programs have attempted to replicate the sectoral approach, and in some cases have served a larger volume of individuals, they do not always maintain the necessary key ingredients that make the approach successful when doing so.

Therefore, to replicate the approach and scale it to reach a meaningful number of workers, a few factors must be established. A suitable vehicle or vehicles must be identified, quality must be maintained, and adequate funding must be provided. To identify places where innovation or adoption of ideas could prevent pitfalls, this report first explores several challenges related to replicating and scaling sector programs. It then presents several potential ways in which sector programs could be expanded, before highlighting a proposed implementation strategy for scaling. This is followed by discussions of potential ways to fund a scale-up effort and how to maintain quality during the effort.

Challenges to Scaling Sector Programs

Replicating and scaling evidence-based programs is often a complex undertaking with challenges that must be addressed to ensure success. Below is an explanation of some key considerations in broadening access to sector-based training.

Is Smallness a Virtue? Most successful sector programs serve hundreds of or a few thousand participants annually. It might not be an accident that these programs are relatively small and, often, were initially smaller. Some aspects of sector programs might be hard to scale. In fact, it could be argued that operating at a small scale may be a virtue of sector programs and might even be essential to their success. Researchers note that successful sector programs are nimble and thus can change quickly with labor market conditions. They are also typically operated by nonprofits that have a deep knowledge of their local communities and take time to know their learners. This allows them to offer supportive services—services aimed at helping individuals enter and complete programs, such as travel stipends, referrals for food assistance, tools, uniforms, and tutoring—tailored to a job seeker's unique needs.

It is unclear whether larger organizations (such as community colleges, one-stop centers, or even large nonprofits) could adapt so readily to local labor market changes or tailor services to the individuals they serve. On a related note, local labor markets have only so much demand for workers in a given occupation or subsector. When thinking about training more workers, programs must account for the amount of demand from local employers. This will influence the extent to which a program focused on a given occupation can grow or expand.

Complicated Models Are Less Scalable. Scaling the core effective services of programs is much easier than scaling complex models. In recent books focused on the subject, including *Scaling Up Excellence: Getting to More Without Settling for Less*[44] and *Lean Impact: How to Innovate for Radically Greater Social Good*,[45] a premium is placed on simplification. However, the sectoral model asks much of providers—many programs, including Year Up and WorkAdvance, are multicomponent and complicated—and can be hard to implement well.[46] In his companion report, *Scaling Year Up to Maximize Access and Impact*, Garrett A. R. Yursza Warfield discusses Year Up's efforts to make its model more scalable.[47]

Let's consider some of the customization that sector programs need to do for which a small scale might be a virtue. Screening is an intensive part of sector programs. Before they can offer sector-specific skills training, providers need to choose the right candidates who have enough preparation to finish the training and perform well in a job but who can also benefit from the training. Providers need to understand the sector's workplace cultures and prepare candidates to enter them, often through contextualized career-readiness training. Providers also need to stay on top of the latest developments in highly specific fields to ensure that hard-skills and career-readiness training are aligned with the latest industry needs. Additionally, providers need to develop jobs with employer partners to ensure candidates are placed in jobs after completing the training. They also need to keep in touch with employers and participants to ensure placements are leading to retention and advancement. Lastly, providers need to offer referrals to support services to ensure individuals can complete the full program.

Doing all this well is challenging, especially when considering scaling. It requires hyper-specific industry knowledge and a dual-customer approach in which providers can speak the language of employers while meeting the needs of job seekers.

What Are the Key Ingredients? To our knowledge, none of the impact studies of sector programs to date rigorously tested components of sector training.

Instead, they tested a package of services. Because of this, we aren't certain what the key ingredients are to the strategy's success. That said, nonexperimental evidence has begun to peel back the layers. Research by Lawrence Katz et al. found that earnings gains of sector programs are generated by getting participants into higher-wage jobs in higher-earning industries and occupations, not just by increasing the number of employed workers.[48] The sector or subsector choice is key, and providers' ability to read and respond to the labor market is an essential capacity.

Beyond the importance of picking the right occupations within a sector, there is not yet a consensus as to the effectiveness of most of the other elements. There is general agreement that screening and wraparound services are important, but we are not aware of any rigorous evidence that supports either component. Implementation analyses done in several evaluations, including the SEIS, identified key organizational features of strong sector programs: having a stringent screening and intake process, developing strong employer connections, and providing individually tailored services.[49]

Additionally, an analysis done as part of the HPOG evaluation (which, as mentioned earlier, evaluated training programs targeting the health care sector using a career-pathways framework rather than a sectoral framework per se) found that certain program characteristics were associated with the size of short-term impacts. For instance, having access to employment supports and social services was associated with larger impacts on target-sector employment.[50] To our knowledge, the effectiveness of individual components typically found in sector programs, such as post-employment services, have not been studied on their own (at least in the context of sector programs). New research is, however, starting to determine the value individual components add to sector programs.[51]

The patchwork of non-rigorous evidence on program components leaves providers in a difficult situation when considering scaling. The research community needs to focus more on testing pieces of the model to see which elements are crucial (with methods such as A/B testing) rather than on looking for evidence that the overall model can work, which is already well established.

How to Measure Fidelity as Programs Replicate and Scale. Some dimensions of sector programs (such as job placement rates) are easy to measure. Others (such as having a dual-customer orientation) are more difficult. As Warfield's companion report notes, providers such as Year Up have been forced to create their own "homegrown" measures in the face of this gap.[52] Additionally, past fidelity measures do not always predict impact.

Experience with the Center for Employment and Training (CET) is instructive. CET was a successful employment program from the 1980s based in San Jose, California. A replication study found that some sites were able to replicate the model with high fidelity. However, even these sites did not have long-term earnings impacts, as was seen in the original study. This suggests the possibility that some elements of the original CET site were not captured well in replication measures.[53] More research into identifying the right fidelity measures of sector employment is needed, as it is clear that not every scaled or replicated program will be successful.

How to Help More Disadvantaged Workers Benefit from the Programs. Another challenge to scaling is that most sector programs use an extensive screening process to identify suitable participants. As a result, many individuals who could potentially benefit from the services drop out or are screened out. One potential strategy to help prepare individuals who are screened out of sector programs is to create bridge programs. For example, several programs in the PACE evaluation offered a bridge-type program to individuals who did not meet the initial skill requirements.

The idea behind these bridge programs was to have participants learn some basic skills before moving on to higher-level training.[54] Findings from some of the programs showed the bridge program successfully prepared individuals for entry into college-level occupational skills training, and most individuals who participated in the bridge program continued on to the occupational skills training, while other programs experienced higher dropout rates between the bridge program and occupational skills training.[55] Future research could provide more evidence on how bridge programs can most effectively prepare individuals to participate in sector programs and whether individuals who attend both the bridge and sector programs succeed in the labor market.

Additionally, evidence suggests that support services help people who enroll in sector programs to complete the programs. Support services are not, however, always differentiated and tailored enough based on participants' need range: Some have few needs, while others have multiple needs for services such as substance abuse treatment, record expungement, emergency housing, childcare, clothing, work equipment, and so on. Additionally, funding does not always cover the cost of offering these services, and providers often have to meld funding from public and private sources.

To overcome this, programs need to be strategic about how to distribute resources. In some cases, it might be possible to use past data to predict an applicant's success in the program at the time of their application. This enables programs to focus intensive resources on those less likely to complete sector programs. Through such tailoring, it should be possible to help more disadvantaged workers benefit from sector programs, which would also help programs scale more quickly.

Scaling Vehicles

So, how do we scale sector programs to reach and benefit more job seekers? A prerequisite for scaling is simplification and better manualization of the model so it is clear what constitutes a sectoral model. (See examples of how Year Up has shortened training in its career accelerator model in Warfield's companion report.)[56] Once the model is more portable and codified, it could be more easily adapted or modified by new providers, with new strategies, or for new populations. This section lays out some approaches to get sector programs to scale.

Build an Ecosystem of Many Small-to-Moderate-Sized Nonprofit Providers. One approach is to have many more nonprofits run sector programs. As long as providers stay aligned with labor market needs, this strategy would help maintain the programs' nimbleness and customizability (by keeping them small) while being able to serve many more individuals (as more programs are offering services). As funding for sector programs has increased, we have seen this happening.[57] While helpful, however, it is not enough to make a dent given the scale of the opportunity.

Additionally, it is unclear whether new providers will deliver services at a high level of fidelity. (And, as mentioned earlier, quality assurance is challenging to ensure when validated fidelity measures are lacking.) As we will discuss more later, this approach would likely need federal funding to be sustainable, and some federal initiatives have already been helpful in this regard. It is unclear, however, whether the nation's nonprofit infrastructure has enough reach for this to reliably be the core scaling approach. But it can certainly help. Furthermore, coordinating such an ecosystem is important so that providers row in the same direction. (Warfield's companion report lays out such a vision based on work that Year Up has started to lead.)[35]

Have Existing Nonprofits That Operate Sector Programs Serve Larger Populations. Because most nonprofits do not charge for training, they would need more funding, including through employers who benefit from these programs. This would increase the number of individuals who can access services without having to open new nonprofits or integrate new services into existing nonprofits.

This could be done by either (1) rethinking and redesigning screening processes so more people ultimately enroll in the programs or (2) expanding into additional sectors to increase the pool of people eligible for and interested in the training (and to not oversaturate a given sector). The former was the main goal of the Expanding the Impact project that MDRC conducted with Per Scholas (and a strategy that other programs have pursued—including Year Up, which is featured in Warfield's companion report).[59] The Expanding the Impact project used a mixed-methods, human-centered design process to improve the efficiency of the intake process, which was yielding low enrollment rates.[60] The new process is substantially less burdensome for staff members and participants seeking admission, while it continues to ensure that prospective learners are a good fit for the program.[61] A similar approach could be adopted at other programs to increase enrollment.

Other programs have expanded into additional sectors. For example, in the WorkAdvance demonstration, St. Nicks Alliance expanded from a focus on environmental remediation into related fields with more demand, including pest control and hazardous material commercial driver's licenses.[62]

Scale Instruction Through Online Training. During the COVID-19 pandemic, all training providers were forced to migrate services online. Anecdotal evidence suggests that providers maintained training quality (after an initial adjustment period), but no rigorous evidence to date supports this.[63]

However, providing online training opens an interesting scaling possibility. Platforms such as Coursera and Udemy have millions of registered users. Is it possible to scale by taking advantage of these platforms while having nonprofits focus on providing wraparound support services and job development? (This is the main hypothesis of the Google Career Certificate study, which includes providers such as Merit America and Year Up.)[64]

Online training somewhat reduces the staffing demands of hiring more trainers when scaling up. Additionally, it expands programs' geographic reach, though programs do need to provide wraparound support and job placement services for the model to succeed. Thus, while there is promise, there are also constraints. Given high dropout rates in online training, the wraparound supports nonprofits would provide would be crucial, and it is unclear how successful job development will be when relationships with candidates are built in a remote format and when relationships with employers potentially need to develop on a national scale.

Further, online training requires individuals to have consistent and reliable access to technology, such as broadband access, and a place in the home with minimal training distractions (a problem that can also lead to inequities in who can participate). These constraints will likely limit the people nonprofits can serve, and it remains to be seen whether this approach can work with populations with lower levels of degree completion. Thus, this feels like another partial solution.

Scale Sectoral Approaches Through the Community College System. In many ways, community colleges feel like the *obvious choice* for scaling sector programs because the infrastructure is already built and the footprint is large. According to the Community College Research Center, community colleges serve seven million students per year in the US.[65] And most community colleges already offer various training programs on the noncredit side. Here though, we have the opposite issue of nonprofits: The scale is in place, but are community colleges equipped to implement successful sector programs?

There are several open questions. First, can community colleges deliver the full set of sectoral programming services well, or should they provide only the training content? Some successful sector programs (such as Project QUEST)[66] are already built on relationships with community colleges. Others, such as Year Up, have partnered with community colleges in mutualistic ways. (See Warfield's companion report for a discussion of Year Up's experience with its professional training corps model.)[67] In these programs, the community college offers technical training while the nonprofit provides the other services.

On a similar note, there are open questions about the consistency of non-training service delivery through community colleges. Historically, most community colleges have not provided the intensive supportive services offered by many successful sector programs. Many colleges also lack the dedicated job-development staff focused on specific sectors that are considered essential to sector programs' impact, and most colleges provide only limited post-placement support.

Next, the noncredit side of community colleges conducts a great deal of training, but it is done without transparency. Without good data on students' employment outcomes, it is hard to know how effective these services are. There are some effective community college–based sector programs and strong community college providers, but we don't have rigorous evidence on many of these.

Finally, most nonprofits that operate sector programs offer training and other services to participants for free. Community colleges, on the other hand, charge tuition and other fees, which would likely inhibit some individuals from entering who could benefit from the programs. Scaling through the community college system would, therefore, require additional funding (discussed more later in this report). At the time of this writing, there is continued discussion of providing short-term Pell Grants to help cover these fees.

Mixing and Matching with Other Programs. Mixing and matching sector programs with other proven interventions can also extend reach and scale. For example, transitional jobs programs often operate at large scale (such as efforts in Los Angeles County).[68] Sectoral training could be offered either before or after transitional jobs. Sector programs could also interface with bridge models (such as Integrated Basic Education Skills and Training) or apprenticeship models, or they could be elements of welfare-to-work programs or job-placement services.[69] Sector programs need not be thought of as only a stand-alone model; elements could also be mixed and matched in effective ways, as we have long done in this field.

A National Implementation and Funding Strategy Built on Success in Replicating and Scaling in Other Fields

As we illustrated earlier, all the scaling approaches have drawbacks, and it is likely that many approaches (if not all) will be needed. Ultimately, an ensemble approach will likely be necessary, with substantial support from philanthropy, employers, and the federal government. This section discusses a way this has been done for another evidence-based program.

As previously mentioned, it is one thing to have an evidence-based "best practice," such as sector-based training, and quite another to replicate and scale that practice. Unless public and philanthropic resources are devoted not just to programs but to those programs that have or are committed to implementing the strategies and practices associated with high-performing sector programs, they may not yield the higher wages, workforce diversity, and career progression that are the hallmarks of programs that have been evaluated and found effective.

Several questions should frame the implementation strategy for replicating and scaling sector programs.

- How does replicating sector-based employment (increasing the number of programs) relate to scaling (substantially increasing the number of individuals receiving training and associated supports necessary to ensure success)?
- How can policymakers encourage fidelity to the cluster of practices that help drive effective sector-based employment strategy?
- How can grant-making and other implementation support (e.g., training and technical assistance, continuous improvement practices, and rigorous quantitative evaluation practices) be deployed to foster fidelity to evidence-informed practices?
- What is the role of existing national, evidence-based training programs in replication and scaling of new sector program sites?

Synergies Between Replication and Scaling. In general terms, we usually try to distinguish between replication (multiplying successful programs) and bringing a strategy to scale (serving a numerically meaningful number of participants). For the purposes of sector training programs, we argue this typical distinction may not be helpful. At the moment, many diverse program models are considered sectoral even while they vary substantially in terms of program components and quality. An important part of our replication-scaling effort is to establish a national standard for government-financed sector training that helps inform the entire workforce development and training system about using evidence-based sector training—and encouraging diffusion of these practices. In this sense, replication of such practices significantly contributes to scaling by sharing model practices as part of the grant development and application processes.

Leveraging Federal Policy to Encourage Replication and Scaling of Rigorous Sector Training Programs. With rare exceptions, the federal government does not operate federal job training programs directly.[70] Instead, funding is typically channeled to state governments through "formula" programs that allocate resources based on population and other factors. States are then responsible for setting workforce development strategy and ensuring programs' administrative integrity. These state and local entities then contract with other groups (e.g., community colleges, apprenticeship programs, and private training providers) to design and deliver job training and support service programs tailored to the needs of local workers, businesses, and economies. Local and state agencies then report on program outcomes that are aligned to federally mandated performance metrics.

The US Departments of Labor, Education, and, increasingly, Commerce also provide billions of dollars through "discretionary" grant programs for job training that fund organizations and consortia engaged in workforce development at the local or regional level. These grants are competitive in nature, typically drawing hundreds or even thousands of applications from private, nonprofit, and state and local government agencies to deliver specific programs that test innovative approaches. States also expend their own discretionary grant dollars to fund training.

Typically, when the federal government issues such grants, it provides oversight of project implementation, technical assistance (usually contracted to organizations with expertise in a given policy or programmatic area), and evaluation of project outcomes. Discretionary grant programs, then, are intended to be "proving grounds" for promising approaches rather than creating new programs at scale.

Learning from Previous Replication and Scaling Efforts. Over the past two decades, a number of large federally funded initiatives have sought to provide public "capital" to help seed and scale social, human services, and job training initiatives. Under the George W. Bush administration, the federal government launched the Compassion Capital Fund, which provided resources to help small, locally based groups increase their capacity to serve high-poverty communities.[71] The Obama administration modified and continued this approach through the Social Innovation Fund, with the same basic goal of building the capacity of antipoverty organizations and expanding the availability of services and supports in high-poverty areas.[72] At the US Department of Labor, the Obama administration also launched a $1 billion Trade Adjustment Assistance Community College and Career Training grant program seeking to replicate training opportunities in certain high-demand fields such as green energy, health care, and information technology.[73] Each of these programs also provided training and technical assistance to grantees and evaluation through third-party contractors. None of these programs were "authorized" by congressional statute; instead, they were funded through annual appropriations with discretion relating to specific designs determined by the participating agencies.

And while all these efforts have provided insights into how to scale effective policies and programs, the specific replication model we propose is based on the one used in the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program. MIECHV, like sector-based training, has substantial evidence of effectiveness generated by rigorous, randomized evaluations over many years of implementation through its nonprofit progenitor, the Nurse-Family Partnership (NFP). Evaluations of NFP over a 35-year period show improved pregnancy outcomes, reductions in child abuse and neglect, improved school readiness, and positive social and economic changes in the lives of mothers in the program.[74]

When President Barack Obama moved to incorporate nurse home visiting into federal welfare policy and programs, his administration paid close attention to the core features of the NFP model. The authorizing statute, which was included in the Affordable Care Act, was specific and prescriptive as to the types of programs that would qualify for funding, such as requiring local programs to demonstrate use of evidence in program design and develop, tailor, and track performance measures that ensure meaningful specification of NFP programs across differing localities.[75] As of 2020, a federal-state program provides services to 140,000 families annually.[76]

Applying the MIECHV Model to Sector-Based Training Replication and Scaling. While few, if any, federal programs have the evidence base of nurse home visiting, the statutory requirements of MIECHV provide a model for shaping effective policy in the case of sector-based training programs. As noted earlier, independent, third-party evaluations of several of these programs provide strong evidence of success and can help set the parameters on use of replication and scaling resources. Ideally, such requirements would be laid down in statutory authorizing language, but in the absence of legislative requirements, individual agencies could include similar restrictions in their grant applications. In addition to clear requirements on grantees aligned to evidence-based practice, federal agencies might also set aside resources for competitions among experienced national organizations to oversee replication and scaling efforts in sector-based training. Finally, agencies that fund such sector-based training programs need to reserve sufficient funding to provide high-quality training and technical assistance programs to support implementation and ongoing qualitative and quantitative evaluations of these projects.

This underscores the need for funding to not only scale sector programs but also, just as importantly, document in playbooks what models look like in practice and allow for the technical assistance and support needed for ongoing formative studies and evaluations of implementation. These topics are taken up in more detail in the next two sections.

Funding the Scale-Up

A crucial element of scaling is funding. And that funding should follow several principles to make sure providers and the approach are set up to succeed.

First, providers are unlikely to build out the infrastructure to scale if funding is unstable and unreliable. Next, consistent with the assertions we made previously, the funding has to be flexible to some extent to allow space for innovation (which is necessary with scaling) and give providers the room to be agile as the economy and workers' needs change. The enhanced flexibility of private funding (compared with public funding) may be one reason why some programs have succeeded where others have failed. Funders need to be flexible to enable nimbleness and agility because as programs scale, they will likely saturate subsectors and need to evolve their offerings.

Finally, funding also has to promote fidelity to avoid a situation in which any employment and training effort is classified as "sector" in name only. Funders will have to make progress on supporting validated measures of fidelity—their development and implementation. Yet at the same time, funders also need to ensure that their performance management systems don't encourage "cream skimming" and other perverse incentives. In particular, funders should be patient and not expect immediate results. The WorkAdvance study team estimated that it took providers who were new to sector strategies about two years to reach a steady-state level of implementation. For participants, it can also take one-and-a-half to two years to see earnings increases because of the time necessary to complete training, get placed in a job, and go through at least one annual review.[77]

One interesting approach to funding that is being tested in several studies, including the Google Career Certificates study[78] and the Pursuit Fellowship's study,[79] is to provide trainees with outcome-based loans. These loans often cover the cost of wraparound support services and are payable only if trainees are employed after training at jobs with earnings above a certain threshold. (In the Google Career Certificates study, the threshold is currently $40,000 per year.) While some have raised concerns about the possibility of these approaches leading to debt, it is an interesting model that we'll learn more about in the coming years.[80] The benefits of this approach would be sustainable funding and better alignment of incentives because providers directly benefit from student success.

Another possible vehicle to fund part of the scaling of sector programs is expanding Pell Grants to cover the short-term trainings typically offered by sector programs—an approach that Congress is considering. Pell Grants could provide a much-needed infusion of support to take sector trainings to a larger scale by increasing enrollment.[81] It could also prevent learners from having to take out loans or pay out of pocket for the training. If this approach is ultimately adopted, it is equally crucial to ensure the trainings for which these grants are used are demand driven and in sectors and occupations that offer higher wages.[82]

Ensuring Quality as Programs Scale: A Need for Manualization

As mentioned above, not every program that calls itself sectoral has all the elements that have led to the exciting economic gains measured in true sector programs. A key priority for the field is to write down what true and faithful sector programs do in more detail. We then must come up with specific measures and create a curriculum. This approach, more common in fields such as health care, should become the norm in employment policy if we are to scale effectively.

The broad contours of the sectoral model are well understood (and described earlier), but new providers do not have enough detail to implement the model with fidelity. We can't train organizations on a model that is poorly defined. As Schaberg noted in a review of several sector programs, there is currently a great deal of variation:

> Most of the programs offered a similar set of services: job-readiness training (including soft or professional skills development), occupational skills training, and support services. Many programs also offered assistance with job searches or job placement, and some continued to offer services to participants after they found a job. How these services were offered, and their length and intensity, differed across programs.[83]

Several briefs have laid out some of the strategy's key elements.[84] An excellent example that highlights the features and qualities of strong sector programs is a brief by Richard Kazis and Frieda Molina in which they provide detailed advice on crucial sector elements, such as

- Picking the right sector,
- Recruiting the right candidates,
- Incorporating technical and work-readiness skills into training, and
- Hiring the right staff and training them with a dual-customer orientation.[85]

But briefs like this one, while helpful, do not codify a model or curriculum. For example, what does it mean to be employer driven? What is the right approach to screening? How do we balance the needs of job seekers and employers with a dual-customer perspective? What are some key performance indicators that can measure efficacy? What kinds of staff should be hired? From where should these staff be recruited? How should staff be evaluated? How should soft-skills instruction be sequenced and delivered?

Once materials are developed, a "train the trainer" strategy can be used. With a curriculum and validated fidelity measures, scaling will be done in a way that enables quality assurance. Otherwise, new providers will be flying blind. This work could build on past efforts, such as the Sector Skills Academy, led by the Aspen Institute Workforce Strategies Initiative, that have trained leaders in the sector employment development field.[86]

Some efforts are underway to help scale programs. A notable effort is being led by the American Institutes for Research's PROMISE Center. In this effort—Expanding the Scale and Reach of Effective Sectoral Training Programs—the American Institutes for Research is partnering with two effective sector programs (Per Scholas and Year Up) to identify the elements and best practices that make the programs successful and provide technical assistance and research support to strengthen and scale the programs. The partnership with Per Scholas is exploring how training can be offered virtually while still being effective, while the partnership with Year Up is developing reliable and valid skill assessments as they scale their program to reach more young people.[87] Any new efforts should build on prior and existing efforts already underway to ensure that field building happens through collaboration with providers and researchers "rowing in the same direction."

Conclusion

This report focused on a key policy priority: scaling sector programs. As noted at the beginning, a confluence of economic forces and trends makes this the ideal time to scale sector programs. This moment represents an unprecedented opportunity to improve economic mobility for thousands of Americans stuck in bad jobs and for employers and the economy at large. While the US economy and labor market are incredibly efficient, better coordination between training providers, employers, and local economic-development professionals can spur further growth and reduce the deep inequities that beset rural residents and people of color.

While this report's focus is on how to push the sectoral scaling agenda forward, it is also important to acknowledge what has already been accomplished. Twenty years ago, we lacked good models for increasing earnings. Most programs got people into work but did not affect earnings or wage levels. Now, we have a proven model that works. That represents significant progress. To have further progress, we need to reduce the model to its crucial elements and document precisely the model's features and requirements.

We must also acknowledge that sector programs are not the only tool in our antipoverty toolbox. We also can access technical colleges, career academies, conditional cash transfers, income supports, microloans, transitional jobs, and apprenticeships. While sector programs are a relatively small part of the overall job training and workforce development infrastructure, few other types of training can boast their achievements in expanding employment and earnings outcomes. They deserve our attention and support as we seek to improve access to opportunity for disadvantaged individuals and communities.

About the Authors

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Notes

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>
> 1. Intensive screening of program applicants for motivation and readiness
> 2. Sector-appropriate preemployment and career readiness services, including orientation to the sector and career advancement coaching
> 3. Sector-specific occupational skills training aligned with employer needs and leading to certifications that are in demand in the regional labor market
> 4. Sector-specific job development and placement services based on strong relationships with employers
> 5. Postemployment retention and advancement services, including ongoing contact, coaching, skills training, and rapid reemployment help if needed.

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