

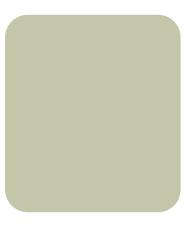
Bridging the Opportunity Divide for Low-Income Youth: Implementation and Early Impacts of the Year Up Program



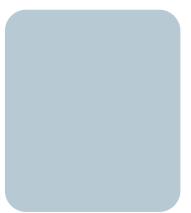


May 2018





OPRE Report #2018-65







Bridging the Opportunity Divide for Low-Income Youth: Implementation and Early Impacts of the Year Up Program

Pathways for Advancing Careers and Education (PACE)

OPRE Report #2018-65

May 2018

David Fein and Jill Hamadyk, Abt Associates

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Overview

This report documents the implementation and early impacts of Year Up—a national sectoral training program for urban young adults aged 18-24. Operated by an organization of the same name, Year Up provides six months of full-time training in the IT and financial service sectors followed by six-month internships at major firms. The full-time program provides extensive supports—including weekly stipends—and puts a heavy emphasis on the development of professional and technical skills.

Year Up is one of nine programs in the federally sponsored Pathways for Advancing Careers and Education (PACE) evaluation. It is among the most intensive workforce training programs tested to date. More than half (59 percent) of the program's \$28,290 per-participant cost is funded by employer payments for interns.

Using a random assignment design, the study found that Year Up increased receipt of employment and training services. Compared to control group members who were not able to access the program, treatment group members were more likely to report that their classes used active learning methods, taught life skills, and were relevant to their lives and careers. Most importantly, young adults with access to Year Up had higher average quarterly earnings in the sixth and seventh quarters after random assignment—the confirmatory outcome selected to gauge Year Up's overall success for this report. Persisting over a three-year follow-up period, Year Up's earnings impacts are the largest reported to date for workforce programs tested using a random assignment design.

Primary Research Questions

The Year Up evaluation addresses three main questions:

- Was the Year Up program model implemented as designed across the program's eight offices?
- How did employment, training, and related service experiences differ between young adults randomly selected to participate in Year Up (the treatment group) and those who could not access the program (the control group)?
- What were the effects of access to Year Up on earnings, career-track employment, postsecondary education, and related outcomes? How did these effects vary across subgroups and across the eight local offices?

Purpose

As opportunities for college graduates have grown in recent decades, prospects for young adults without postsecondary credentials have steadily worsened. With few chances at well-paying jobs, millions give up on school and withdraw from the labor force, often leading to long-term disconnection and life-long disadvantages. The societal costs of disconnection are high, including higher rates of crime, substance abuse, and intergenerational poverty; diminished tax revenues; and the loss to employers of millions of workers who otherwise could help to close skills gaps in growing industries.

The PACE evaluation of Year Up provides an opportunity to build on promising evidence for other well-implemented career pathways approaches with a strong sectoral focus. It assesses the possibility that more intensive and comprehensive interventions—addressing both general and occupation-specific skills, using work-based learning, and fully engaging employers—will prove more effective than lower-intensity programs studied in the past.

Key Findings and Highlights

Highlights from the implementation and early impact findings include:

- Year Up implemented its program with high fidelity to its design. Site visits to four of Year Up's eight local offices found all major program components implemented and functioning well. Quantitative indicators attest to strong implementation on outcomes such as recruitment, retention, internship slots, and post-program employment. Although generally high, outcomes varied somewhat across offices.
- Year Up had positive effects on the scope and nature of services received by its students. More than half (57 percent) of control group members pursued training, mostly at community colleges. However, nearly all treatment group members (96 percent) participated in Year Up, and they were far more likely to cite promising instructional approaches; take courses in life skills; accrue related work experience; and receive an array of support services.
- Effects on earnings were consistently large and positive. This finding applies to the overall sample, to all participant subgroups analyzed, and to all eight Year Up local offices. Year Up increased average quarterly earnings by \$1,895 (53 percent) in the sixth and seventh quarters after random assignment—the pre-specified confirmatory outcome for this analysis. Large positive effects persisted through the third follow-up year. Impacts also were positive for an array of other indicators of early career progress, although effects on college persistence were mixed.

Methods

The Year Up evaluation includes implementation and impact studies. The implementation study uses data from the program's management information system; interviews with local staff, participants, and other stakeholders; an 18-month participant follow-up survey; and other sources. For the impact study, Year Up offices in all eight metropolitan areas recruited, screened, and randomly assigned a total of 2,544 young adults to treatment (1,669) and control (875) groups in 2013-2014. The evaluation team measured outcomes using data from employer-reported wage data maintained in the federal National Directory of New Hires, college enrollment records from the National Student Clearinghouse, and the 18-month follow-up survey.

Prior to estimating Year Up's impacts, the research team published an analysis plan specifying key hypotheses and outcome measures and registered those outcomes. An essential principle in the analysis plan was to organize and discipline the number of statistical tests conducted to avoid the problem of "multiple comparisons," whereby a potentially large number of tests could reach conventional levels of statistical significance by chance, even if there were no effect on any outcome.

Executive Summary

As opportunities for college graduates have grown in recent decades, prospects for young adults without postsecondary credentials have steadily worsened. With few chances at well-paying jobs, many give up on school and withdraw from the labor force. Short spells of withdrawal often lead to long-term disconnection and life-long disadvantages. The societal costs are high: lack of opportunity is associated with higher rates of crime, substance abuse, health problems, single parenting, and economic dependency. Tax revenues are diminished, and employers are deprived of millions of workers needed to close skills gaps in growing industries.¹

This report provides encouraging evidence on the implementation and early impacts of Year Up—a national sectoral training program for urban young adults aged 18-24 with a high school diploma or equivalent. Operated by an organization of the same name, Year Up provides six months of full-time customized training in the IT and financial service sectors followed by sixmonth internships at major firms. The full-time program provides extensive supports—including weekly stipends—and puts a heavy emphasis on professional, as well as technical, skills. Employer payments to Year Up for interns financed 59 percent of the program's \$28,290 per participant cost. The program grew rapidly following its inception in Boston in 2000, increasing both in the number and size of local offices. During the study period—2013-2014—Year Up served over 3,500 young adults in eight metropolitan areas.

Year Up is one of nine programs Abt Associates is evaluating in the federally sponsored Pathways for Advancing Careers and Education (PACE) evaluation. Each of the nine evaluations includes implementation and impact studies. For the Year Up study, the evaluation team randomly assigned 2,544 young adults to treatment (1,669) and control (875) groups. This report covers the program's implementation and early impacts, with follow-up centering on 1.5 years and extending to 3 years for some outcomes. Future reports will examine program impacts for up to 6 years after program entry and include analyses of the program's costs and benefits.

Findings show that Year Up implemented its program with high fidelity to its design and substantially increased the training, support, and employment services young adults received. It had a large positive impact on the confirmatory outcome selected for this report—average quarterly earnings in the sixth and seventh quarters after random assignment. Average quarterly earnings were \$1,895 higher for the treatment group (\$5,454) than for the control group (\$3,559)—a 53 percent impact. Impacts diminished but remained large (about 40 percent) over the following year. As documented briefly in this summary and at more length in Chapter 1, these earnings impacts are the largest reported to date for workforce programs tested using a randomized controlled trial (RCT) design.

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See Chapter 1 for literature review and citations.

Program Overview

Gerald Chertavian founded Year Up in 2000 to serve economically disadvantaged urban young adults ages 18 to 24.² The program targets young adults with a high school diploma or equivalent who are motivated and who, with assistance, can overcome challenges and successfully enter careers in fast-growing technical occupations. Year Up and other advocates have labeled this population "Opportunity Youth" to emphasize the positive contributions they could make, given effective interventions.

Year Up's original model—which it calls the "core program"— is a free-standing program operating in eight urban areas: Atlanta, Boston, Chicago, New York, Providence, the San Francisco-San Jose Bay Area, Seattle, and Washington DC. Abt Associates is evaluating the core program in all eight locations for PACE.³

The program teaches students high demand technical and professional skills, connects them with employers, and provides college credits via agreements with local college partners. A national team headquartered in Boston provides operations assistance (e.g., human resources, marketing, and accounting); facilitates cross-site knowledge building; and provides oversight and troubleshooting of local implementation.

Payments from employers for interns cover 59 percent of Year Up's costs. Nearly all of the balance (39 percent) of revenue comes from foundations and other private-sector donors, and only two percent is from public agencies.

Recruiting from the general community, the program enrolls participants twice (in March and September) each year. During the first six months of the program—the "Learning and

Development (L&D) Phase"—students attend courses at Year Up full-time. Training addresses both occupation-specific and general skills. The focus of technical training varies by office and cohort. Fields include information technology (IT, the most common emphasis), business operations, financial operations, software development, and sales and customer support. General skills courses focus on professional and business communications skills. Students gain experience in writing, giving

"Year Up provides a very consistent structure. ... [I]t's not loose. You know what to expect: [the hours are] 8:30-3:30, your stipend is this, and [there is] a particular routine. Some of our young people are coming from environments where there was never a routine: you could show up at high school or not show up, do whatever you want to do. But Year Up creates a culture similar to the culture we are trying to have them assimilate in."

—Year Up staff member

presentations, interacting with clients and colleagues, and developing critical thinking skills. Year Up sites work with local partner colleges so that students can earn college credit for their participation in Year Up.

See Chertavian (2012) on Year Up's founding and development.

Since launching the PACE evaluation, Year Up also has launched pilots of an adaptation of the core program for college settings—the Professional Training Corps (PTC)—aimed at reducing costs and enhancing scalability. Abt Associates is collaborating with researchers at the University of Pennsylvania and Year Up on a separate evaluation of PTC.

Year Up's "high support, high expectations" model provides extensive services and sets high

standards for professional behavior. Each incoming cohort of young adults is organized into groups of about 40 students and staff called "learning communities" to foster supportive social connections. All participants receive advising from Year Up staff members, and every staff member is expected to serve as a student advisor/coach in addition to other duties. Participants also receive mentoring from outside professionals working in

"The main thing was that I could be part of something, not so alone. [It] gave me the sense I could be part of something again...."

—Year Up participant

related occupations. Each local office maintains a team of social workers who provide direct services and referrals to help students address varied life challenges. Students receive weekly stipends (typically \$150 during the first half and \$220 during the second half of the program) to help cover transportation and other program-related expenses. Students sign a formal contract specifying standards for professional behavior. Infractions trigger stipend reductions and can lead to dismissal from the program. The program teaches techniques for constructively giving and receiving feedback. It hones these skills in "Friday feedback" sessions and encourages practice throughout the week.

In the second half of the year—the "Internship Phase"—students intern at local firms, often Fortune 500 companies. Students work at their internship sites full-time for four-and-a-half days a week. Students return to Year Up each week for a half-day skills workshop during which they share their internship experiences and plan for education and careers after graduation from the program. Towards the end of internships, the emphasis on job search and placement intensifies. Active efforts to support job search and placement continue for up to four months after graduation.

"[My internship] is exciting—I like it. I've learned a lot. ... I hardly knew about SharePoint. Right now, I could say I'm the goto gal. My manager, she's pretty impressed that I caught on so quickly. I've been practicing every day. If [my manager] wants to change something, I have to figure it out. I'll just Google it and do it."

—Year Up participant

Evaluation Design

To implement the impact study's random assignment design, staff in Year Up's eight⁴ core offices recruited, screened, and randomly assigned a total of 2,544 young adults to treatment (1,669) and control (875) groups at a 2:1 ratio in 2013-2014. The design generated a treatment group sufficient to fill all seats in each office over two recruiting cycles.

Year Up staff actively engaged treatment group members to encourage follow-through on enrollment, and virtually all (96 percent) did enroll. Control group members were subject to a three-year embargo on Year Up participation but could receive other training and supports in the community. An analysis of baseline data shows that the treatment and control groups were statistically indistinguishable on an array of demographic, economic, and psycho-social characteristics (e.g., motivation, self-confidence, and social support). The career pathways

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Although Year Up has two offices in the Northern California Bay Area—in San Francisco and San Jose—key operations are jointly administered, and the program typically groups the two offices as a single location in performance measures.

framework developed for PACE (Fein 2012) and Year Up's theory of change guided the evaluation team in selecting key research questions and outcome variables.

The impact study draws on three data sources: (1) employer-reported Unemployment Insurance wage data maintained in the federal National Directory of New Hires (NDNH), (2) college enrollment records from the National Student Clearinghouse (NSC), and (3) an 18-month follow-up survey. Survey response rates were 78 and 73 percent for treatment and control group members, respectively.

For the implementation study, the PACE team conducted interviews and observations at four local Year Up offices and at the program's national office in Boston. Fieldwork also included indepth interviews with 19 treatment and 13 control group members and with employer and college partners. Quantitative analyses of implementation draw on extracts from Year Up's management information system, a survey of local Year Up staff, and the 18-month follow-up survey.

Implementation Findings

Results from field research and quantitative analyses of program data show that the eight local Year Up offices fully implemented all program components and generated strong results on a series of implementation indicators. This is a substantial achievement given the number and complexity of program elements, varying local environments, and the need for tight coordination across many services.

 Year Up achieved high levels on measures of implementation for recruitment, retention, internships, revenue, and post-program employment. It earned high praise from employers.

All offices met the study's requirement for expanding recruitment by 50 percent for PACE. They did so while maintaining applicant quality, admitting only one in six applicants as in the past. Nearly all (96 percent) treatment group members actually enrolled in training (Exhibit ES-1). Retention was high: 75 percent of the treatment group (78 percent of those enrolling) completed the program. Staff diligently enforced Year Up's contract: 96 percent of enrollees received at least one infraction, and 45 percent received 10 or more infractions.

The program placed 99 percent of L&D completers in internships and generated \$22,404 in revenue from employers for the average intern. Averaged across all participants (including those dropping out before internships), this revenue financed 59 percent of the program's \$28,290 per participant cost. Foundations and private donors provided the vast majority of the balance, and only two percent of operating funds came from public agencies.

"I like [the contract]. I think it holds every student accountable. If they didn't have it, everybody'd be doing what they wanted. I don't think that would be fair. Now that we're on internship, we're dressed professional because of Year Up ... not using slang, getting to work on time, actually turning our work in on time too."

—Year Up participant

Four months after graduation, 83 percent of graduates were employed. Of those working, 89 percent were employed full-time, 88 percent were in an occupation relevant to their Year Up's training, 41 percent had jobs with their internship sponsors, and 77 percent were earning \$15 per hour or more.

Full-time: 89%

In targeted occupation: 88%

At internship sponsors: 41% For \$15+/hour: 77%

(Average wage: \$17.41/hour)

ASSIGNMENT TO YEAR UP: 100% Percent of enrollees who received contract penalty DID NOT ENROLL IN **ENROLLED IN PROGRAM:** PROGRAM: 96% 1+ infraction: 96% 4% 10+ infractions: 45% COMPLETED LEARNING & **DEVELOPMENT PHASE: 81%** (85% OF ENROLLEES) **COMPLETED INTERNSHIP &** GRADUATED: **75%** (78% OF ENROLLEES) Percent of employed alumni working

EMPLOYED AT 4-MONTH YEAR UP FOLLOW-UP:

62% (83% OF GRADUATES)

Exhibit ES-1: Progress through Year Up by Treatment Group Members

Abt Associates Executive Summary pg. ES-v

Employers' perceptions of Year Up interns were highly favorable. Several employers noted that experience with Year Up interns had led them to revamp career pathways in skilled technical occupations to create new career entry points at lower levels. One large firm heavily re-oriented its entry-level hiring practices to recruit sub-baccalaureate-level interns. For another, creating

"[At Year Up] they get all the right skills ... especially customer service and professionalism. ... Year Up interns hold their own and get hired over the stereotypical college graduate from a stable home. Those [college] kids don't know how to interact with a manager. They don't know how to make small talk in an elevator or with a director. They don't know how to write a professional email that doesn't use text abbreviations, but the Year Up interns do."

"The Year Up kids ran circles around the 45-year-old professionals. They did everything we asked them to. They did it with a smile. They did it confidently."

"They're eager and excited. They want to learn and engage. It helps with our employees as well, keeping up the morale."

—Internship employers

assignments for interns stimulated the realization that a substantial layer of tasks currently handled by mid-level employees could be performed by Year Up graduates.

 Treatment group members reported experiencing promising instructional practices more often at Year Up than control group members experienced at other training providers.

Virtually all treatment group members participated in Year Up, and over half of control group members received education and training from other providers—mostly community colleges. In the 18-month survey, treatment group members were more likely than control group members who pursued training elsewhere to say that the instruction they received included practices seen as promising in the workforce field. As shown in Exhibit ES-2, Year Up participants were

more likely to say that their classes mostly involved project- and group-based work and less likely to say that classes mostly involved lectures. The former also were more likely than the latter to indicate that their classes stressed active learning methods (e.g., discussion and projects), and that classes were relevant to important life pursuits. More students in the treatment group reported

"There's more interaction than lecture. You can talk more, be more communicative ... it's easier interacting with other students. I [also liked] that it was more hands on."

—Year Up participant

taking courses specifically focused on life skills than did students in the control group.

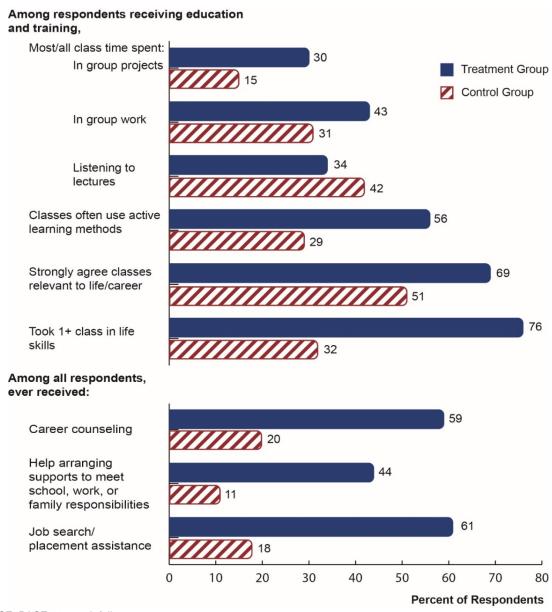
More treatment than control group students said they received supports while in education and training. Year Up students were nine percentage points more likely than control group students to receive academic advising, 18 percentage points more likely to receive tutoring, and nine percentage points more likely to receive financial aid advising (not shown in exhibit). Year Up participants were 13 percentage points more likely to cite receipt of grants or scholarships and 22 percentage points less likely to take out loans than control group members at other schools.

Year Up increased receipt of key career supports.

The 18-month follow-up survey also measured receipt of selected services from any source for all sample members, including those not enrolling in school. The bottom panel in Exhibit ES-2 summarizes these impacts. Year Up increased the likelihood of receiving career counseling by

39 percentage points; supports for meeting school, work, or family responsibilities by 33 points; and job search and placement assistance by 43 points.

Exhibit ES-2: Education and Training Experiences and Receipt of Supports after Random Assignment



SOURCE: PACE 18-month follow-up survey.

NOTES: All treatment-control differences are statistically significant at the 1-percent level (two-tailed tests). Statistics in the top panel apply to the subset of survey respondents attending education and training since random assignment (1,035 treatment, 367 control) and are not regression-adjusted. Statistics in the bottom panel apply to the full survey sample (1,301 treatment, 638 control) and are regression-adjusted.

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• Year Up's national team used varied strategies to maintain fidelity to the program model following a period of rapid growth.

The PACE years (2013–2014) followed a period of rapid growth in the number and size of local Year Up offices (see Fein 2016a). This growth brought increased variation in local approaches to key program strategies. It was not always easy for program leaders to distinguish positive adaptations to local conditions from less productive departures from the program model. Rapid growth also heightened the challenge of knitting together increasingly specialized staff members.

One strategy Year Up's leaders used to maintain model fidelity was promoting alignment on the program's mission—closing the "Opportunity Divide" for urban young adults. They fostered such alignment through continuous engagement with staff, participants, and other stakeholders (e.g., employers, college partners, and funders) in discussions of the program's core values (see box).

Fieldwork conducted during the PACE study found many instances of staff and students consciously trying to connect these values to their daily activities. For example, "strive to learn" is one core Year

Year Up's Core Values

- Respect and value others
- Build trust, be honest
- Engage and embrace diversity
- Be accountable
- Strive to learn
- Work hard and have fun

Up value. Intentional efforts to apply this value led students to take responsibility for their studies, local staff to put energy into improving services, national staff to create program-wide mechanisms for continuous improvement, and all to give and accept constructive feedback.

Another salient facet of Year Up's culture is the unusual degree to which business values, language, and tools are incorporated throughout the program.

Leaders also used the program's performance measurement system—FM-RADIO—to promote alignment on common goals across different offices and a diverse staff. ⁵ This tool provided a way to monitor and troubleshoot varying approaches to services while encouraging innovative adaptation to local conditions. Its measures of multiple outcomes

"One thing that I really, really like about Year Up is the way they do feedback. ... I have never had feedback that way. They focus on your strengths and commend you for what you did right and your strong points. Then they say, 'With that in mind, I would encourage you to do this.' See? So it's not saying, 'But you do this all wrong.' They say it in a way that's going to encourage somebody to keep that growth area in mind. I like that a lot."

—Year Up participant

also helped to promote awareness of the relationships between work performed by different staff specialties—highlighting, for example, the connections between admissions screening, L&D retention, and internship revenue.

Another integrative element of Year Up's culture is its deliberate cultivation of a strong business ethos. Fieldwork for PACE found pervasive evidence of such an ethos—as exemplified

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The FM-RADIO dashboard tracks outcomes for local offices on key indicators for: Financial Management (revenue covers costs), Retention, Admissions (recruitment), Development (fundraising), Internship sales, and positive Outcomes. During PACE, for example, local offices had to meet a 75-percent overall retention standard, secure internships for all L&D completers, and ensure that 85 percent of graduates were working full-time in Year Up target occupations for at least \$15/hour and/or enrolled in post-secondary education at the four-month post-graduation time point.

in the energetic, entrepreneurial approach of its staff and the infusion of business language, concepts and tools throughout daily activities. Interviews with students, staff, and employers suggested that this aspect of the culture helps to motivate students to work hard and connect well with Year Up's employer partners.

Finally, national leaders took steps to promote consistency by standardizing some services and shifting authority to the national level. The 2013–2014 period brought initiatives to standardize key admissions processes, centralize curriculum planning, and foster a "customer solutions" approach to corporate relations aimed at expanding the number of interns large employers were willing to host.

Year Up's Early Impacts

This section summarizes Year Up's early impacts on earnings, employment, and postsecondary education. It also discusses findings on impacts for subgroups and local Year Up offices. The analysis estimates impacts for each outcome by calculating the difference between average values in the treatment and control groups.

 Year Up generated a large, statistically significant increase in average earnings in the sixth and seventh quarters following random assignment (the confirmatory outcome).

The study's confirmatory hypothesis was that Year Up would increase quarterly earnings averaged across the sixth and seventh quarters after random assignment. The evaluation team chose this period to confirm short-term success because these quarters immediate follow Year Up's four-month post-graduation employment services. Measures of average earnings include sample members who did not work (and thus had zero earnings) during each quarter.

Year Up produced a statistically significant \$1,895 (53 percent) positive impact on average quarterly earnings, which were \$5,454 and \$3,559 for treatment and control group members, respectively. This estimated impact, based on employment records in the NDNH, is very close to independent estimates from the 18-month follow-up survey.

Exhibit ES-3 shows impacts for individual calendar quarters extending for three years after random assignment. It shows that large positive impacts persisted through the end of the third year. Overall impacts are \$5,181 in Year 2 (a 39-percent impact) and \$7,011 in the Year 3 (a 40-percent impact). By comparison, impacts for the most effective workforce programs rigorously tested to date have been smaller.⁶

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For example, the Sectoral Employment Impact Study (SEIS) reported some of the largest earnings impacts to date—\$4,001 (29 percent)—for a pooled sample of adults in three sectoral programs in the second follow-up year (Maguire et al. 2010). The SEIS estimate for 18–24-year olds was \$3,092. Among the three programs tested, Per Scholas, an IT-focused program with some similarity to Year Up, generated the largest impact for adults of all ages—\$4,663 (32 percent)—but had only a small (\$1,339) and statistically insignificant impact for young adults. A recent replication also found substantial, if somewhat smaller, overall Year 2 impacts for Per Scholas but did not provide separate estimates for young adults (Hendra et al. 2016, Schaberg 2017). Although Project QUEST, a health care-focused sectoral program, increased earnings by \$5,080 (22 percent) in Year Six for a general sample of adults, impacts for young adults were statistically insignificant and negative in sign (Elliot and Roder 2017).

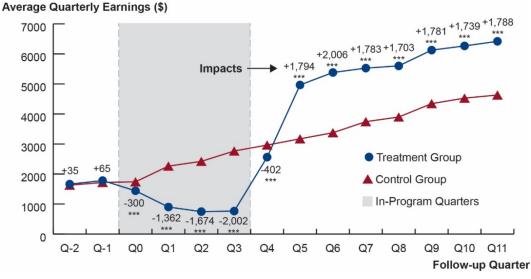


Exhibit ES-3: Impact on Average Earnings in Successive Follow-up Quarters

SOURCE: Match to wage records in the National Directory of New Hires for 1,638 treatment and 858 control group members. NOTES: Impacts appear as numbers giving differences in average earnings for treatment and control group members in each follow-up quarter. *** Impact in a two-tailed test is statistically significant at the 1-percent level, ** at the 5-percent level, * at the 10-percent level.

Training programs typically produce negative earnings impacts in the first follow-up year (the program year), as participants prioritize training over work. Year Up was no exception, with a \$5,338 reduction in the first follow-up year. The Year 1 loss was more than offset by positive impacts totaling \$12,192 over the next two years, however. Moreover, in Year 1 treatment group members also received an average of \$7,172 in Year Up stipend payments not included in the estimated earnings impacts.

• Survey data indicate that Year Up's impacts on earnings reflect increases in average hourly wages and hours worked rather than increases in the percent employed.

Although employment rates were identical (at 74 percent) for the control and treatment groups in the 18-month follow-up survey, Year Up increased the total hours worked by an average of 3–4 hours per week relative to control group members (who worked about 24 hours per week on average). Employed treatment group members earned nearly \$4 per hour more than employed control group members and were substantially more likely to be working in information technology (37 versus four percent) and in business and financial occupations (23 versus 14 percent).

Higher earnings contributed to improved financial circumstances: Year Up reduced the percent of individuals citing financial hardships in the past 12 months from 43 percent to 35 percent.

Impacts on postsecondary education were mixed.

Provisions to co-enroll Year Up participants at local colleges led to a doubling in the proportion enrolled in college during the first follow-up year (see Exhibit ES-4). As Year Up graduates went to work in the second year, college enrollment in the treatment group fell to below that of the control group.

Not shown in exhibit.

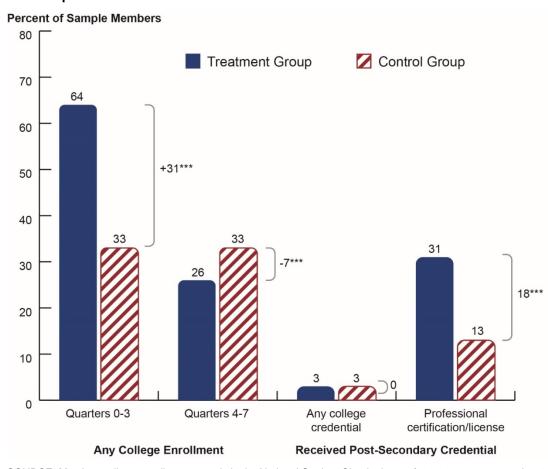


Exhibit ES-4: Impacts on College Enrollment and Postsecondary Credentials over the First Two Follow-up Years

SOURCE: Match to college enrollment records in the National Student Clearinghouse for 1,668 treatment and 871 control group members. Credential receipt as reported in the PACE 18-month follow-up survey for 1,301 treatment and 638 control group members.

NOTES: *** Statistically significant in a two-tailed test at the 1-percent level.

Year Up produced a small increase in the average number of credits earned (4.0 credits) in the first 18 months after entering the program (not shown in exhibit). There was no impact on receipt of college credentials: only three percent of individuals in either group reported receiving a college credential since random assignment. On the other hand, Year Up increased receipt of industry certifications and licenses by 18 percentage points.

 Year Up increased earnings for every subgroup of participants examined and for all eight local Year Up offices. The size of impacts nonetheless varied for a number of characteristics.

Impacts on quarterly earnings in Quarters 6–7 were at least \$1,000 and statistically significant in every subgroup across 11 characteristics examined. The size of effects varied substantially, however. Impacts were lower for participants who reported weaker high school performance and those who at study intake expected to work full time over the next few months. Such results suggest possible benefits from strengthened academic supports and help minimizing challenges arising from outside work during the program. Smaller earnings gains for African

Americans may signal that the well-documented disadvantages facing this group—including greater discrimination and social and economic challenges—also require greater effort to overcome (National Research Council 2014).

Although motivation would seem to be critical to succeeding in Year Up, impacts were *more* favorable for participants who rated *lower* on training commitment than for those who rated in the highest category on a 10-item commitment scale. It suggests that the most motivated recruits were in a somewhat better position to succeed without Year Up—though they still did benefit from the program. The finding also raises the possibility that Year Up may be effective for less motivated young adults than the program historically has targeted. It hints that low motivation may be malleable for some young adults, given sufficient time in a highly structured and supportive program.

Positive impacts in all eight local offices attest to Year Up's replicability in different urban environments. That said, the size of impacts varied substantially across offices. This variation might arise from differences in local environments, the quality of implementation, or both. Considerable differences in average control group earnings across offices indicate that contextual factors—such as local population characteristics, labor markets, and access to transportation—could play an important role. But indications also suggest variability in implementation. With only eight offices and many dimensions to context and implementation, it is not possible to identify contributing factors with confidence.

Implications

This report's findings add to growing evidence on the promise of well-implemented career pathways approaches with a strong sectoral focus. These approaches tend to be intensive and comprehensive, address psycho-social skills as well as occupation-specific competencies, provide opportunities for work-based learning, engage employers, incorporate evidence-based practices, and emphasize continuous improvement.

The PACE findings should allay concerns that programs like Year Up that screen for ability, motivation, and manageable life challenges necessarily are serving young adults who would do just as well without such interventions. Baseline statistics show substantial socioeconomic disadvantages in the young adults Year Up recruited, and the study's random assignment design establishes that they truly benefitted from the program's services.

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The PACE Training Commitment scale is based on ACT Inc.'s proprietary Commitment to College scale, modified in consultation with ACT staff to apply to training more broadly. The scale captures commitment to persisting in and completing training. Illustrative items, rated on a 7-point scale ranging from strongly disagree to strongly agree, include: "I am committed to finishing whatever educational program I am in" and "I would stop attending school if I found something more interesting to do."

For example, program completion rates ranged from 64 percent in one office to 85 percent in two offices, with the remainder in the 75–79 percent range. While for six offices 30–39 percent of interns were hired by their internship sponsors, outliers included one office with a 21 percent conversion rate and another with a 52 percent rate. Contract enforcement was especially variable, with the percent cited for 10 or more fractions ranging from 21 percent to 60 percent.

Stringent screening does raise the important question of whether Year Up is appropriate for more than a narrow segment of Opportunity Youth. This study's findings of large positive impacts for participants with weaker academic backgrounds, lower motivation, lower incomes, and a wide variety of demographic characteristics hint that the program might be effective with lower-skilled, more disadvantaged populations. But they do not prove

"I could say that I've really grown ... that's what I mean by it changed my life. A year ago I wasn't thinking about nothing like this or being in contact with the people I'm in contact with or doing the things I'm doing. I feel like it's changing how I look at people now, how I look at situations."

—Year Up participant

that it would be more widely effective or establish how far beyond the current population wider benefits might extend. Future experiments testing the model with expanded target populations would be valuable.

Year Up's success in engaging employers demonstrates the potential for not only expanding opportunities for work-based learning in fast-growing professional occupations, but also for mobilizing privatesector financing of organizations that serve as intermediaries between newly skilled job seekers and employers. Thus, while exemplifying more familiar forms of engagement such as appointing business representatives to advisory boards and working together in identifying skills in demand and designing training programs, Year Up's experience also highlights the potential for employers to play central roles also in funding and service delivery in

"There are so many elements to the program that I feel honestly that if you were to remove one piece you'd have a different ... it's like when you made the best strawberry upside down cake, and then you take a little bit of sugar out, and you're like, 'Damn, this doesn't taste the same,' So the mission-driven staff is one main piece. The programming pieces are great, but you need real people that care enough to do these programming pieces well, and I think it's really the staff that it boils down to. And you really, essentially need the internships. ... It's really that end piece, the internship experience, the job, that says, 'Okay, this is what you would've done.' And having internship partners that believe in the model. ... [Employers] have to believe that we can provide them fantastic interns that can do the job, and we have to provide them fantastic interns that can do the job."

—Year Up staff member

workforce programs for economically disadvantaged adults.

As noted earlier, several employers noted that experience with Year Up interns led them to revamp career pathways in technical occupations to create new career entry points at lower skill levels. Although anecdotal, such reports show how employers can become comfortable substituting a trusted workforce intermediary's "brand" for academic credentials in hiring.

Looking Ahead

While answering one set of questions about Year Up's implementation and early impacts, this report raises many questions for future research. Future data collection and analysis for the PACE evaluation will address some of these questions, whereas others will require separate studies.

One series of questions for the ongoing PACE evaluation concerns how Year Up's impacts will evolve over the longer-term:

- Do impacts on earnings persist or fade?
- To what extent do the program's positive initial impacts on employment in entry-level career-track jobs position young adults to continue along career pathways in occupations Year Up targets?
- What role does college play in these pathways, compared to young adults who did not go to Year Up? At what rates do Year Up graduates return to school and earn college credentials in the longer-term?
- To what degree does career progress affect well-being in other domains?

Future reports on program impacts covering up to six years of follow-up will address these and other questions.

Another important set of questions concerns Year Up's costs and benefits. A planned cost-benefit study will estimate the net financial returns from the perspectives of participants, government, the balance of society, and society as a whole (i.e., summing the first three). Positive earnings impacts and unique features of Year Up's financial model raise interesting questions about longer-term costs and benefits. Although Year Up's costs per participant are relatively high, revenue from employers covers a substantial share of costs, and dependence on public funds is minimal. From participants' perspective, foregone earnings during the program year are more than offset by program stipends. The potential societal benefits are considerable: one set of simulations for the general U.S. population shows economic returns from averting disconnection of around \$600,000 per youth (Belfield et al. 2012).

In describing plans for Year Up, leaders emphasized that substantially expanding the program is the main priority going forward. Having demonstrated the effectiveness of the core program model, the organization has launched several initiatives to develop and test more scalable approaches (Fein 2016a).

As part of these efforts, Year Up is exploring how an increased emphasis on college completion might help to ensure continuing career advancement after participants finish the program. The present study's finding of negative impacts on college enrollment after graduating Year Up attests to the difficulty of combining full-time work and school. A newer Year Up model—the Professional Training Corps, which leverages college facilities and instructional capacity—provides a fertile field for exploring the tradeoffs. It creates intriguing possibilities for moving from two-partner sectoral models focused on career entry to three-partner models that add colleges to support further movement in career pathways.

1. Introduction

As opportunities for young adults with college degrees have grown in recent decades, prospects for those without postsecondary credentials have steadily worsened. ¹⁰ With few chances at well-paying jobs, millions give up on school and withdraw from the labor force. Short spells of withdrawal often lead to long-term disconnection and life-long disadvantages. The societal costs of disconnection are high: lack of opportunity is associated with higher rates of crime, substance abuse, economic dependency, child abuse and neglect, and intergenerational poverty. Tax revenues are diminished, and employers are deprived of millions of workers needed to close skills gaps in growing industries.

A wide range of interventions have aimed to improve workforce outcomes for disadvantaged youth and adults. Randomized controlled trials (RCTs) typically have found at most small effects, and positive findings have been difficult to replicate. Short-term training for entry-level jobs in growing occupational sectors has produced some of the best results to date. These sectoral programs generally target low-income adults who have high school diplomas and screen for motivation and other factors related to ability to benefit.

This report provides evidence on the implementation and early impacts of Year Up, a sectoral training program for urban young adults ages 18-24 with a high school diploma or equivalent (Chertavian 2012). Operated by an organization of the same name, Year Up provides six months of full-time training in the information technology (IT) and financial service sectors followed by six-month internships at major companies. The program also provides extensive supports—including weekly stipends—and puts a heavy emphasis on professional, as well as technical, skills. Employer payments for interns finance 59 percent of the program's \$28,290 per participant cost. Year Up grew rapidly following its inception in Boston in 2000, increasing both in the number and size of local offices. In 2013-2014, the period that PACE cohorts participated in Year Up, the program served more than 3,500 young adults in eight urban areas around the country.

Abt Associates is evaluating Year Up as part of the Pathways for Advancing Careers and Education (PACE) evaluation. ¹¹ The evaluation includes both an implementation study to examine Year Up's design and operation and an impact study that uses a RCT design to estimate effects on earnings, employment, postsecondary training, and other outcomes. This report evaluates Year Up's implementation and impacts over a follow-up period of up to three years after random assignment. Future reports will extend follow-up for up to six years.

This chapter describes the PACE evaluation, reviews the research backdrop for Year Up, and outlines the report's remaining chapters.

The body of this chapter provides citations for this and the following paragraph.

For more information on the PACE study, go to www.acf.hhs.gov/opre/research/project/pathways-for-advancing-careers-and-education.

1.1 Pathways for Advancing Careers and Education (PACE) Evaluation

Funded by the Administration for Children and Families (ACF) within the U.S. Department of Health and Human Services, the PACE evaluation is a study of nine programs that include key features of a "career pathways framework." Initiated in 2007, PACE represents the first large-scale, multi-site experimental evaluation of career pathways programs.

The career pathways framework guides the development and operation of programs that aim to improve the occupational skills of low-income individuals—primarily nontraditional students—by increasing their entry into, persistence in, and completion of postsecondary training. Central to accomplishing these improved outcomes, the framework articulates signature strategies for overcoming the barriers that nontraditional, occupational students often face. For example, key features of programs within this career pathways framework include having a series of well-defined training steps, engaging instruction, supportive services, and connections to employment (Fein 2012).

Programs consistent with the career pathways framework typically have multiple

Programs in PACE

- Bridge to Employment in the Health Care Industry at San Diego Workforce Partnership, San Diego, CA
- Carreras en Salud at Instituto del Progreso Latino, Chicago, IL
- Health Careers for All at Workforce Development Council of Seattle-King County, Seattle, WA
- Pathways to Healthcare at Pima Community College, Tucson, AZ
- Patient Care Pathways Program at Madison College, Madison, WI
- Valley Initiative for Development and Advancement (VIDA), Lower Rio Grande Valley, TX
- Washington Integrated Basic Education and Skills
 Training (I-BEST) program at three colleges (Bellingham Technical College, Whatcom Community College and Everett Community College), Washington State
- Workforce Training Academy Connect at Des Moines Area Community College, Des Moines, IA
- Year Up (Atlanta, Bay Area, Boston, Chicago, National Capital Region, New York City, Providence, Seattle)

components. The multi-component nature of such programs reflects the reality that nontraditional students often face many barriers and need additional support to substantially improve their employment or other prospects. The career pathways framework is flexible, however, and not a specific program model. Thus, which components a local program adopts and how it implements them can vary greatly.

Reflecting this diversity, each of the nine programs in the PACE evaluation represents a different program model. All share some program components that are part of the career pathways framework, but each also has distinct and unique elements, reflecting the target populations, occupational trainings offered, and industries of focus. Because of this variation, PACE evaluates and reports findings for each evaluated program individually. 12

The central goal of the PACE evaluation is to determine the effectiveness of each of the nine programs using a common evaluation design and conceptual framework. The most critical element of the evaluation design is random assignment of eligible applicants either to a treatment group that can access the career pathways program or to a control group that

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All PACE-related reports can be found on www.career-pathways.org and www.career-pathways.org.

cannot. Random assignment ensures that the study's treatment and control groups will be equivalent in their observed and unobserved characteristics, and that any systematic differences in their subsequent outcomes (i.e., the program's impacts) can be attributed to the treatment group having access to program services. Systematic differences in outcomes due to the characteristics of individual members in each group can be ruled out.

Consistent with this career pathways framework and the theory of change guiding the PACE Year Up evaluation, as described in Chapter 3, impact analyses concentrate on employment and training outcomes, although the study also analyzes effects in other domains.

1.2 Challenges and Opportunities Facing Economically Disadvantaged Youth

Before examining Year Up's approach in detail (in Chapter 2), the remainder of this chapter describes the wider research backdrop to the present study. This section looks at statistics on economically disadvantaged youth and on the availability of jobs in the sectors programs like Year Up target.

Target Population. Year Up and other workforce organizations have framed the case for investing in young adults in terms of a need to close the "Opportunity Divide" for "Opportunity Youth." The concept of Opportunity Youth commonly refers to young adults who are disconnected from school and work. On the other side of the divide is unmet demand for workers with good soft skills and entry-level technical skills in fast-growing occupations.

One widely-cited figure for Opportunity Youth is Belfield *et al.*'s (2012) estimate of 6.7 million 16- to 24-year-olds (17.3 percent of this age group) who spent little or no time in school or work in the prior year. Of this number, Belfield et al. estimate that about half (3.3 million) had some periods of school and work between ages 16 and 24. They suggest that this "underconnected" half of the population offers better prospects for education and training-focused interventions than do the "chronically disconnected" half.

A growing body of evidence attests to the economic disadvantages facing youth lacking post-secondary credentials. One recent analysis estimated that, compared with young adults with no more than a high school credential, college graduates' earnings were 34 percent higher in 1980, 57 percent higher in 1990, 71 percent higher in 2000, and 78 percent higher in 2015 (Valletta 2016). Among 18- to 24-year-olds in 2013 with only a high school credential, some 30 percent were neither working nor in school, compared to 13 and 9 percent, respectively, for those with an associate's or bachelor's degree (National Research Council 2014). Young adults without a college degree also experienced higher rates of unemployment during the Great Recession (ibid.).

Racial and ethnic minorities have faced greater barriers to post-secondary education and suffered greater economic disadvantages as a consequence. In 2013, some 24 percent of black and 21 percent of Hispanic young adults ages 18-24 were neither in school nor working, compared with 14 percent of non-Hispanic whites. Black and Hispanic young adults are much less likely to receive a bachelor's degree than their white counterparts and are more likely to attend college without receiving any kind of credential (Holzer and Dunlop 2013). Not surprisingly, the Great Recession hit young black men especially hard: 37 percent of those ages 20-24 were disconnected in 2010 (Dennett and Modestino 2013).

The implications of educational disadvantages extend to many other domains. Low earnings put young adults at high risk of poverty and associated ills, including poor health, higher crime, stressful living conditions, early and non-marital childbearing, and transmission of poverty to successive generations (National Research Council 2014).

Demand for Middle-Skilled Workers. Looking at projected demand for workers with some high school but less than a four-year degree in growing technical fields, Year Up and other workforce organizations see a "win-win" solution. By expanding investments in postsecondary education for disadvantaged adults, they have argued that society can expand opportunities while addressing skills shortages and fostering economic growth.

Economists have actively debated trends in supply and demand for sub-baccalaureate-level workers. Some analysts have emphasized a "hollowing" of job opportunities for middle-skilled workers, citing evidence of slower growth compared to lower- and higher-skilled occupations (e.g., Autor 2010). Historically, such jobs were concentrated in traditional manufacturing, construction and production sectors and required routine manual and cognitive skills. While acknowledging slower growth in middle-skill jobs, other economists have noted that the number of such jobs is nonetheless large and growing faster than the supply of new workers (Holzer 2010). They have pointed also to a large segment of rapidly-growing, skilled technical jobs within the middle—jobs requiring some postsecondary education, but not a four-year degree. Analysts variously have labeled these as "new middle-skill" or "skilled technical" occupations to distinguish them from traditional blue collar and office jobs (Holzer 2015, National Research Council 2017).

One recent study identified 272 growing occupations in which more than one-third of workers had some college but not a four-year degree (Modestino 2015). Jobs in the information technology (e.g., network administrator, computer support technician) and health care (e.g., technician and therapy specialties) sectors were prominent among these occupations. Overall, these occupations accounted for a third of all U.S. workers in 2012. The study forecasted a shortfall of 3.4 million workers in such occupations by 2022.

Such forecasts do not account for shifts in education requirements due to longer-term technological change and shorter-term business cycles. Though the former are difficult to project, recent evidence suggests how employers will respond to flux in economic conditions.

The Great Recession accelerated growth in vacancies requiring bachelor's degrees for jobs that had not previously required them—a phenomenon known as "up-skilling" (Holzer 2015). Analysts have attributed this surge to employers' increased ability in weak labor markets to hire college graduates without raising wages (Holzer 2015) and the convenience of relying on a bachelor's degree in lieu of direct screening for needed skills (Burning Glass 2014).

More recently, the evidence suggests that the reverse has occurred—so-called "down-skilling" as labor markets have tightened, putting upward pressure on wages. A recent analysis of 82.5 million online job postings found strong signs of such an effect: between 2010 and 2014, a one-percentage point reduction in the local unemployment rate was associated with a 0.27-percentage point reduction in the fraction of jobs requiring at least a bachelor's degree (Modestino et al. 2016). In surveys, large numbers of employers cite difficulties in finding

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workers with suitable technical and "soft" skills—particularly in growing sectors such as health care, information technology, and advanced manufacturing (Accenture et al. 2014).

The evidence thus suggests growth in skilled technical jobs accessible with a year or two of post-secondary training and willingness of employers to adjust position requirements in response to shifts in supply and demand. But employers' willingness to hire for skilled technical positions at this level will depend on their ability to find strong candidates at a reasonable cost.

That is the demand that Year Up and other organizations seek to activate in recruiting and training low-income youth and adults. The strong emphasis on the demand, as well as supply, side of the labor market is a shift from older employment and training programs. As summarized in the next section, the newer "sectoral" approaches are showing greater promise than past approaches.

1.3 Evaluating Year Up in the Context of Prior Random Assignment Studies

Earlier generations of workforce programs targeted a wide cross-section of disadvantaged youth and generally did not train for fast-growing technical occupations. Newer interventions target somewhat less disadvantaged segments of the low-income population and intensive training in high-demand occupational sectors.

As context for the Year Up evaluation, Section 1.3.1 traces findings from RCT evaluations of successive generations of workforce programs. Section 1.3.2 compares Year Up's approach with that of other promising sectoral training programs and summarizes findings from a small previous Year Up study.

1.3.1 Evidence on Other Workforce Programs for Young Adults

The earliest national programs providing short-term training and supports to economically disadvantaged youth populations were mostly unsuccessful. Findings for the Job Training and Partnership Act showing no positive impacts for out-of-school 16- to 21-year-olds (Bloom et al. 1997) prompted cuts in program funding for young adults. JOBSTART, a 13-site demonstration targeting high school dropouts aged 17-21 also found little impact on labor-market outcomes in all but one site (Cave et al. 1993). 13

A second set of demonstrations involved more intensive services and had more positive effects. The most successful of these programs, National Guard Youth Challenge, is a 22-week residential program for 16- to 18-year-old high school dropouts (Millenky et al. 2011). It provides education and training services within a disciplined, quasi-military environment and extends follow-up mentoring for 12 months after completion. In addition to positive impacts on GED receipt and postsecondary enrollment, a 10-site RCT found that Challenge increased earnings by \$2,266—a 20-percent effect—in the third year after random assignment (the first full post-program follow-up year).

Although this site—the Center on Employment and Training (CET) in San Jose—also proved effective in a demonstration targeting single parents (Zambrowski and Gordon 1993), the CET model proved difficult to replicate. A 12-site replication found little impact on employment and earnings for out-of-school 16- to 21-year-olds (Miller et al. 2005).

Job Corps, another residential program, also focuses on relatively disadvantaged 16- to 24-year-olds: about three-quarters of sample members in a nationwide evaluation were high school dropouts (Schochet et al. 2008). The program boosted receipt of GEDs and vocational certifications. It increased earnings by as much as 10 percent in the fourth follow-up year, with the largest effects for 20- to 24-year-olds. However, impacts faded over the next year or two.

A number of studies tested youth-focused programs emphasizing work experience. At the more intensive end, YouthBuild provides education and training mainly in construction and hands-on experience with home building in community service projects along with supports. It targets 16-to 24-year-old high school dropouts and screens for "mental toughness." YouthBuild produced modest increases in GED receipt and postsecondary enrollment but only small earnings impacts over an initial two-and-half-year follow-up period (Miller et al. 2016). Tests of two national community service programs for out-of-school 18- to 25-year-olds, which also involved light training and supports, found little (Jastrzab et al. 1996) or no (Price et al. 2011) positive labor-market impacts. A "light touch" program in New York City—the Young Adult Internship Program—provides paid internships lasting 10-12 weeks in varied sites to 16- to 24-year-olds who are neither in school nor working. Early findings show modest positive earnings impacts (\$182, a 13-percent increase) in the fourth follow-up quarter (Skemer et al. 2017).

The most promising evidence to date is for programs that target more advantaged low-income populations—generally motivated adults with high school credentials—and provide intensive short-term training and supports for skilled technical jobs in growing occupational sectors.

These "sectoral programs" focus on career-track employment in professional occupations such as health care, IT, business, and financial services, as well as more skill-intensive jobs in manufacturing and the trades (Conway & Giloth 2014, Maguire 2016). They take a "dual customer" approach, treating both employers and disadvantaged adults as clients. Sectoral programs aim to become a reliable and trusted source of qualified workers equipped with skills local employers need. In striving to address local labor demand as well as possible, they screen stringently for ability to benefit from program services. A typical program accepts only one in five applicants (e.g., Hendra et al. 2016).

Sectoral programs evaluated to date have operated on a small scale in localized occupational niches. The first RCT study, the Sectoral Employment Impact Study (SEIS), tested programs operated by three experienced providers (Maguire et al. 2010). The programs targeted low-income adults with weak employment outcomes and screened on basic academic skills and motivation. Training varied from two to 22 weeks and variously targeted jobs in IT, health care, office administration, construction, and manufacturing. All three programs had substantial positive impacts on earnings: together, they increased earnings by \$4,011 (29 percent) in the second follow-up year. Across the SEIS sites, subgroup analysis showed a sizable \$3,092 (25 percent) impact for a subsample of 281 young adults' ages 18-24. Impacts varied somewhat

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¹⁴ A 30-month follow-up survey found a statistically significant \$16 increase in weekly earnings (a 12 percent effect), whereas estimates based on wage records data were close to zero and statistically insignificant.

across programs. The largest effects were for an IT training program operated by Per Scholas, which generated a \$4,663 (32 percent) impact. 15

The SEIS findings prompted a follow-on demonstration, WorkAdvance, to assess whether sectoral programs could be effectively implemented by organizations with little prior experience (Hendra et al. 2016). The basic model was similar to SEIS but added job retention and advancement services to support next steps on career ladders. Three of the four participating organizations developed new programs for the study. The fourth, Per Scholas, provided an opportunity to see whether previous results could be replicated.

The overall impact for the pooled WorkAdvance sample was positive in the second year, albeit—at \$1,945 (14 percent)—substantially smaller than the SEIS impact. Smaller impacts at the three inexperienced WorkAdvance sites accounted for most of the difference. Per Scholas's impact was again large (\$3,746, or 26 percent), albeit somewhat smaller than in SEIS. Pooled across the four sites, subgroup analysis for young adults found positive impacts nearly identical to those for the full sample.

The most recent addition to evidence on sectoral programs is an RCT evaluation of Project QUEST in San Antonio (Elliott and Roder 2017). This program seeks to engage and support low-income adults with a high school degree or equivalent in existing college programs providing training in health care occupations. Services include financial assistance with college expenses, remedial instruction, intensive individual and group counseling, and job search and placement services. A small RCT found that the program raised average earnings by \$2,286 (14 percent) in the third follow-up year and that effects grew steadily to reach \$5,080 (22 percent) by the sixth year. Unlike SEIS and WorkAdvance, however, impacts were not positive for 18- to 24-year-olds. ¹⁶

1.3.2 Strengthening the Evidence Base: Evaluating Year Up in PACE

Like other sectoral programs, Year Up incorporates stringent screening, training targeted to jobs in growing fields, intensive supports, work-based learning, and strong relationships with employers. But Year Up is unique in a number of respects. It is the only national multi-site sectoral program for young adults operated by a single nonprofit agency. At \$28,290 per participant, it is a relatively intensive and costly program. Literature reviewed for this report offers no examples of professional internship programs for low-income young adults on a comparable scale and generating substantial revenue from employers.

An earlier RCT found large earnings impacts for Year Up (Roder and Elliot 2014). However, the study sample was very small (102 treatment and 41 control group members at three local

It is interesting to note that, like Year Up, Per Scholas provides training and internships in entry-level positions in IT. While Year Up places interns with outside employers, Per Scholas interns work in the organization's own revenue-generating computer refurbishing business. Although both programs help prepare participants for industry certification exams, such training is a more central feature of the Per Scholas than of the Year Up model (see Chapter 4, Section 4.2).

The point estimates actually showed a negative impact for young adults and a positive impact for older adults. Notwithstanding the study's small sample (100 of 341 total sample members were young adults), the difference in impacts was statistically significant (at p<.05; Elliot and Roder 2017, 14).

offices), and the design was flawed by a premature end to the embargo on services to control group members.¹⁷ Adjusting for this "crossover" from control to program conditions, the study found annual earnings impacts of \$4,135 (34 percent) in the second year after random assignment, \$4,934 (37 percent) in the third year, and \$3,278 (24 percent) in the fourth year. There were large increases in employment in targeted occupational sectors (IT and financial services). Year Up's strong emphasis on employment appears to have competed with college: rates of college enrollment were lower for treatment than for control group members after Year Up.

The PACE evaluation of Year Up embodies a stronger design, with a much larger sample, a three-year embargo on services to randomly assigned control group members, richer data sources, and plans for long-term follow-up. The larger sample allows the study to detect smaller overall impacts as well as test for differences in impacts across subgroups. Subgroup analysis is valuable in gauging the implication of screening on varying characteristics during admissions. The availability of administrative as well as survey data extends the study's ability to provide accurate measures of key outcomes for the full sample. Plans to follow up over a relatively long period and conduct a benefit-cost analysis mean the study will be able to assess how impacts evolve over a significant portion of participants' lives and whether benefits outweigh costs. The PACE study also provides an opportunity to measure Year Up's effectiveness in a strengthening economy.

1.4 Organization of this Report

This report has seven chapters. Chapter 2 provides an overview of Year Up's organization and services. Chapter 3 describes the theory of change underlying Year Up and sets this theory within the career pathways framework guiding the PACE evaluation. It also documents how the study implemented random assignment and describes its principle data sources. Chapter 4 analyzes program implementation. Chapter 5 assesses differences in experiences with employment and training and related services in the treatment and control groups. Chapter 6 provides the report's main findings on Year Up's early impacts on employment, earnings, and career progress; postsecondary education; and other outcomes for the full sample and by subgroup. Chapter 7 summarizes and discusses the implications of the report's findings.

Of the 41 control group members, 11 returned to participate in Year Up during the second and third years after random assignment. The authors used a standard approach to adjust for crossover, dividing the unadjusted impact estimates by the difference between the percentages of treatment and control group members who ever participated. The resulting estimates represent Year Up's impacts for those who participated (in this case, 88 percent of treatment group members), rather than the total sample randomly assigned.

The Year Up Program

This chapter describes Year Up's local contexts and its major organizational and programmatic features. It begins in Section 2.1 with an overview of the program model. Section 2.2 profiles the urban areas in which local programs operate. Section 2.3 describes each of four major categories of services Year Up provides: assessment (2.3.1), instruction (2.3.2), supports (2.3.3), and employment connections (2.3.4).

2.1 Overview

In 2000, Gerald Chertavian founded Year Up to serve "disconnected" young adults ages 18 to 24—youth with a high school diploma or equivalent, but who are neither employed nor in school full-time. 18 Year Up designed its model to meet employers' needs for entry-level workers by preparing young adults from economically disadvantaged backgrounds with relevant technical and professional skills. The program teaches students high-demand technical and professional skills, connects them with employers for internships, and provides college credits via agreements with a local college partner.

Year Up's original program—its stand-alone "core" program—operates from eight offices in major U.S. cities. 19 A national staff team headquartered in Boston supports local offices with operations assistance (such as human resources, marketing, and accounting); facilitates crossoffice knowledge building; and provides guidance and oversight on implementation. Each Year Up office is in or near the central business district of the city in which it operates. Year Up receives funding from employer payments for interns; foundation grants; donations from companies and individuals; and, to a small degree, government agencies.

Year Up seeks to recruit a diverse group of low-income students who are motivated and who, with assistance, can overcome challenges or barriers that may be affecting their ability to pursue career-track employment. Though students may have had some prior college experience, most Year Up offices do not accept applicants with bachelor's degrees.²⁰

The program enrolls participants in small groups of about 40 students, called "learning communities," in March and September of each year. Entering cohorts in most offices include two or three learning communities. The program operates in two six-month phases:

During the first half of the program—the Learning and Development (L&D) Phase students attend classes at Year Up from 8:30 AM until 3:30 PM four days a week, and for a half day on Wednesdays. 21 Training addresses both occupation-specific and general skills. The focus of technical training varies by office and cohort among five

For more information on Year Up's development, see Chertavian (2012).

The PACE evaluation is studying Year Up's original core program. The organization also has developed a newer version of its model—the Professional Training Corps—that is now operating in over 15 college settings.

Applicants with an associate's degree generally are eligible.

The Wednesday schedule gives L&D students an unstructured afternoon when they can catch up on homework and other life needs. It also frees up staff and space for Wednesday afternoon sessions with returning interns (see below).

target occupational fields: IT (the most common), quality assurance, financial operations, project management, and customer service. Other courses focus on professional and business communications skills. Students gain experience in writing, giving presentations, interacting with clients and colleagues, and developing critical-thinking skills. Exhibit 2-1 summarizes the key program features of each local office.

In the second half of the program—the Internship Phase—students work in entry-level
professional roles at local employers, often major corporations. They maintain full-time
schedules, working at internship sites four and a half days a week and returning to Year
Up on Wednesday afternoons to share and process internship experiences, attend
workshops, and plan post-program career transitions.

Exhibit 2-1: Selected Characteristics of Local Year Up Programs

Office/ Year of Inception	Students per Cohort	Occupational Focus	Partner College	Maximum College Credits Awarded for Participation in Year Up			
Atlanta, GA 2009	85	Information Technology	Atlanta Metropolitan College	21 credits + IT Certificate			
Bay Area, CA (San Francisco 2008, San Jose 2012)	80 (San Francisco) 40 (San Jose)	Information Technology Quality Assurance	Foothill College	29 quarter semester credits + Fundamentals of Technical Support Certificate			
Boston, MA 2001	180	Information Technology Financial Operations	Cambridge College	18 credits			
Chicago, IL 2010	80	Information Technology	Harold Washington College	18 credits			
Washington, DC 2006	120	Information Technology	Northern Virginia Community College	18 credits			
New York City 2006	135	Information Technology Quality Assurance Financial Operations Project Management	SUNY Empire State College	30+ credits (18-21 credits per track, with additional credits possible for submitting an internship portfolio)			
Providence, RI 2005	80	Information Technology Customer Service	Community College of Rhode Island	23 credits for IT; 22 for Customer Service			
Puget Sound, WA (Greater Seattle Area) 2011	80	Information Technology Quality Assurance	Bellevue College	18 credits + Intro to Information Technology Certificate			

NOTE: Quarter semester credits at Foothill College represent about 19 regular semester hours, following the general standard that each quarter semester credit represents .6667 semester credits.

Employers are heavily involved in the program. They provide input on the program design, participate in program activities with students, teach workshops, provide internships, hire a substantial number of program graduates, and help to keep staff and students up to date on the latest developments and needs in relevant occupational sectors. Also, as noted in Section 2.3.4, employer payments for interns represent a major source of revenue for Year Up.

2.2 **Local Context**

Before describing the program in more detail, this section provides background on the nine urban settings that host Year Up's core (i.e., stand-alone) program offices. The metropolitan areas include Atlanta; Boston; Chicago; New York; Providence; San Francisco; San Jose; Seattle; and Washington, DC. The program operates from a single central location in each city, with for the exception of the two Bay Area offices. ²² The first section below summarizes basic demographic and economic statistics for the nine metropolitan areas. The second section briefly notes other services that are available to young adults in these areas.

Population, Geography, and Labor Markets

The nine urban areas span both coasts and the Midwest. Census Bureau estimates for Metropolitan Statistical Areas (MSAs) in 2013—the year that Year Up began enrollment for PACE—indicate widely-varying demographic and economic characteristics (see Exhibit 2-2).

Total populations range from under two million (Providence and San Jose) to nearly 20 million (New York) residents. African Americans and Latinos comprise a substantial proportion of the population in all but three areas (Boston, Providence, and Seattle). The proportion of adults with at least a bachelor's degree varies from 30 percent (Providence) to 50 percent (Washington, DC).

Poverty rates range from 9 percent (Washington, DC) to 16 percent (Atlanta), with rates of cash welfare and food stamps receipt generally tracking poverty levels. The "disconnection rate" for young adults—measured here as the fraction of 16-24-year olds not currently in school or working—varies from 8 percent (Boston) to 15 percent (Atlanta) and also generally tracks poverty.

In most of the Year Up MSAs, the proportion of all jobs in computer and mathematical occupations and business and financial operations is higher than for the US as a whole. Estimates from the Department of Labor's Bureau of Labor Statistics show higher concentrations of jobs in these target sectors in all but one MSA (Providence). In four MSAs (San Francisco, San Jose, Seattle, and Washington, DC), the proportion of all workers employed in computer and mathematical occupations were two to four times higher than for the nation as a whole.

Year Up explicitly trains for financial operations occupations in two locations—Boston and New York—but its IT training also provides skills useful in a wide range of business and financial services occupations. Concentrations in this sector are higher for most of the Year Up MSAs than for the nation as a whole, albeit to a somewhat lower degree than for computer and mathematical occupations.

Employment growth in these occupational sectors from 2013-2016 (the follow-up period for this report) provides a rough indication of the degree to which opportunities were expanding during the period covered by follow-up data on PACE sample members in this report. Again,

Year Up administers its San Francisco and San Jose offices jointly and treats them as a single office in statistical reports.

conditions were quite variable. Employment grew rapidly in both sectors in New York, San Francisco, and San Jose and very little in Boston, Chicago and Washington, DC.

A final statistic summarizes the availability of mass transit in each MSA, a critical support for many disadvantaged young adults in commuting to school and work. Index scores indicate substantially better access in some MSAs (e.g., New York and San Francisco) than others (Atlanta, Providence, and San Jose). These statistics show that Year Up's nine offices operate in varied environments. An implication is that PACE provides a strong test of the degree to which the program model can be implemented successfully and generate its intended impacts in diverse urban settings.

Other Services Available in the Community

Each of the metropolitan areas offers an extensive range of alternative employment and training services, including training at community and technical colleges, for-profit postsecondary institutions, and non-profit training providers. Some of the better known community-based providers include Job Corps, Per Scholas, Jewish Vocational Services, Center on Employment and Training, and Goodwill Industries. Many training providers offer job readiness and job placement services in conjunction with technical skills training. Some offer participants mentoring by volunteers in the business community.

At some providers, training is offered to participants free-of-charge. However, for many of these education or training options, individuals likely would need to navigate financial aid or identify other sources of funding. In some communities, individuals might qualify for college access programs that provide free financial aid advising. A few programs offer paid internships or work experience opportunities (e.g., Per Scholas in Boston and the Young Adult Internship Program in New York). Few programs offer extended professional experience at major corporations comparable to Year Up's internships.

2.3 **Local Office Staffing**

Year Up local offices maintained five basic categories of staff during PACE:

- Admissions and student services (typically located in the same department);
- Program and academics (including learning community leaders and instructors, also often located together);
- Corporate partnerships (typically including employer partner development, internship services, and career and alumni services);
- Development (sometimes including volunteer coordination); and
- Operations (typically including accounting, human resources, facilities and related strategic planning).

An executive director in each office provided overall leadership and devoted substantial attention to external relationships and fundraising. Most offices also had a deputy with more responsibility for day-to-day management: this role (also known as site director or program director) became more common over the study period. A typical office had about 40 regular staff.

Exhibit 2-2: Characteristics of Metropolitan Statistical Areas with Year Up Core Offices

Characteristic	Atlanta	Boston	Chicago	New York	Providence	San Francisco	San Jose	Seattle	Washington, DC
Total population, 2013 (1,000s)	5,525	4,684	9,537	19,950	1,604	4,516	1,920	3,610	5,950
Disconnected 16-24 year olds in 2013 ^a		.,,	.,	,	.,,,,,	.,	-1	-,	
Percent of all youth	14.9	8.2	12.5	13.5	13.0	10.4	9.7	12.4	12.4
Number (1,000s)	111	49	148	324	28	51	20	51	94
Black or African American (%)	33.0	7.7	16.9	17.2	5.3	7.9	2.7	5.7	25.5
Hispanic or Latino Origin, Any Race (%)	10.5	9.9	21.4	23.5	11.2	21.9	27.7	9.5	14.7
Educational Attainment, 25+ year olds (%)									
Less than high school graduate	11.8	8.8	12.8	14.7	15.2	11.9	13.5	8.3	9.5
High school graduate/equivalent	24.8	24.0	24.8	25.6	28.1	16.9	15.3	20.3	19.1
Some college or associate's degree	28.2	22.4	27.2	22.2	27.1	26.1	24.5	31.9	22.8
Bachelor's degree	22.4	25.0	21.4	21.9	18.2	27.0	25.3	25.2	25.3
Graduate or professional degree	12.7	19.8	13.7	15.5	11.4	18.2	21.3	14.2	23.3
Unemployed (%)	9.8	7.2	9.8	8.8	9.6	8.0	8.3	7.3	6.7
Below Poverty (%)	15.9	10.4	14.4	14.6	14.3	11.5	10.5	12.6	8.5
In Household with Benefits in Last 12 Months from									
Cash public assistance	2.1	2.9	2.7	3.2	3.2	2.8	2.3	3.4	2.0
Food Stamp/SNAP benefits	14.2	11.3	13.3	14.0	16.2	6.3	5.4	12.6	7.9
Prominence of Occupation (Location Quotient) ^b									
Computer and mathematical occupations	1.44	1.77	1.08	1.08	0.89	1.91	3.76	2.50	2.72
Business and financial operations	1.36	1.33	1.08	1.22	0.93	1.46	1.38	1.38	2.06
Change in Number Employed 2013-16 (%)									
Computer and mathematical occupations	23.5	6.6	13.7	13.8	13.0	24.2	34.0	5.2	0.5
Business and financial operations	6.0	-0.2	11.4	11.0	9.8	18.3	18.2	17.9	0.4
Extent of Transit Index (0-100)c	44	74	65	84	48	80	41	57	71

SOURCES: 2013 population characteristics at www.factfinder.census.gov, disconnection estimates from Lewis & Burd-Sharps (2015), occupation statistics at www.bls.gov/oes/tables, transit scores at www.walkscore.com/methodology.shtml.

NOTES: ^a Estimates of disconnection are based on current school and work status. ^b The "location quotient" is a Bureau of Labor Statistics measure representing the ratio of the fraction of all workers in a particular occupation in the MSA to the fraction for the US overall. Values above one indicate that an occupation is more prominent in the MSA than in the nation as a whole. ^c Higher values on the transit index indicate greater access to major transit routes (factors include frequency, transit mode, and distances to nearest stop).

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In addition to staff, each office appointed an executive board of leaders from local business, philanthropic, and education communities. These boards provided ongoing counsel on strategy and developments in the community and often played key roles in introducing Year Up leaders to new donors, corporate partners and college partners.

2.4 Program Design

This section describes Year Up's major services, organized under the four major career pathways framework components (Fein 2012): assessment (2.4.1), instruction (2.4.2), supports (2.4.3), and employment connections (2.4.4).

2.4.1 Assessment

A comprehensive approach to assessing participants and program performance is a hallmark of promising career pathways programs. The Year Up model includes several basic assessment components, each directed to a different goal. Two components guide decisions and supports pertaining to individual applicants and participants, while a third component involves monitoring and supporting high performance at the local office level.

First, to identify and select applicants who are a good fit to the program, admissions staff in each local office administer an intensive, multi-stage assessment and screening process. Recruitment and screening is ongoing, timed to generate target number of admissions to cohorts starting the program in March and September of each year. Key steps include:

- 1. Online interest form. Potential applicants complete a student interest form on Year Up's website. The form covers basic demographic, educational, and employment background information.
- **2. Information session.** Young adults then attend an information session where they receive a tour of the local Year Up office and an overview of program.
- **3. Application.** If interested, they then submit an application, attaching a resume, a two-page essay describing their interest in Year Up, and references.
- **4. Drug screens and background checks.** Local offices conduct drug screens and background checks at varying points in the process. Some offices screen up front and condition admission on passing drug tests, while others test after acceptance to identify needed support services.
- **5. Learning assessment.** The next step involves assessing applicants' abilities and skills through individual and group activities. Although formats and activities vary, most offices assess reading, writing, and critical-thinking abilities, and some offices assess math abilities. Learning assessments generally included a public-speaking activity and interactive group activities to evaluate attitudes, motivation, and interpersonal skills.
- **6. One-on-one interview.** Applicants who pass the learning assessment screen then have one-on-one interviews with program staff. Interviews focus on strengths, motivation, career interests, reasons for applying to the program, and a series of personal factors that might affect success in Year Up (for example, stable housing, transportation, and child care). Using a standardized rubric, interviewers assign "risk" scores to capture the

existence and severity of each of a set of potential barriers. Admission teams tally scores across barriers for a summary measure of risk.

7. Decision forum. Towards the end of the six-month recruitment period for each incoming cohort, admissions teams meet to review and discuss each applicant's strengths and weaknesses and make acceptance decisions. The reviews focus on each candidate's ability to meet the program's demands, given available supports, and the likelihood that they will benefit from participating. The goal of the process is to identify applicants who can thrive in Year Up but who otherwise might not succeed in starting a career. Applied to summary risk scores, for example, program guidelines encourage local staff to focus on candidates in the intermediate range—rather than those in the lowest or highest ranges.

In addition to supporting admissions decisions, local staff use information gathered through the above steps to identify and arrange needed supports for accepted applicants.

A second aspect of Year Up's comprehensive approach to assessment is ongoing monitoring of each participant's progress during the L&D and internship phases:

- During the **L&D Phase**, in addition to graded classroom assignments, students receive feedback from seven- and 14-week assessments, styled after performance reviews in the corporate world. Approaches vary by office, but tend to include feedback from instructors, advisors, and learning community directors. The aim is to identify whether a student is "on track" or "not on track" in a number of domains, from course performance to demonstrated independence. The 14-week assessment also highlights areas in which the student has improved since the previous assessment. The goal of these assessments is to help students identify additional steps needed to successfully complete the L&D phase and earn an internship. As another feedback mechanism, some offices work with certain students to develop "hire-ready action plans" that outline tangible steps in preparing to make a strong impression on potential employers.
- During the Internship Phase, Year Up internship specialists monitor interns by email, phone calls, and site visits with interns and work supervisors. Work supervisors also provide formal feedback on student attendance, dependability, initiative, technical performance, and professional demeanor via online surveys at two time points during the internship (weeks 8-10 and weeks 18-20). Supervisors assign ratings and provide written comments on each intern's strengths, weaknesses, and job prospects. They also file weekly reports on attendance and timeliness. Finally, the program solicits input from host employers on areas in which Year Up can strengthen its curriculum to better meet their business needs.

The third pillar in Year Up's approach to assessment focus involves monitoring local office performance. A key tool is a set of quantitative indicators known as "FM-RADIO." Drawing from Year Up's management information system (based on a Salesforce database), national and local staff monitor weekly dashboard reports for each office summarizing performance on: Financial Management (revenue covers costs), student Retention, Admissions (meeting

 recruitment targets), <u>D</u>evelopment (fundraising), <u>I</u>nternships (securing enough positions), and post-graduation employment <u>O</u>utcomes. Local offices are expected to meet performance targets in each area. Illustrative targets included achieving 75 percent program retention to graduation, developing internship placements for all L&D completers, and ensuring that at least 70 percent of participants were working full-time in Year Up target occupations four months after graduating. Failure to meet targets typically prompts intervention by national office staff, to help troubleshoot and develop responses to problems.

2.4.2 Instruction

During L&D, Year Up offers courses in three subjects. This section describes the three subject areas, as well as arrangements with local colleges to grant credit for Year Up courses.

One set of courses focuses on **technical skills** in specified occupational tracks. Occupational tracks vary by office (see Exhibit 2-1). Within tracks, offices have the flexibility to choose or develop curricula to meet the needs of local employer and generate credit through arrangements with local colleges (described below). Some offices use existing curriculum, such as Cisco's *IT Essentials* for those in the IT track, whereas others create their own curricula with input from employers and assistance from consultants.

A second course—**Business Communications**—focuses on English and related communication skills needed to succeed in corporate settings. In these courses, students learn how to compose, analyze, and respond to professional emails. Instruction in basic reading, writing, and critical-thinking abilities draws heavily on situations and tasks that arise in professional environments. Students also learn public-speaking techniques and how to express ideas persuasively, as well as develop an "elevator pitch" about their career interests and skills. Business Communications introduces the concept of code switching—or being able to move alternately between two different languages or dialects. This concept encourages students to become fluent in the language and culture of corporate America, while acknowledging that different manners and vocabulary may be appropriate in students' home communities.

A third course—**Pro Skills**—focuses on the wider set of expectations and behaviors needed to function effectively in professional settings. Classes explore business etiquette, non-verbal communication, workplace relationship skills, and appropriate responses to common workplace scenarios. To help students manage their lives outside of the classroom or workplace, Pro Skills courses also typically include sessions on financial literacy, including topics such as debt, managing credit, and budgeting.

During the PACE period, local offices had substantial flexibility to tailor curricula to local circumstances. Exhibit 2-3 gives a sense of some of the ways local approaches varied to reflect the interests and experience of local instructors, curriculum standards of local college partners, and skills prioritized by area employers.

Exhibit 2-3: Local Flexibility in Curriculum Development

During PACE (2013-2014), Year Up's national office outlined learning objectives that all offices should cover in specified courses, but it did not provide standardized curricula. The philosophy was that this flexibility would lead to better customization to the curriculum standards of local college partners, to skills employers needed, and to the teaching strengths and interests of individual instructors.

Local offices sometimes borrowed curricula from other Year Up offices or outside organizations, and they sometimes developed curricula from scratch. For example, one office modified Cisco's *IT Essentials* curriculum to include different examples and activities and meet its college partner's standards. Another office updated its college partner's curriculum to reflect recent changes in the IT industry. Yet another office developed an entire track in financial operations working closely with a large partner employer.

Year Up's Business Communications courses varied across the eight offices. In most offices, these courses were highly applied—focusing on language and style in emails and other workplace-relevant communications. Other offices took a more traditional academic approach, sometimes to qualify for English credit from the college partner and sometimes because staff believed such an approach had more general benefits. The traditional version might emphasize mechanics, structure, and style in formal essay writing or bring more literature into reading assignments.

Curricula for Year Up's Professional Skills course were more consistent across offices. These courses typically covered practical business skills (e.g., handshakes, eye contact, small talk, body language, dress code); networking and personal "branding"; and preparing for internships (e.g., what to expect; interpersonal conflict; managing your manager). Offices variously put more and less emphasis on certain skills, such as critical thinking, problem solving, and financial literacy.

Towards the end of the PACE period, Year Up's national leaders took initial steps to centralize curriculum development. This step addressed the increasing difficulty of monitoring curriculum quality across an increasing number of locations and occupational tracks and the greater efficiency of centralized development.

As part of the program model, each office established a formal agreement with a local college partner. Under these agreements, the colleges enrolled participants as students, granted credit for successful completion of courses, and sometimes awarded short-term certificates for completing Year Up. The level of support from Year Up staff in the enrollment process varied. In some offices staff guided students through each step of the enrollment process, including applying for financial aid and signing up for placement exams, whereas in others students were mainly left to apply on their own. Year Up handled the portion of tuition and fees not covered by Pell grants and other financial aid, making college available at no cost to participants.

In tailoring some of its courses to meet local colleges' requirements for credit, Year Up aims to foster progress towards college credentials in the longer-term while emphasizing career-track employment in the short-run. This dual focus—on articulation between successive training and employment steps—is a core career pathways principle (Fein 2012).

While nearly all college partners granted credit for program's technical and business courses, only a few awarded credit for Year Up's Pro Skills course. In some offices, colleges granted English credit for Year Up's Business Communications course only for students scoring high enough on college placement exams to qualify for college-level English.

Although graduating from Year Up does not normally result in an occupational certificate, a few partner colleges award certificates to Year Up graduates for work completed in Year Up. Examples include certificates with titles such as Fundamentals of Technical Support and Introduction to Information Technology.

Preparation for industry certification is not a core feature in Year Up's technical courses. However, a number of offices provide ad hoc supports such as: 1-2 week training boot camps, shorter workshops, elective courses taught by volunteers from local employers, and financial assistance with examination fees.

In addition to formal classes, Year Up also offers multiple opportunities for participants to gain wider exposure to local professionals and practice work-relevant skills during L&D (see Exhibit 2-4).

Exhibit 2-4: Fostering Career Knowledge Beyond the Classroom During L&D

In addition to internships and a highly work-oriented, hands-on curriculum, Year Up provides its students a variety of opportunities to experience professional situations during the L&D phase. For example, many students participate in Year Up marketing and outreach activities. Such activities offer them real-world occasions to practice their business communications and professional skills and to get to know local professionals. Visits from and to local employers familiarize students with technologies in use, work environments, and career pathways at different firms. In addition to building students' knowledge and skills, these activities are one of the program's most potent marketing tools.

Student Ambassadors. Year Up generates interest in wider professional communities, including among local community organizations, policymakers, funding agencies, researchers, and businesses, as well as the media. One way it channels this interest is through office tours conducted by "student ambassadors." During the tours, students describe program activities and answer visitors' questions. Visits often include lunch with a group of students. Ambassador training for student tour leaders covers topics such as how to describe Year Up; share personal backgrounds, program experiences, and career aspirations; and ask visitors about their jobs, backgrounds, and companies.

Outreach. Students can participate in program marketing events on and off site. Year Up events often include presentations from panels of Year Up students and alumni. One student interviewed for PACE described with pride how he was selected to give a speech at a Year Up golf tournament fundraiser and "talk about life in front of a bunch of people." Several staff remarked that Year Up has learned that hearing students' stories directly is one of the most effective tools for raising funds and developing partnerships with employers.

Learning Community Activities. Another form of work-based learning is the opportunity to take responsibility for weekly learning community activities, such as Monday Morning Kick-Off and Friday Feedback. One office rotated students weekly in the manager role to plan and lead such activities. Another created a four-week training program in meeting facilitation for students interested in facilitating Friday Feedback. This training covered planning and structuring the sessions, as well as how to coach others in feedback skills.

Employer Engagement. Year Up also exposes students to industry professionals by engaging employers as guest speakers, elective instructors, and participants in Year Up activities. For example, one office held "Tech Thursdays," with weekly guest speakers sharing the latest developments in technology and giving tips on stepping into technology careers. Another office hosted sessions with employers on Fridays. Staff selected speakers whose life stories were likely to resonate—for example, one guest speaker from PayPal talked about what it was like to develop her career as a single parent. Students prepare for these sessions by researching the speaker's background and preparing questions for discussion.

Workplace Simulations. Another often-used strategy involves simulated work situations. Such activities often involve on-site participation by employers. For example, one office held a "Tech Olympics" at the end of the L&D phase, with role playing in customer service scenarios and customer service situations. Employers played the roles of clients and end users.

2.4.3 Supports

Year Up espouses a philosophy of "high support, high expectations" that promotes high standards for both participant behavior and program services. As described below, a formal contract with each student lists expectations for professional behavior, and varied program activities encourage feedback on behavior among peers and staff. Learning communities aim to foster a supportive social environment. Other supports include staff social workers, advisors, mentors, financial assistance, and instructional supports.

Encouraging Professional Behavior

Year Up specifies expected responsibilities and behaviors in a formal contract each student must sign as a condition of participating in the program. The contract sets forth expectations for attendance, being on time, professional dress, behavior and conduct, assignment completion, and respect for the core values of the program. One staff member described it as a tool that outlines the "rules to the game for corporate America."

Contract violations—called "infractions"—trigger loss of points and stipend reductions. Although details varied across offices, students generally start with 200 points. When points fall to a specified threshold (usually 100-150, depending on the office), students must work with staff on an improvement plan and present it to their learning community. If points reach zero, students are said to have "fired" themselves and must leave the program.

Year Up stresses a high-feedback culture in which students learn to both accept and give feedback constructively. In "Friday Feedback" sessions, they gather with their learning community to give one another specific feedback using a structured method called the plus/delta approach.²³ This method involves identifying positive aspects of recent experiences (the "plus") and aspects they might wish to change (the "delta"). To underscore its philosophy of "high support, high expectations," the program also encourages students to provide feedback to program staff. Friday Feedback sessions also are used to reinforce Year Up's contract: point totals and infractions earned by students during the week are read aloud and discussed. Staff encourage students to apply skills feedback in all L&D activities as well as with co-workers and supervisors during internships.

Social Supports

Year Up's social supports begin with orientation and extend beyond graduation. To foster a sense of belonging and help new students acclimate to the demands of Year Up, many offices offer pre-program activities. These activities include welcome receptions, "bring a supporter" events open to friends and family, question-and-answer sessions with the office director or other senior program staff, and "Gear Up for Year Up" sessions aimed at bolstering students' engagement.

As noted earlier, students are grouped in learning communities of about 40 students and designated staff members. Community members learn together and share a common Year Up identity. During the first week of the program, known as Orientation or "O-week," learning community members engage in activities designed to build trust and cohesion. Activities emphasize "interactives"—small group exercises focused on key skills and principles that require active engagement and collaboration. Their purpose is to help students learn what they have in common with others, highlight unique background experiences, show the importance of supportive peer and career networks, establish shared norms for behavior, and hold one another accountable over the course of the program.

Social Services

Year Up's Student Services staff includes trained social workers and mental health professionals equipped to support students' efforts to negotiate challenges that may affect their chances of

The plus/delta approach is a tool commonly used in facilitation, debriefing, and instructional environments.

completing the program. During admission, these staff members help to identify circumstances that can make it difficult for young adults to succeed in the program. Student services teams then help to decide whether the program has resources to support each individual and the number of higher-risk applicants the program can handle. Before classes start, social workers work with each admitted student to identify issues, develop an "onboarding plan" identifying needed preparatory steps, and arrange supports. For students needing more intensive supports, the program coordinates with a network of community-based providers to provide specialized services such as housing, child care, legal advice, medical insurance and care, and help accessing public benefits such as the Supplemental Nutrition Assistance Program (SNAP). Social workers participate in learning community activities over the course of L&D to get to know and be accessible to participants.

Advising and Mentoring

Each student is assigned a staff advisor at the outset of the program, and this relationship continues at least through graduation. Particularly during the L&D phase, advisors monitor each participant's experiences in the program closely, providing encouragement and helping to solve problems that arise. All Year Up staff members, regardless of their role, serve as advisors to four to eight students. Advisors are required to meet with advisees on a weekly basis but have substantial flexibility in the format of these meetings.

Year Up also pairs each student with an outside mentor from the community for additional career and personal guidance.²⁴ The program recruits mentors from the local business communities, often as part of the same outreach activities used to raise funds and develop internship positions at local firms. Mentors offer students an opportunity to meet and network with working professionals in settings relevant to their occupational interests. Mentors often participate in program activities such as tutoring and preparation for job search (e.g., resume development and practice interviews). At most offices, mentors are assigned after the students have been in the program for some time (e.g., midway through the L&D phase or early in the internship). Students and mentors meet once or twice a month, typically outside standard Year Up hours. Local offices provide training to mentors on Year Up and on expectations for the mentoring relationship.

Financial Assistance

Year Up provides its package of training and services at no cost to students. It also helps students address financial needs through weekly stipends and help applying for student financial aid.

Stipends provide an opportunity to "earn while you learn" and are designed to help students meet needs that otherwise might prevent participation. In most offices, the weekly stipend was \$150 during the L&D phase and \$220 during the internship phase. In theory, a student who finished the program and received their full stipends each week would earn \$8,870 for the entire program. Although less than they would receive in a full-time minimum-wage job (\$15,080 at the \$7.25 federal minimum wage) the stipend's purpose is to make it easier for

All but one office requires students to meet with their mentors. The remaining office thought that allowing students to decide if they wanted mentors would result in stronger mentoring relationships.

participants to work fewer hours in order to focus on the program, rather than provide a regular wage.

Another function of stipends is to incentivize compliance with the expectations specified in the student contract. As explained above, contract infractions trigger reductions in stipends and exit from the program. Thus, the amount students actually receive may be less than the maximum possible. Chapter 4 reports data on infractions and actual stipend amounts received by the PACE cohorts.

As mentioned above, local office staff help students assess eligibility and apply for Pell grants and other student financial aid to meet tuition and other school expenses required for enrollment at the programs' local partner colleges. Year Up covers any remaining college costs not covered by this financial aid.

Instructional Supports

Local offices provide tutoring and other assistance to students who need additional academic help. The format and extent of such supports varies. In most offices, instructors or teaching assistants are available in computer labs after classes to assist students who have questions about course material. At least one office runs a peer tutoring program.

Employment Connections

Year Up provides students with actual employment experience during the internship phase of the program. It also provides intensive employment services towards the end of the program.

As detailed in Chapter 4, Year Up has dedicated staff to develop internship positions at the national and local levels. In most instances, national leaders initiate and coordinate relationships with large national firms with workplaces in Year Up's local markets. Corporate relations teams in local Year Up offices are responsible for developing internship positions— "internship sales" as the program calls it—as well as for maintaining ongoing relationships with local firms.

Internships

Following their coursework during the L&D phase, students continue their learning through sixmonth internships with companies in fields related to their program of study. The purpose of internships is to provide work experience, career awareness, and connections with potential future employers, while maintaining contact with Year Up staff and attending weekly meetings with staff and peers to "process" their work experiences.

Employers pay Year Up for each intern to defray costs of recruiting, training, and supporting interns' success. The average payment was \$22,404 per intern in the PACE sample. Averaged across all participants (including those dropping out before internships), this revenue financed 59 percent of the program's \$28,290 per participant cost.

Several weeks before the internship phase begins, each local office runs an intensive operation to match interns with available internship slots. In matching students to internships, local offices consider student attributes such as personality, interests and abilities, outside life circumstances, location, and transportation options. They also consider key aspects of

internship positions including the work environment, supervisory styles, typical duties, future career possibilities, and location.

During internships, students work full-time four days a week and a half-day on Wednesday. The somewhat higher stipend they receive during their internships (\$220/week) helps to compensate for transportation and any other additional needs during this phase. Contract monitoring during internships focuses mainly on attendance and work hours, with worksite supervisors filing regular online reports. Otherwise, Internship Services staff focus on interns' progress and any issues at work, rather than on enforcing other contract provisions.

On Wednesdays, interns return to Year Up to debrief on internship experiences and reconnect with staff and peers. Activities vary across offices, but generally include advising, group discussion of progress and challenges in internships, and workshops on selected topics. Towards the end of internships, Wednesday activities emphasize career planning, resume development, and job search.

Year Up encourages students to view internships as opportunities to gain hands-on experience, earn a strong letter of recommendation or reference, and potentially land a job after graduation from the program.

Post-Program Services

Each local Year Up office's Career and Alumni Services (CAS) team assists participants with job search and placement after graduation. These services extend for up to four months. Services generally involve identifying pertinent job openings, sponsoring job fairs, and providing one-onone support with career counseling, job search, and resume development. CAS teams staff an in-office resource center providing internet access and help completing online job applications and other job search activities.

CAS teams also promote more extended engagement through local alumni boards and social media platforms such as LinkedIn and Facebook. Related opportunities for graduates are attending alumni events, speaking to current students at Year Up, and sponsoring internships at their place of work.

In 2014, Year Up launched an affiliated employment services firm—Year Up Professional Resources (YUPRO)—dedicated to Year Up alumni. YUPRO provides career supports to alumni and fee-based recruitment services to employers. Its financial goals are to be self-sustaining, returning any profit to Year Up to support expanded alumni programming.

3. Evaluation of Year Up

This chapter describes the evaluation design and analysis methods and data used in this report. Section 3.1 describes the theory of change underlying Year Up's model. Section 3.2 outlines major research questions for the evaluation. Section 3.3 describes the evaluation's research design, characteristics of the research sample, data, and analysis plan.

3.1 Theory of Change for Year Up

The PACE evaluation is using a career pathways framework (Fein 2012) to provide consistency in research questions and analyses across the nine programs in the study. This framework helps in identifying aspects of Year Up that are important to understand in evaluating the program's implementation and impacts.

Exhibit 3-1 depicts the PACE career pathways theory of change as applied to Year Up. It shows how major program components target intermediate outcomes, which in turn are expected to affect the main outcomes of interest when assessing whether the program was successful.

3.1.1 Recruitment & Screening

The Year Up program model begins with recruitment (see box A). As described in Chapter 2, recruitment targets urban young adults aged 18-24 who have a high school credential and who staff judge can benefit from the program. In assessing ability to benefit, admissions teams look for applicants who are motivated to succeed and whose challenges are manageable with supports the program can offer.

3.1.2 Major Program Components

Chapter 2 described the four major components of the Year Up program model. To recap, they include:

- 1. Assessment. Year Up participants are assessed during the admissions process; during onboarding to the program; and throughout the program via course grades, periodic evaluations from staff and employers, and structured feedback.
- 2. Instruction. Participants receive formal instruction in business communications; professional skills (e.g., practical business communication and networking skills, critical thinking and problem solving, teamwork, self-regulation, financial literacy); and technical skills (e.g., IT, financial operations). Local offices also provide a wide range of workshops and other ad hoc learning opportunities.
- **3. Supports.** Participants are offered a wide array of services to support successful completion of the program. These services include advising, mentorship, learning communities, supportive services and connections to external services, stipends, and contracts with financial incentives to encourage professional behavior.
- **4. Employment Connections.** During the latter half of the program, participants work as interns in professional settings and receive supports for career planning and post-program job placement. They also interact with employers in other aspects of the program. For example, during the L&D phase, employers teach workshops, participate in class projects and on-site events, and host workplace visits to introduce their companies.

Exhibit 3-1: Theory of Change for Year Up

A. RECRUITMENT & SCREENING

- Ages 18-24, high school credential
- Motivation, manageable risks

B. MAJOR PROGRAM COMPONENTS

1. ASSESSMENT

- · Admissions and onboarding
- Grades
- Periodic evaluations from staff, employers
- Structured feedback

2. INSTRUCTION

- · Business communications
- Professional skills
- · Technical skills

3. SUPPORTS

- · Advising
- Volunteer mentors
- · Behavior contract & stipend
- · Learning community
- · Student services & referrals

4. EMPLOYMENT CONNECTIONS

- Internships
- Other employer engagement
- · Career transition services

C. INTERMEDIATE OUTCOMES

- 1. GENERAL (21ST-CENTURY) COMPETENCIES
- 2. OCCUPATION-SPECIFIC COMPETENCIES
- 3. CAREER ORIENTATION AND KNOWLEDGE
- 4. MATERIAL RESOURCES
- 5. PERSONAL AND FAMILY CHALLENGES

D. MAIN OUTCOMES

1. SUCCESS IN CAREER-TRACK EMPLOYMENT

- Full-time job in targeted occupations at/above targeted wage
- · Retention & advancement

2. PURSUIT OF FURTHER EDUCATION

- College persistence
- · Career-relevant credentials

3. IMPROVEMENTS IN OTHER LIFE OUTCOMES

- · Increased income & assets
- Enhancements in other aspects of individual & family well-being

E. CONTEXTUAL FACTORS

- Economic conditions and labor market context
- · Institutional context for postsecondary education and training
- Social context and socio-demographic profile of the young adult population

3.1.3 Intermediate Outcomes

These program components variously aim to improve intermediate outcomes in five domains (see box C):

- 1. General (21st-Century) Competencies. These competencies include cognitive skills (e.g., literacy, numeracy, critical thinking, creativity); intrapersonal skills (e.g., core self-evaluation, work ethic/conscientiousness, self-regulation/meta-cognition, intellectual openness); and interpersonal skills (e.g., teamwork, collaboration, leadership). The Year Up program seeks to develop these skills through its Business Communications and Pro Skills courses, behavior contracts, learning communities and other social supports, and exposure to work situations during internships.
- **2. Occupation-Specific Competencies.** Technical courses; ad hoc learning opportunities at Year Up offices (e.g., workshops, elective courses, guest lectures); and hands-on experience during internships all impart specific occupational skills.
- **3.** Career Orientation and Knowledge. Many elements of the program aim to foster broader awareness of career options and pathways in the fields Year Up targets. They include extensive exposure to local employers, technical instruction from instructors with extensive industry experience, and formal career planning services.
- **4. Material Resources.** Stipends and supports arranged by student services teams are designed to alleviate material hardships that can interfere with students' ability to participate in the program.
- **5. Personal and Family Challenges.** Close assessment and strong supports help to identify and address other potentially destabilizing life challenges.

3.1.4 Main Outcomes

Improvements in the intermediate outcomes are expected to improve three main outcome domains (see box D):

- 1. Success in Career-Track Employment. Year Up's theory of change defines success following the program largely in terms of full-time work in targeted occupations at \$15/hour or above at four months post-graduation.
- 2. Pursuit of Further Education. The program also identifies college persistence and completion as important longer-term goals, once graduates are financially stable. To this end, during the program students are enrolled at local colleges and earn grant credits for completing Year Up courses.
- **3. Improvements in Other Life Outcomes.** The model posits that good jobs will raise income and assets and thus enhance other dimensions of individual and family wellbeing in the longer term (e.g., physical and mental health, formation of healthy family and social relationships).

3.1.5 Contextual Factors

Finally, each local Year Up program tailors its program to local conditions. These include the sociodemographic composition of young adults in the area, local industry and employment

base, economic conditions, and colleges and other post-secondary options in the community (see box E).

3.2 Major Research Questions

This report addresses a range of questions about Year Up's implementation and early impacts.

3.2.1 Questions about Implementation

The implementation study assesses how program staff implemented the program and experiences operating it (Chapter 4) and what students experienced as participants (Chapter 5). Key questions include:

- Where did the program operate, and what were the prevailing local economic and demographic characteristics?
- What was the basic approach to staffing and operation in local offices, and what role did Year Up's national office play? What basic services and strategies did local offices put into place?
- How fully did Year Up implement the program model in each of the eight local offices?
- To what degree did treatment group members progress through and complete the program's two major phases? What were some of the challenges for participants and how did staff respond to those challenges?
- To what extent did the services treatment group members experienced at Year Up differ from the services control group members received at other programs?

3.2.2 Questions about Impacts

The impact study analyzes impacts on intermediate and main outcomes (Chapter 6) over follow-up periods ranging from 1.5 to 2.5 years (depending on the data source). It addresses questions such as:

- Did the program have impacts on students' earnings in the period following Year Up post-graduation services? Did effects extend beyond that period?
- Did the program have impacts on students' employment in technical fields that Year Up targets? Did it affect their hourly wages? Foster a sense of career progress and supportive career networks?
- Did connections with local college partners affect college enrollment during and after the period that treatment group members were completing the program? Were there impacts on credits earned and credentials received?
- Did Year Up have impacts on financial hardship and strain?
- Did the program affect other outcomes, such as psycho-social skills and resources (e.g., grit, academic self-confidence, and core self-evaluation) and family formation?
- To what degree do impacts vary for students with different characteristics and in different Year Up local offices?

The impact analysis covers a relatively short follow-up period. Later reports will cover longer-term impacts.

3.3 Evaluation Design and Analysis Plan

As mentioned in Chapter 1, the evaluation team implemented a random assignment research design to estimate the impacts of access to the program. This design ensures that estimated effects can be attributed to access to the program and not to unmeasured differences in characteristics or external circumstances between individual students with access (treatment group) and without access (control group).

This section describes the evaluation's major components. It covers random assignment procedures, characteristics of the study sample, impact analysis methods, the implementation study approach, and data sources.

3.3.1 Sample Enrollment and Random Assignment

The evaluation team worked closely with Year Up's national staff in designing study recruitment and enrollment procedures. The evaluation was designed to assign one eligible applicant to the control group for every two assigned to the treatment group. Local admissions teams thus had to recruit three eligible applicants for every two open program seats—a 50-percent increase over the number they normally would have had to attract to the program. The recruitment effort succeeded in generating a total sample of 2,544 young adults, with 1,669 treatment and 875 control group members.

With new cohorts starting the program twice a year, recruitment is an ongoing activity at Year Up. PACE enrolled two cohorts in each of the eight offices, with intake staggered at different times between January 2013 and August 2014 in different offices. Thus, although the sample built up over a two-year calendar period, it represents a full year's worth of Year Up recruits nationally.

To meet the study recruiting targets, Year Up received funding from the PACE evaluation for enhanced marketing and admissions screening. The program used some of the funds to hire an outside marketing agency, which tested recruitment messages, prepared materials, and worked with Year Up staff to implement approaches through a variety of online and traditional marketing channels. A separate report summarizes lessons from this experience (Fein 2016a).

Year Up's application process involves a series of steps. As described in Chapter 2, these steps include a mandatory information session, a formal application, drug screening and background checks, a "learning assessment" (group interview), one-on-one interviews, and a final staff meeting known as "decision forum" to discuss and select viable candidates. For PACE, local offices then took the additional step of randomly assigning eligible applicants to treatment and control groups. Just prior to random assignment, staff administered an informed consent form and two baseline data collection forms:

• **Informed consent form.** Applicants who agreed to participate in the PACE study signed an informed consent form, which explained the study and their rights as a study participant. Those who did not consent to be in the study were not randomly assigned and were not eligible to participate in Year Up.

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• Baseline data collection forms. Applicants who consented then completed two surveys. A Basic Information Form (BIF) collected standard demographic and economic information, and a Self-Administered Questionnaire (SAQ) inquired about a range of attitudes, beliefs, and psycho-social dispositions, as well as more-sensitive personal characteristics (e.g., financial security and criminal background).

After applicants signed the consent form and completed the baseline data collection forms, staff used an online lottery tool developed for PACE to randomly assign them to the treatment or control group. Treatment group members had the opportunity to participate in Year Up (but were not required to enroll). Control group members could not participate in Year Up, but could receive other services available in the community. Program staff normally called study participants to inform them of their group assignments and provided control group members a list of alternative services in the community.

National staff regularly assessed numbers at different stages of the admissions process (e.g., submitting an interest form, attending open house and formally applying, completing the learning assessment) to ensure local offices were on track to meeting the study's sample targets. Local offices enforced a three-year embargo on Year Up services for control group members.²⁵

3.3.2 Characteristics of the Study Sample

Exhibit 3-2 describes the study sample using a selection of characteristics measured through the BIF. 26 The p-values in the last column test the hypothesis that treatment and control groups are similar for each characteristic.

Results show that random assignment produced well-balanced treatment and control groups. Of 28 characteristics tested, only one shows a statistically significant difference: parent's education (p=.064). Since, on average, three in 28 tests will show statistically significant differences due to chance at the 90-percent confidence level, this result demonstrates that the PACE study was highly successful in creating balanced groups.

Baseline statistics also show that Year Up succeeded in reaching its target population of urban young adults. A majority of sample members were black (54 percent) or Hispanic (31 percent). Men (59 percent) outnumbered women (41 percent), though the latter figure is large for a tech-focused training program. Most sample members (68 percent) were living with their parents, and few (nine percent) had children. Many had struggled in high school: 40 percent reported usual grades of C or below, and only 10 percent reported usually receiving A's. About half had attended some college. Nearly two thirds (63 percent) were in families with annual incomes below \$30,000.

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Control group members who turned 25 during the embargo period (about half of the sample) were not eligible for Year Up when the embargo ended.

See Appendix Exhibit A-1 for definitions and details for these characteristics.

For example, in 2014 women accounted for only 20 percent of recipients of Associate's degrees in computer science nationally. See https://www.nsf.gov/statistics/2017/nsf17310/static/data/tab4-1.pdf.

Exhibit 3-2: Selected Characteristics of the Study Sample (N=2,544)

	Treatment Control p-\					
	All	Treatment Group	Group	<i>p</i> -Value of Difference (T-C)		
Characteristic	Participants	(T)	(C)			
Age (%)	·			.811		
18 to 20	42.8	43.2	42.1			
21 to 24 ^a	57.2	56.8	58.0			
Female (%)	41.0	41.0	41.0	.992		
Race-Ethnicity (%)				.720		
Hispanic, any race	31.4	31.6	31.1			
Black, non-Hispanic	53.7	53.6	53.8			
White, non-Hispanic	5.5	5.1	6.2			
Another race, non-Hispanic	8.8	9.7	8.9			
Living Arrangements (%)				.452		
Not living with spouse/partner or children	86.6	87.1	85.8			
Not living with spouse/partner, living with children	6.5	6.6	6.2			
Living with spouse/partner, not living with children	4.5	4.2	5.1			
Living with spouse/partner and children	2.4	2.1	2.9			
Living with Parents (%)	68.4	68.8	67.7	.564		
At Least One Parent with Some College (%)	55.4	54.0	58.0	.064		
High School Grades (%)	33.4	34.0	30.0	.249		
Mostly A's	10.4	10.0	11.1	.247		
Mostly B's	49.4	48.6	50.8			
Mostly C's or below	40.3	41.4	38.1			
Educational Attainment (%)	40.3	41.4	30.1	.791		
Less than a high school degree	0.6	0.7	0.5	.171		
High school or equivalent	51.8	51.0	53.3			
Less than 1 year of college	22.1	22.3	21.5			
1+ years of college	22.5	22.9	21.8			
Associate's degree or higher	3.1	3.1	2.9			
Received Vocational or Technical Certificate or Diploma (%)	18.4	18.9	17.3	.349		
Career Knowledge Index (mean) ^b	0.46	0.46	0.47	.625		
Psycho-Social Indices (means) ^c	0.40	0.40	0.47	.023		
Academic discipline	5.28	5.28	5.27	.671		
Training commitment	5.52	5.52	5.50	.232		
Academic self-confidence						
Emotional stability	5.05 5.22	5.04	5.07 5.22	.226 .987		
•	5.33	5.33	5.32			
Social support	3.35	3.34	3.36	.135		
Stress	2.20	2.21	2.18	.315		
Depression (90)	1.59	1.60	1.57	.103		
Family Income Last Year (%)	07.4	07.0	0.4.7	.533		
Less than \$15,000	37.1	37.3	36.7			
\$15,000-\$29,999	25.7	25.0	27.1			
\$30,000 or more	37.2	37.7	36.2			
Family Income (Mean \$)	27,021	27,287	26,528	.443		

Continued

Characteristic	All Participants	Treatment Group (T)	Control Group (C)	<i>p</i> -Value of Difference (T-C)
Public Assistance in Past 12 Months				
Received WIC or SNAP (%)	32.8	32.6	33.1	.756
Received Public Assistance or Welfare (%)	6.6	6.3	7.3	.352
Financial Hardship in Past 12 Months (%)	29.7	29.4	30.3	.578
Current Work Hours (%)				.490
0	47.6	47.9	47.1	
1 to 19	10.5	10.3	11.0	
20 to 34	26.7	27.4	25.3	
35 or more	15.2	14.5	16.6	
Expected Work Hours in Next Few Months (%)				.866
0	36.3	35.9	37.1	
1 to 19	23.0	23.1	22.7	
20 to 34	31.1	31.5	30.3	
35 or more	9.6	9.4	9.9	
Life Challenges Index (mean)d	1.46	1.47	1.45	.264
Owns a Car (%)	28.8	28.7	28.9	.959
Has Computer and Internet at Home (%)	84.9	84.1	86.5	.111
Ever Arrested (%)	16.2	16.6	15.5	.502
Sample Size	2,544	1,669	875	

SOURCE: Abt Associates calculations based on data from PACE BIF and SAQ. The means and percentages were calculated without weights. The p-values are based on t-tests (and for sets of categories F-tests) for differences between the two groups. SNAP is Supplemental Nutrition Assistance Program, WIC is Special Supplemental Nutrition Program for Women, Infants, and Children.

Although Year Up screens for motivation, levels of training commitment in the Year Up sample were somewhat lower than for PACE overall (see Fein 2016b). About a quarter of Year Up applicants rated themselves as relatively highly motivated, compared with a third for the pooled PACE sample. The Year Up sample also was slightly less likely to report significant life challenges interfering with work, school, or family responsibilities (21 percent) than the overall PACE sample (27 percent). Young adults in the Year Up sample were more likely than all PACE participants to have an internet-equipped computer at home (85 percent, compared with 72 percent) but less likely to own a car (29 compared with 56 percent)—perhaps because many Year Up participants came from central city neighborhoods (Abt Associates 2015).

3.3.3 **Impact Analysis**

The evaluation team conducted analyses to estimate the impact of Year Up on key outcomes and selected subgroups (see Chapter 6 for findings). Prior to estimating impacts, the team published an analysis plan specifying key hypotheses and outcome measures.²⁸ The evaluation team subsequently assessed data quality, refined the plan, and publicly registered it on the

^a A small number of enrollees were accepted to Year Up just prior to their 25th birthdays and had reached age 25 by the time they completed the BIF. For simplicity, this table includes these sample members (less than one percent of the sample) in the 21-24 age group.

bcd See Appendix Exhibit A-1 for operational definitions of indices and other variables in this table.

See Abt Associates, Inc. (2015).

Open Science Framework website.²⁹ The purpose of the analysis plan and registration was to document the evaluation team's work and publicly commit to particular hypotheses and an estimation approach, consistent with ACF's commitment to promote rigor, relevance, transparency, independence, and ethics in the conduct of evaluation.³⁰

The impact evaluation was designed to estimate:

- The impact of the offer to participate in Year Up—known as the "intent-to-treat" effect—not the impact of actual participation. That said, a very high percentage of treatment group members—96 percent—accepted the offer and began the program.
- The impact of all components of Year Up combined, not the impact of specific program components. Because the offer included access to Year Up's entire array of services, the random assignment design does not provide a rigorous basis for disentangling what individual program components contributed to impact.
- The impact of Year Up in the context of other programs available locally. Both treatment and control group members could access other education, training, and support services in the community. The experimental design allows the evaluation to estimate the impacts of Year Up for individuals who may have had opportunities to participate in other programs and services.

3.3.4 **Hypothesis Testing**

An essential principle in the PACE analysis plan is to organize and discipline the number of statistical tests conducted. Like most social policy evaluations, the nine PACE studies target an array of different outcomes. If the evaluation did not adjust in some way for multiple hypothesis tests, at least some of a potentially large number of the tests in each study would reach conventional levels of statistical significance by chance—even if there was no true effect on these outcomes. This situation is known as the problem of "multiple comparisons." To address the issue, the PACE evaluation established three categories of hypotheses: confirmatory, secondary, and exploratory.

Confirmatory hypotheses involve outcomes most critical to judging whether the program seems to be on track—that is, producing the results expected at a given followup duration. Given the relatively small sample sizes in the PACE studies, the research team generally limited such tests to one for each pertinent "main" outcome domain in the theory of change (see Exhibit 3-1). The sole pertinent domain for Year Up at this follow-up juncture is success in career-track employment.

The confirmatory analysis estimated Year Up's impact on the outcome: average quarterly earnings in the sixth and seventh quarters after random assignment. The evaluation team chose this period because these quarters immediately follow Year Up's four-month period of post-program employment services.

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See https://osf.io/bpm8u/.

See https://www.acf.hhs.gov/opre/resource/acf-evaluation-policy.

Secondary hypotheses involve a set of additional indicators consistent with expected
effects within the period covered by the study report. The number of tests is small to
minimize the risk of false results (i.e., due to chance), which increases as the number of
tests grows.

Secondary analyses estimated Year Up's impacts on annual earnings, indicators of career pathways employment, and self-assessed career progress roughly 18 months after random assignment.

Each confirmatory and secondary hypothesis has an expected direction of change, an increase or decrease in the outcome. Accordingly, the associated statistical tests are one-tailed—testing only in the specified direction and ignoring possible effects in the other direction.

 Exploratory hypotheses cover an additional set of possible effects whose direction and timing are less certain. Accordingly, the team applies two-tailed tests to these hypotheses. The Year Up analyses include tests of several kinds of exploratory hypotheses

One category includes *outcomes for which impacts may emerge later*. For example, the program may improve students' financial status and reduce financial strains, as reflected in measures of **dependence on public assistance**, **financial hardship**, **access to health insurance**, **and other factors**. However, these impacts are not expected to occur until after participants complete the program, obtain employment, and earn income for a longer period of time.

- A second category includes outcomes for which the impacts could plausibly be positive or negative. For example, the program may reduce college enrollment and completion due to its emphasis on full-time employment after completion; alternatively, it may encourage college persistence after completion by offering college credit for Year Up courses and career guidance that covers college planning. Similarly, although the program might lead participants to postpone marriage and childbearing to focus on their careers, it also might increase marriage prospects by improving participants' financial circumstances. Similarly, given uncertainty about how impact will vary across subgroups, the evaluation team also treats subgroup analyses as exploratory.
- A third category of exploratory hypotheses includes outcomes based on measures with uncertain validity. Most notably, standard measures of grit, savvy, and core self-evaluation may suffer from "reference bias," which can arise when a program leads participants to see themselves as less skillful by raising their awareness of standards for psycho-social behavior. 31 Such bias will tend to cause estimated impacts to understate the true impacts of the program.

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For discussion of the challenges in measuring psycho-social skills, see Duckworth and Yeager (2015) and West et al. (2015).

3.3.5 Impact Estimation

Following common practices, the evaluation team used a statistical technique to adjust comparisons of averages for the above outcomes between treatment and control group members. The adjustment helps to guard against any effects of chance differences arising during random assignment and can improve the precision of estimates. The first step is to regress each outcome on a set of baseline variables for the control group. The next step is to apply the resulting regression model to calculate predicted values for the outcome for sample members in the two groups. The final steps are to calculate the average difference between actual and predicted values for each group and subtract the resulting average differences.

More formally, the procedure applies the following equation:

$$\hat{\delta} = \frac{1}{n_T} \sum_{i} T_i (Y_i - \hat{Y}_i) - \frac{1}{n_C} \sum_{i} (1 - T_i) (Y_i - \hat{Y}_i)$$

where $\hat{\mathcal{S}}$ is the estimated impact of being in the treatment group (whether or not the person attended the program or used any of the offered services); Y is the outcome variable; \hat{Y} is a prediction of Y based on baseline variables measured at random assignment; T is an indicator of treatment status (which is set equal to 1 if the individual is assigned to the treatment group and 0 if the individual is assigned to the control group); n_T and n_C are the respective sample sizes in the treatment and control groups; and the subscript i indexes individuals. Appendix A describes this procedure in greater detail.

Once estimated, the evaluation team tested impacts for statistical significance at the 10-, 5-, and 1-percent levels. Tests of outcomes corresponding to confirmatory and secondary hypotheses were one-tailed, because expected effects were in a single direction. Exploratory analyses applied two-tailed tests, because the nature and direction of effects were less certain.

The main data sources for the impact analysis were the baseline surveys (BIF and SAQ), the 18-month follow-up surveys of students, earnings data from the National Directory of New Hires (NDNH), and college records data from the National Student Clearinghouse (NSC). Section 3.4 provides more details for these data sources.

All analyses of follow-up survey data applied weights developed to adjust for differential nonresponse. Additional detail on these and other aspects of the analysis appears in Appendices B-F.

3.3.6 Analysis Plan for the Implementation Study

For the implementation study, the evaluation team conducted analyses of the design and delivery of Year Up services (in Chapter 4) and of differences in services received by treatment and control group members (in Chapter 5). Key analyses include the following:

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As explained in Appendix A, the approach is a variant on the traditional approach to regression-adjustment methods used in impact analyses. The latter typically involves linear regression of each outcome on an indicator of treatment status and a series of baseline variables. In this approach, the coefficient on the treatment indicator provides the regression-adjusted impact estimate.

- Qualitative description of implementation. The description of Year Up's design, theory
 of change, and context relies primarily on interviews with national and local office staff
 and review of program documents. In addition to site visits (described in Section 3.4),
 analysis draws on discussions in regular calls with program staff during the period of
 sample intake and random assignment.
- Quantitative analyses of participant flow. The evaluation team used administrative
 data from Year Up to document the proportions of participants having key program
 experiences and reaching major program milestones. These analyses detail outcomes
 for Year Up overall and for each of its eight offices.
- Fidelity. The team used multiple data sources to assess the degree to which Year Up's
 actual implementation was consistent with its design and to document and understand
 changes in implementation over time. In addition to statistical analyses of
 administrative records for the entire program, analyses draw on interviews and
 observations from site visits to four local offices and the national office.
- Service differences. A key series of implementation study analyses document differences in services experiences between young adults who were randomly assigned to Year Up and the control group. In addition to establishing the intensity of services to treatment group members, these analyses establish the degree to which control group members were able to find comparable services in the community. The comparisons rely on service receipt each group reported in the 18-month follow-up survey and are supplemented with qualitative detail from in-depth interviews.

3.4 Data Sources

The evaluation draws on a wide range of data sources, including data collected directly from young adults; from the program's staff and partners; and from records in several administrative data systems. Appendices to this report provide further details on most quantitative data sources.

Data from surveys of young adults in the sample included:

- Baseline surveys. Prior to random assignment, all study participants completed two
 baseline forms. The BIF collected demographic and economic information. The SAQ
 measured a variety of attitudes, beliefs, psycho-social dispositions, and other moresensitive personal characteristics such as criminal background and financial security.
- In-depth interviews. The evaluation team conducted in-depth interviews with random samples of participants in four local Year Up offices in 2014 (a total of 19 treatment and 13 control group members). Interviews typically lasted 45-60 minutes and explored motives for applying to Year Up, experiences with Year Up and (for the control group) other services, and hopes and plans for the future.
- **18-month follow-up survey.** The survey covered education and training experiences, receipt of related supports, employment and self-assessed career progress, financial status, psycho-social outcomes, and family formation. The response rate was 78 percent for the treatment group and 73 percent for the control group. Appendix D provides

more detail on survey methods, imputation for item nonresponse, and adjustments for survey nonresponse.

Information from Year Up's staff and partners included:

- **Site visits.** For the implementation study, the evaluation team conducted two rounds of site visits. In the first round in 2012-2013, the team visited all eight local offices and focused on admissions and random assignment procedures. In a second round in 2014, they visited four of the Year Up core program's eight offices (Bay Area, Boston, Chicago, and Washington, DC) to assess implementation. The team selected these offices to represent different regions of the country and different local operating environments (e.g., local populations, labor markets). During the visits, researchers interviewed a wide range of staff, at Year Up and at its college and employer partners; observed key program activities; and gathered program documents. In 2014, the team also visited Year Up's national office to interview program leaders.
- **Staff survey.** The evaluation team administered an online survey to Year Up staff in local offices covering attitudes about the program, current practices, and other topics. About half of Year Up's regular full-time local staff members (153 respondents) completed the survey.

Administrative data include records from several automated data systems:

- Year Up's management information system. Data in a December 2016 extract from Year Up's primary management information system—a Salesforce® database—covered key events arising in connection with admissions, contract infractions and stipend receipt, program retention, employer payments, and employment outcomes as of Year Up's four-month post-graduation follow-up. A number of indicators in Year Up's FM-RADIO performance management tool (see Chapter 1) also draw on these data.
- National Directory of New Hires (NDNH). Maintained by the federal Office of Child Support Enforcement, the NDNH includes an individual's quarterly earnings across multiple employers, excluding earnings from self-employment and "off the books" jobs. Data from an April 2018 extract cover a period extending from two quarters before random assignment to three years (12 quarters) after random assignment for all sample members.
- National Student Clearinghouse (NSC). Maintained as an enrollment verification service for purposes of administering student loans, the NSC provides very high coverage of enrollment at public two- and four-year colleges (more than 96 percent) and private nonprofit (96 percent) colleges. It also provides good coverage of for-profit four-year colleges (81 percent), but coverage is relatively low for nonprofit (42 percent) and for-profit (27 percent) two-year colleges. Data from an April 2017 extract cover enrollment outcomes over nearly three years (11 quarters) after random assignment.

4. **Implementation Analysis**

Chapter 2 described the wide array of services that local Year Up offices must develop and integrate to deliver the program as envisioned. This chapter assesses the offices' approach to implementing and operating these services during the PACE study period (2013-2014). It draws on interviews with national and local staff and with the program's college and employer partners, as well as quantitative analysis of program data (described in Chapter 3). A following chapter (Chapter 5) compares services received by treatment and control group members, analyzing data from the 18-month follow-up survey and in-depth interviews with young adults in each group.

The chapter begins with an assessment of responses to several cross-cutting organizational challenges. Section 4.2 summarizes efforts to meet ambitious recruitment goals. The next three sections discuss the implementation of Year Up's basic services—education and training (4.3), "high support, high expectations" strategies (4.4), and internships (4.5). Section 4.6 examines career transition services. A final section (4.7) summarizes the main findings.

4.1 **Organizational Aspects**

This section assesses Year Up's approach to several cross-cutting requirements for consistently delivering complex and resource-intensive services in multiple offices. One response to this challenge has been to promote a clear set of shared norms, values, and practices for staff and program partners. Another requirement involved establishing a sustainable financial model. A third need was to effectively organize and manage staff across eight local offices and find the right balance between national and local levels of authority.

4.1.1 Culture

In interviews, many stakeholders emphasized the strong role that culture and values play in the Year Up program. They cited many ways the organization aims to foster active reflection on, and shared commitment to, its mission and core values. For example, staff at all levels reported spending a great deal of time discussing goals and values and assessing and revising processes to promote desired outcomes. Year Up's core values apply to staff as well as students. They include "respect and value others," "build trust and be honest," "engage and embrace diversity," "be accountable," "work hard and have fun," and "strive to learn."

The organization used several strategies to foster internal alignment on its mission and values. For example, in hiring staff, leaders put much weight on applicants' passion for helping young adults. According to one local staff member, the message from national leaders is, "I don't care how much you know. I want to know how much you care." National leaders also promote extensive discussion and communication about mission and values. Having all staff serve as advisors to multiple students over the course of successive one-year cycles is intended to help staff keep sight of the program's desired end results.

Many informants noted that Year Up's cultural ethos played a strong role in motivating and aligning staff. Two emphases are particularly salient—a pervasive use of language and practices from the business world and a strong emphasis on continuous learning.

Year Up's national and local leaders created an organizational culture that emphasized concepts and tools from the business world.

Interviews, observation, and documents gathered during site visits revealed many ways that Year Up has woven business concepts and practices into its program's fabric. This aspect of program culture is intentional and rooted in the fact that many national and local leaders have degrees or experience in business or management.

The evaluation team observed many examples of this business ethos during site visits to program offices. It is embodied in standards for professional conduct and dress, student contracts, the physical look of local offices, teaching methods that encourage initiative, and training in business tools and practices. Instructors assign "deliverables" rather than homework, and in some offices refer to students as "junior colleagues." Staff members often refer to Year Up as "the company."

Local staff noted that fostering a businesslike, corporate environment helps to create strong socializing influences on participants. As one interviewee put it:

Year Up provides a very consistent structure... [I]t's not loose. You know what to expect: [the hours are] 8:30-3:30, your stipend is this, and [there is] a particular routine. Some of our young people are coming from environments where there was never a routine: you could show up at high school or not show up, do whatever you want to do. But Year Up creates a culture similar to the culture we are trying to have them assimilate in.

Year Up's national leaders described strong relationships with the social entrepreneur and venture philanthropy communities. They use tools adapted from the private sector in fundraising and engaging corporate partners. For example, in fundraising Year Up uses prospectuses modeled on investment capital solicitations to encourage donations based on anticipated social and financial returns.

Year Up applied its core value "strive to learn" to both students and staff.

Interviews, classroom observations, and curriculum documents revealed many strategies Year Up uses to encourage students to take responsibility and actively engage in learning. As described in Section 4.3 below, instructional methods are project-based and emphasize critical thinking, problem solving, and individual accountability. Instructors teach students how to solicit and provide feedback from other students and staff and encourage them to ask questions.

Staff informants also noted that the organization encourages staff to apply the value "strive to learn" in ongoing assessment and continuous improvement of program services. Formal mechanisms include annual staff retreats to review and revise approaches, "no-blame lookback" assessments in local offices between each six-month L&D and internship session, crossoffice calls to share experience and best practices, electronic platforms for sharing ideas and examples of promising service approaches, and support for staff development and training. Year Up encourages feedback from students to staff, between staff, and to and from employers and other program partners. Local staff frequently pilot new approaches to curricula and

services—examples include group projects spanning multiple courses and a new course emphasizing basic math skills.

The organization has invested heavily in its management information systems (particularly its main Salesforce® database), and performance statistics derived from these systems (e.g., the FM-RADIO metrics) figure heavily into pilot assessments as well as more global improvement initiatives.

4.1.2 **Finances**

Year Up's average cost was \$28,290 per student in 2013-2014. 33 Local staff and student stipends (averaging \$6,614³⁴ per student) accounted for a majority of that total (46 and 23 percent, respectively), and other local program expenses generated 20 percent of costs (Exhibit 4-1).³⁵

Year Up covered these costs with substantial revenue from employer internship payments and philanthropy and very little reliance on public funds.

Nearly 60 percent of local operating costs were financed by employer payments for interns, as shown in the right-hand panel of Exhibit 4-1. Foundation grants covered 22 percent, and private companies and individuals supported an additional 17 percent through charitable donations.

Public funds accounted for less than two percent of support for Year Up services. Leaders explained that they seek to minimize reliance on governmental grants in order to reduce exposure to unpredictable fluctuations in funding, maximize flexibility in use of funds, and minimize sometimes onerous reporting requirements.

Experience has proven this financial model to be sustainable at the program's current scale. As discussed later in this chapter, Year Up has identified and is testing revisions to the financial model to support further up-scaling.

Each local Year Up office is responsible for raising funds to cover its operating costs primarily including staff salaries, student stipends, rent and other administrative expenses.

In Year Up's FM-RADIO framework (described in Section 2.4 of Chapter 2), annual financial management ("FM") and development ("D") goals are key performance metrics. The national

This analysis uses Year Up aggregate financial data for 2013-2014 to approximate costs and revenue during the period of services to the PACE sample. The statistics reflect financials for some cohorts enrolling before and after PACE cohorts (as explained in Chapter 3, local offices enrolled PACE cohorts on a staggered basis during this period). The numbers accurately represent average costs and revenue over the two calendar years that the PACE sample received services.

As discussed in Chapter 6, the average stipend was slightly higher—\$7,172—for the subset of 1,560 young adults assigned to the treatment group for PACE.

The \$28,290 figure includes the direct costs of training, all of which Year Up staff provide. Most college partners also charge tuition in exchange for granting credits for Year Up-provided training. These costs are financed partly by Pell and other student aid programs, partly by college contributions, and partly from Year Up revenues. Separate data on the amounts (included in the "program, fundraising, and administrative costs" category) were not available.

team provides substantial support by leveraging relationships with larger foundations and companies to set up opportunities for local development teams. The system operates like a bank, with surpluses and debts carrying over across years and loans provided from national accounts as necessary.

100% 100% 2% Public & misc. contributions (\$633) 5% Corporate contributions (\$1,300) 11% National office costs (\$3,007) Individual contributions (\$3,531) 12% Program, fundraising & 20% administration costs (\$5,610) Foundation grants (\$6,115) 22% 23% Student stipends (\$6,614) 59% Internship revenue (\$16,907) 46% Personnel costs (\$13,055) Components of Average Average Revenue per Cost per Participant Participant by Source (Total = \$28,290)(Total = \$28,487)

Exhibit 4-1: Program Costs and Revenue for 2013-2014

SOURCE: Financial summary from Year Up for all participants served in 2013-2014 (n=3,539).

In interviews, local development leads identified creative fundraising strategies and had perceptive insights into local fundraising environments. Many engaged students as fully as possible, because, as one staff member put it, "They tell our story better than we ever could." Development teams encouraged potential sponsors to visit Year Up offices and participate in program activities. One informant said that they liked to have visitors work with students on Year Up "interactives" involving creative problem-solving tasks. She said, "It gets the foundation folks in particular. ... It's fun for them. Makes them do a little work, shakes things up."

Year Up's message reportedly resonates with many donors because they recognize the difference support has made in their lives, and because Year Up offers a chance to help solve wider societal problems. Teams modulate the pitch depending on the sponsor—one

development lead cited as an example putting more emphasis on benefits for business and the wider economy in discussions with conservative donors.

Most offices coordinate development activity with efforts to develop (in Year Up parlance "sell") internship seats and engage mentors and other volunteers in the program. Staff stressed the fluid and developmental character of relationships across these functions. For example, a manager at a local firm might start as a mentor and then become a donor or internship sponsor.

4.1.3 **Organization and Staffing**

Delivering Year Up's comprehensive services in varied localities poses a series of staffing and organization challenges.

• One challenge was finding the right balance between national and local office roles.

The PACE period followed several years of rapid growth in the number and size of local Year Up offices. From 2008-2013, the program added five offices and roughly tripled the number of young adults served annually (see Fein 2016a).

In interviews, Year Up's leaders noted that growth led to greater diversity in local practices and concerns about consistency in the quality of services. They sensed a need for increased national control but did not want to discourage positive adaptations to local conditions.

For their part, local staff valued their autonomy and believed they were best equipped to respond to local needs. They noted a tendency at times for national office staff to overtroubleshoot without fully understanding local circumstances, and to launch new initiatives without fully considering the burdens for local staff.

In response to feedback from local offices, Year Up's leaders emphasized to national staff that their main job was to "perfect services to sites." To foster understanding of local programs, nearly all national staff must work in a local office for six months sometime during their first two years of employment. For national program staff, perfecting services to sites includes supporting cross-site dialogue, dissemination, and adoption of best practices. For most local staff roles, national staff organize an annual retreat and monthly cross-site teleconferences to discuss common challenges and share insights and strategies.

Another response to identifying the right level of involvement by national staff involved use of a common set of performance measures—FM-RADIO (see Chapter 2). This tool helped national leaders to discern productive from problematic deviations in local practices. As one national leader put it, "Hitting the FM-RADIO [target] is the price of freedom: If you hit it, I will clear almost everything I can, whether it is experimenting with something outside the box or hiring more people."

To foster consistency and scalability, the national team began to standardize and centrally manage key program services. One approach to standardization involved creating "playbooks" of guidelines for practices—for example, an early admissions playbook drew on lessons learned in expanding recruitment for PACE. Three new National Site Directors assumed responsibility for managing local offices on a regional basis. The national Corporate Engagement team assumed supervisory responsibility for local staff members working on employer partnership

development. The national team also took initial steps to centralize curriculum planning and development.

A second organizational challenge was knitting together the program's varied components into a coherent whole.

National leaders observed that increases in the number of staff and specialization in functions and services could lead to a "hand-off mentality"—that is, a tendency of staff to focus on their specific roles and not consider young adults' needs in a holistic manner. Rapid hiring reportedly exacerbated the problem by generating a substantial influx of young and inexperienced staff.

Staff in different roles sometimes saw program goals differently. Leaders cited the example of Year Up's admissions (closely linked to social services) and Corporate Engagement teams. The former tended to focus on the program's mission of serving youth who need help, whereas internship sales teams focused on convincing employers that Year Up was a dependable source of entry-level talent. In recruitment, the former were inclined to take on more needy applicants, while the latter pressed for more stringent screening.

Leaders' approach these tensions involved promoting shared values and accountability for FM-RADIO outcomes. They used statistical analyses of the relationships between performance outcomes to encourage alignment on approaches. Such analyses helped to convince staff of the strong interdependencies between student characteristics, retention, and internship sales, for example.

Year Up's advising system also helps to promote integration. As noted earlier, every national and local staff member advises four to eight students throughout the program and participates in Friday Feedback and other activities as a member of the learning community. Many staff praised this approach for its effectiveness in widely familiarizing staff with all aspects of the program and fostering responsibility for helping advisees negotiate challenges and arrive at positive outcomes.

In addition to serving to introduce students to Year Up, a robust orientation program for incoming students also functions as an integrative strategy for staff. Every six months, most local staff members participate in a week-long orientation session for incoming students. The intensive array of presentations and interactive activities reportedly has strong positive effects in engaging new staff in Year Up's culture and processes and in reinforcing knowledge and connections among existing staff.

A third challenge was keeping Year Up well staffed during a period of increased specialization, rapid growth, and heightened expectations.

During in-person interviews and in the PACE staff survey, many staff identified burnout and turnover as challenges for Year Up. The program's weekly operations and bi-annual recruitment and internship targets imposed exacting demands on local teams. Year Up's strong focus on mission encouraged staff to go above and beyond assigned responsibilities and work hours when students need extra help. Its emphasis on continuous improvement reportedly leads many staff to devote extra effort to devising and testing new approaches. As one local staff member summarized the situation:

There is a point where you roll your eyes [about the ethos of "never say no"]. ... But it's the mission of everyone here. People work at Year Up because they care. It's hard work to be in the trenches. You see a lot. It's intense. We train people to have tough skin.

In response to these pressures, national leaders described a number of measures to reduce job stress. These steps included a generous benefits package, a wellness initiative, and efforts to strengthen career paths within the organization. National leaders also sought to minimize burdens on local teams from new projects launched by national staff. They also sought to improve efficiency and reduce workloads. For example, an initiative to place larger numbers of interns at fewer employers was motivated in part by the greater efficiency and reduced workloads such a model implies for internship sales staff.

Interviews also highlighted the particular challenges in staffing some specialties. The most often mentioned recruitment challenge was IT instructors, who typically command substantially higher salaries in private industry and college settings and may have little experience with nontraditional teaching methods. Good fundraisers also were difficult to recruit and retain—a challenge for other nonprofit workforce programs as well as Year Up.

Recruiting Participants

During PACE, a considerable additional challenge for local offices was meeting stepped-up recruitment targets to generate a control group. As discussed in Chapter 3, the study required recruiting 50% more qualified candidates than needed to fill program slots. The effort was successful and, in addition to meeting the targets, generated many useful lessons on scaling recruitment (Fein 2016a).

All local offices were able to increase recruitment by 50 percent across two cycles to generate the PACE control group.

All offices hit their target numbers for PACE. The overall acceptance rate and average number of assessed risks were relatively constant for cohorts recruited before, during, and after PACE (see Fein 2016a). The implication is that the program maintained its rigorous screening practices even while increasing the scale of recruitment efforts. Year Up accepted 16 percent of applicants during PACE (see Exhibit 4-2). As noted in Chapter 1, stringent screening is typical for sectoral workforce programs that, like Year Up, strive to meet the needs of both participants and employers (e.g., Hendra et al. 2016).

Meeting stepped-up recruitment goals was challenging. Although staff and community partners mostly understood the value of random assignment and that it had little bearing on the number of available program seats, many found it difficult to deny admission to control group members after intensive efforts to engage them. In interviews, admissions staff also cited the difficulty of accurately gauging interest in IT and other Year Up occupational specialties from essays and interviews. Some applicants reportedly overstated their interest in IT to enhance their chances of acceptance and later exhibited low motivation and performance in technical courses.

Exhibit 4-2: Selected Implementation Measures by Office

Outcome	All Offices	Office A	Office B	Office C	Office D	Office E	Office F	Office G	Office H
Percentage of Applicants Accepted	16.2	11.1	28.7	12.2	47.8	16.7	12.0	14.5	12.7
	10.2	11.1	20.7	12.2	47.0	10.7	12.0	14.5	12.7
Percentage of All Treatment Group Members:									
Assessed as:	20.1	20.0	21 /	17.1	47.0	27.2	07.4	25.2	22.1
Low risk	28.1	20.9	21.6	17.1	47.9	27.3	27.4	25.2	33.1
Intermediate risk	42.6	34.2	37.9	34.8	32.2	49.7	48.9	61.4	50.6
High risk	29.3	44.9	40.5	48.1	19.9	23.0	23.7	13.4	16.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Who started L&D phase activities	96.0	95.7	94.7	99.4	98.0	91.0	96.0	97.5	96.3
Who completed the L&D phase	81.5	73.8	79.1	90.6	82.0	75.8	82.4	83.4	87.7
Who started internships	80.7	72.0	79.1	89.9	79.5	75.8	82.0	81.6	87.7
Who enrolled in college during Quarters 0-3	65.2	78.7	73.4	96.2	88.1	43.0	11.9	57.7	93.2
Sample size	1,669	164	321	159	244	178	278	163	162
Percentage of Those Starting L&D:									
Who completed the L&D phase	85.0	77.1	83.6	91.1	83.7	83.3	85.8	85.5	91.0
Who started internships	84.1	75.2	83.6	90.5	81.2	83.3	85.4	83.6	91.0
Received contract infractions during Year Up									
0 infractions	4.4	1.3	7.6	11.4	1.7	1.2	1.1	6.3	5.8
1-5 infractions	30.6	21.7	39.5	33.5	18.4	22.8	30.0	49.7	27.6
6-9 infractions	20.3	19.7	19.4	22.8	19.7	18.5	17.6	22.6	25.0
10+ infractions	44.7	57.3	33.6	32.3	60.3	57.4	51.3	21.4	41.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sample size	1,602	157	304	158	239	162	267	159	156

SOURCE: PACE calculations based on a December 2016 extract of participant records in Year Up's Salesforce® management information system.

NOTES: Offices ordered from smallest to largest impact on the confirmatory earnings outcome (see Exhibit 6-11-in Chapter 6). The "low, intermediate, and high risk" categories refer to participants who scored 0-1, 2-3, or 4 or more, respectively, on a Year Up "sum of risks" measure. To derive this measure, Year Up sums ratings across 14 factors assessed for each applicant using a 0-4 severity scale (with 0 indicating no risk). Risk factors include issues like transportation, housing, childcare, substance abuse, exposure to domestic violence, and mental health.

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Most offices met the PACE recruitment targets without digging deeper into their existing applicant pools and accepting "higher-risk" applicants.

As Exhibit 4-2 shows, six of the eight offices accepted fewer than 20 percent of applicants, and only one accepted a substantially higher fraction (Office D, at nearly 50 percent). In itself, a high acceptance rate does not necessarily imply less-stringent screening: initial applicant pools can vary in the proportion of suitable young adults they contain. For example, although Office D accepted nearly half of applicants, the percentage of admissions classified as "high risk" (20 percent) was lower than in the overall sample (29 percent).³⁶

Conversely, two offices with very low acceptance rates (Offices A and C) had higher proportions of high-risk admissions (45 and 48 percent, respectively). These offices likely were recruiting from more disadvantaged local populations.

Year Up leaders noted that some offices have greater capacity to support high-risk students than others. Statistics in Exhibit 4-2 hint at such variation, showing, for example that the office with the highest percentage of high-risk students (C) also had the highest rate of L&D completion. As one leader put it: "[The optimal] balance is probably different in every site... there's a constant debate between who we admit, how we do it, and how we execute."

4.2 Education and Training during the Learning and Development Phase

This section assesses the customized training in business communications, technical, and professional skills that Year Up provides during the 21-week L&D phase. It starts with a brief look at statistics on L&D participation and then turns to curriculum development and instructional practices.

 High percentages of treatment group members began and completed the 21-week L&D phase.

Of sample members assigned to the treatment group nearly all (96 percent) enrolled in the program and began classes. A very high fraction of these enrollees (85 percent) completed the L&D phase (see bottom panel of Exhibit 4-2). The latter figure exactly meets the 85-percent retention standard for enrollees set by Year Up's national office (the "R" in FM-RADIO). As shown in Exhibit 4-2, retention reached 91 percent in two offices and fell below 80 percent in one office.

An implication is that impacts measured in PACE represent the effects of a program that achieved the full dose of instruction for a very high proportion of young adults offered services.

The low, intermediate, and high risk categories refer to participants who scored 0-1, 2-3, or 4 or more, respectively, on a Year Up "sum of risks" measure. To derive this measure, Year Up sums ratings across 14 factors assessed for each applicant using a 0-4 severity scale (with 0 indicating no risk)—possible values accordingly ranged from 0 to 56. Risk factors include issues like transportation, housing, childcare, substance abuse, exposure to domestic violence, and mental health.

Most Year Up offices were agile in revising curricula in response to changing employer needs.

In general, local office staff cited active efforts to solicit and act on feedback from employers on needed skills. Mechanisms included online surveys eliciting supervisors' assessments of each intern at the middle and end of their internship, ongoing monitoring of interns by program staff, and substantial contact with employers.

One office's approach exemplifies the extent to which local offices could go in soliciting employer feedback and developing new curricula. Largely in response to employer-identified needs, this office expanded from two to four technical tracks (IT helpdesk, quality assurance, project management, and cybersecurity). Students took foundational technical courses together and then divided into more specialized courses, structured to shift from cohort to cohort in accordance with changing employer needs. The site also worked with a leading cybersecurity software developer to develop a customized curriculum establishing new certification points for entry-level positions.

Substantial curriculum change—whether in existing or new courses—required review and approval by college partners for the course to offer credit. In many instances, revisions to existing courses received favorable, often pro forma review.

In other situations, staff opted to pilot supplemental training in ad hoc formats on a non-credit basis. One office piloted an elective in customer service that subsequently was integrated in the main curriculum. Another office piloted an elective in business math that was discontinued when it did not appear to address employer needs. Another implemented a five-week quality assurance boot camp to a subset of students at the end of L&D. Although this training did not generate college credits, instructors believed it was useful in the job market.

The pace of curriculum revision was slower in some offices than in others. Staff explained that in some fields, the skills that employer partners needed changed more slowly. They said that signals from employers often did not add up to a strong enough pattern to justify change. But sometimes staff said that their office was not as nimble as it should be. One expressed frustration that it often took a year or more to develop and launch a new course.

A general challenge cited by a number of instructors was that schedules already packed with teaching, learning community (e.g., advising), and administrative duties left little time for the intensive study and discussion required for curriculum development. They typically focused on this task during intersession periods in February and August—periods described as "really intense" because staff also had to train new instructors and handle other duties during this time.

With growth in the number and size of local offices, the national office began to increase its involvement in curriculum monitoring and alignment.

As noted in Section 4.1 and Fein (2016a), the number and size of local offices were increasing rapidly in the years preceding PACE. As Year Up grew, it became increasingly difficult for the national team to keep up with local curriculum developments and practices. During the PACE period, national academic leads took steps to monitor and guide these developments more

closely. They also introduced a variety of measures aimed at promoting alignment on best practices.

For example, national office leaders instituted a variety of cross-office meetings involving instructional staff. Formats included a monthly teleconference and biannual in-person meetings with local office academic directors. Leaders also organized virtual "mini-conferences," in which instructors took turns leading short trainings and sharing best practices with other instructors. Instructors also shared curricula and materials via the online instructional platform Schoology.

Towards the end of the PACE period, national leaders decided that a more centralized approach to curriculum development was needed. The decision was based on the increasing difficulty of monitoring and ensuring quality of proliferating curricula, the growing burden for already stretched local instructors, and the mounting inefficiency in duplicating efforts across offices. Work on this centralized capacity got underway in 2015-2016.

Year Up courses engage students in active discussion and emphasize group work and project-based learning.

Of the 51 instructors responding to the PACE staff survey, very high fractions said that their Year Up teaching often or nearly always involved project-based learning (86 percent) and working in groups (96 percent). Only 31 percent described their classes as often or nearly always lecture-based. Supporting such assessments, more treatment than control group students cited promising instructional approaches in the 18-month follow-up survey (see Chapter 5).

Classes observed during site visits were active, engaging and lively. In on-site interviews, instructors emphasized that hands-on and interactive learning is especially critical in working with the many Year Up students who have not had good prior experiences with school.

In interviews, instructors cited a variety of approaches to active learning. As one instructor said, "I like to bring out a lot of interaction, peer to peer, a lot of assignments in work and reading. We use video, TED Talks, a lot of hands-on equipment itself, critical thinking, problem solving."

Group projects often formed the foundation of the curricula, particularly in technical training courses (IT and financial operations). One example is a "Finopoly" project (based on the board game Monopoly) one local office used in a seven-week Financial Management course. The game simulated accounting processes over a corporation's financial cycle. Students split into small groups acting the part of companies in different industries. Based on the group's cash holdings and financial transactions represented by rolls of the dice, students recorded changes and create financial statements. At the conclusion of the "fiscal year," each group prepared an annual report, pitched "investors" to take the corporation public, and purchased shares in other corporations.

Another office ran a cross-site project involving student teams at two locations. Each team had to propose a business idea, develop the details, and present its proposal to "investors." Project work required mastering Agile project management skills and drew on skills taught in the office's technical and Pro Skills courses—including skills in group facilitation and teamwork, conflict resolution, and understanding different learning styles. Staff noted that, in addition to

these skills, the cross-office aspect fostered expertise in the technology and etiquette of virtual communication central to many business environments.

Instructors take varying approaches to teaching students at different levels of ability.

Year Up admits many students assessed at enrollment to have lower basic academic skills (see Exhibit 3-2 in Chapter 3). Strategies for teaching lower-skilled students varied. One instructor paired lower-skilled students and more-advanced students on group projects to encourage peer support. Another instructor explained how learning difficulties often required slowing the pace: "It's really important that these students get these particular skill sets that we've identified. [Our approach is:] 'If we're not getting it, we're going to spend more time on it.""

Such an approach could make it difficult to keep courses on schedule and to keep more advanced students engaged. One instructor explained his approach to meeting needs at varying ability levels:

We're better now than we were in the past at differentiating our instruction. This student is lower, this upper, I'll give them this to do. Additional readings, they can go further in a Schoology class. ... We can differentiate with the [learning management system] online. They can have different units.

Year Up instructors track students' classroom performance and written assignments and exams closely. As described in Chapter 2, in addition to graded classroom assignments, students receive feedback from 7- and 14-week assessments. The assessments help instructors and students identify additional steps to improve academic outcomes.

Agreements with partner colleges varied in the college credits students could receive during Year Up and in the qualifications applied to Year Up instructors.

Each Year Up office worked with its local college partner to maximize the number of awarded credits that could be transferred to other colleges. One Year Up office aligned its Business Communications course with its partner college's English composition course, because credits for the latter were transferable to four-year colleges. Staff in several offices noted that limited transferability was often a problem with credits earned during Year Up. For example, at one office, only 14 of the 24 total credits from the community college partner transferred to the state university system. In another office that partnered with a four-year college, the latter's credits did not easily transfer to two-year schools.

College standards had an important bearing on instructor hiring. College partners typically treated Year Up instructors as adjunct faculty and often required a master's degree in the discipline taught. Year Up staff at several offices reported that it was especially challenging to recruit IT instructors with the requisite credentials who were willing to accept lower salaries than they could command in private industry. Some college partners were more flexible and counted industry experience and certification in lieu of a master's degree.

Differing arrangements with partner colleges led to substantial variation across offices in proportions of Year Up students formally enrolled in college during the program.

According to college records in the National Student Clearinghouse, 65 percent of treatment group members were registered as enrolled college students at some point during their year in the Year Up program (see Exhibit 4-2). The percentage enrolled varied from 12 to 96 percent across the eight local offices.

Most Year Up offices helped students navigate college enrollment processes in college after admission to Year Up. The office with 96 percent enrolled in college provided such services during the admissions process. It took this approach at least in part so that control group members would have their paperwork ready and not miss the chance to enroll in college due to time spent applying to Year Up. 37

 IT instructors believed that industry certification was valuable but generally did not favor spending time preparing students for certification at the expense of other program activities.

Preparing students for certification and licensing exams in IT and other training-related fields was not a standard component of Year Up's model. Instructors cited several reasons for not making this outcome a high-priority goal. Some felt that the short time students were in Year Up was best used in equipping students with strong basic technical skills and setting them up to pursue credentials on their own or with help from employers after the program. Other staff members believed that certification was not critical to employment immediately following the program, since employers got to know students' skills through internships and generally trusted the Year Up brand.

Although not a central component of the model, staff in most offices recognized that certification was very important at some firms and for longer-term advancement. One interviewee estimated that CompTIA A+ certification was worth an additional \$5-\$10 more per hour to a Year Up graduate. Another noted that A+ and Network+ certification were especially helpful in federal government jobs. Accordingly, many offices offered ad hoc workshops, short courses, and financial support with examination preparation materials and fees.

4.3 Implementing Year Up's "High Support, High Expectations" Strategies

As described in Chapter 2, Year Up provides a comprehensive array of supports. This section assesses the level of implementation and varying approaches to these components in local offices. Analysis focuses on five of the program's most salient supports: advising, support services, financial stipends, contract enforcement, and feedback.

Year Up's advising system created a strong layer of supports and connections between students and staff.

The requirement that nearly all local and national staff serve as student advisors added a substantial time commitment to their regular duties. Although time consuming, most staff interviewed emphasized the requirement's value in familiarizing and holistically engaging them in the program. They also cited many examples of how regular interaction with advisors increased the likelihood of students sharing and getting timely support with problems.

As a result, control group members received some support applying for college that they would not have received absent Year Up. The effects of this support appear to have been modest, however, as fewer than half (42 percent) of control group members in this location went on to enroll in college.

Although general guidelines require advisors to maintain weekly contact with advisees during L&D (and visit periodically during internships), advisors have much flexibility to choose formats and activities. One advisor's account suggests the flexibility this approach engenders:

Last week [my advisees and I] took a walk over to [the local park], and we talked about a lot of things bothering them, their goals for this week, the Kardashians. Whatever they needed to talk about. I like to do things, introduce them to new things. But at the same time, if we just need a chat session, that's what we'll do. I know some people are a lot more structured in this advising time. For me, it's a nice time to just be together and talk about what's going well and what's not, and be that support for them.

Year Up's social workers identified housing and mental health as among the more difficult challenges to address.

In in-depth interviews during site visits, Student Services staff emphasized the difficulty of finding suitable housing for young adults (and related challenges, such as homelessness and problems at home) and identifying and addressing participants' mental health issues. In most Year Up cities, housing costs are high and supports are limited for young adults. One staff member said that public agencies see young adults' needs as less "dire ... that they can find a friend's couch." But the reality is often different. As one student described it:

That was my biggest challenge—just finding somewhere to crash every night ... that was it. [Y]ou're not gonna pay first, last, and security on a Year Up salary while [paying to have] the lights come on every day and still eat and live. It was just a situation I couldn't find a way to make sense of.

Although there appeared to be relatively few students with severe mental health problems, social workers stressed that difficulties in detecting and addressing such issues also put them near the top of their list of challenging problems.

Providing social services required successfully negotiating a number of organizational challenges.

Another often-cited challenge for Student Services staff was meshing with other staff. They noted that it could be difficult to clearly define and communicate their role in an environment with many other committed and involved adults. As one lead social worker put it:

We have support for each individual. The good side is that there's dedicated support. The downside is [the difficulty of] figuring out who to go to when you have a challenge: learning community leader, advisor, or social worker? If they go to one individual and the sharing isn't tight, they may go to the person who will give them the answer they want. If a Student Services person says, "Let me give you something to be helpful," whereas the [learning community] leader says, "You need to be accountable," there is a bit of tension there.

The dense social network in learning communities also can be challenging on occasions when Student Services staff need to uphold client confidentiality. Without assurance of confidentiality, students might be less forthcoming. They reportedly often ask social workers

not to share their personal problems with other staff and students. Student Services accordingly operates on a "need to know" basis, where the default is to keep issues private. This policy sometimes creates tensions when the same students are working with advisors and other staff who are eager for information and reassurance that issues are being resolved.

A third challenge identified by Student Services staff was stress from high workloads. Key factors cited here included the small number of staff, the range and changing nature of issues young adults face, the stressful nature of work on intense personal problems, the complexity of Year Up's environment, and the multiple roles Student Services staff play in the program. In addition to helping to address particular problems and developing connections to community resources, these roles include extensive involvement in admissions, onboarding, and ongoing learning community activities.

All offices use master's in social work (MSW) graduate school interns to augment their Student Services staffs. In addition to providing additional capacity at low cost, the internships provide valuable experience to MSW students as well as a hiring pipeline for Student Services staff. The strategy has its limits, though, as interns do not have the level of skill of a regular MSW staff member and so add to supervisory demands on regular staff.

Staff cited Year Up's stipends as indispensable supports for participation. Staff, students, and employers believed that tying stipends to compliance with Year Up's contract provided important leverage for fostering positive behaviors.

Many staff and students believed that Year Up's stipends played a critical role in making participation possible for many students. As one staff member put it:

I don't think our students would be able to do it if there wasn't the stipend; that's really unique, and that's a huge selling point. Most of our students still have to work after school, but it still helps make this time possible.

Given that stipend amounts are relatively modest, however, staff believed it was important to emphasize their purpose was to help with transportation and other additional costs of participating in Year Up and not to cover major living expenses. Many students covered living expenses by working and/or living at home while attending Year Up.

Nearly everyone interviewed—staff, participants, and employers—believed the contract was a fair and effective strategy for instilling professional attitudes and behaviors. Many liked the way it made standards concrete and tied them to real-world consequences.

Interviewees also liked how Year Up language communicates that students are responsible for their own behavior: students "earn" infractions and "fire themselves from the program" if their point total hits zero. One staff member explained:

Given the language [of the contract], the student has incurred and earned the infraction. It is not the staff's fault. It is one of the things I appreciate about the organization. I think it is effective in curbing behavior that is career limiting. I think the culture work done here is very good.

Employers liked that the contract fostered accountability, and they appreciated its role in screening students prior to internships:

What I like is that it's about self-empowerment and self-accountability. Not that anyone is doing something to you. You know the expectations, you're choosing to meet them or not. It's you deciding not to do it.

Attitudes towards enforcement varied. Some staff stressed the need to enforce the contract in a supportive and non-punitive manner, noting that the ideal was to use the contract to create teachable moments with a minimum of actual penalties. Others felt that reluctance to impose penalties could undermine the contract's effectiveness and favored strict enforcement:

My honest opinion is that there are staff members that need to watch coddling the students. We are implementing a program philosophy that this is the students' journey. You cannot win more for them than they can for themselves. If Jane Doe needs to fire herself from the program and come back, that may be the best thing for her. ... You got to be okay with the student being angry and upset. You are preparing them for the corporate world.

Analyses of program records indicate that overall contract enforcement was strong, though infraction rates varied considerably across offices.

Although contracts focused on the same behaviors in all offices, approaches to points and enforcement varied. Offices varied in the number of initial total points, structured some penalties differently (varyingly increasing penalties for repeated infractions, for example), and sometimes gave bonus points for weeks with no infractions. One office had a general policy of issuing warnings (as "recorded conversations") in the program's early weeks to help students acclimatize.

The evaluation team's analyses of Year Up's program records found that virtually all students (96 percent) received at least one infraction, and 45 percent received 10 or more infractions (Exhibit 4-2). The most common reasons were unexcused absences (recorded for 83 percent of students), late assignments (80 percent), and excused late arrivals (73 percent). The share receiving 10 or more infractions varied from 21 percent to 60 percent across offices. This variation likely captures differences in student characteristics and geography (e.g., commuting difficulties), as well as in approaches to contract enforcement.

Staff cited Year Up's approach to teaching how to give and receive feedback as one of the program's most potent strategies.

Year Up's approach to teaching and practicing the "plus/delta method" in weekly Friday Feedback sessions each week was one of its most widely acclaimed strategies in interviews with staff, students, and employers. Staff stressed how the program encourages ongoing practice by all members of the learning community throughout the week. Program staff often cited the high value of these feedback skills in the workplace:

[Students] learn how to give feedback "up," a skill they will need to "manage up." Employers don't want people to just do the work, they want them to think and know how to suggest changes and not come off like a jerk. That's a valuable learning and communication skill you really don't get anywhere else.

4.4 Learning at Work: The Internship Phase

National and local staff emphasized that Year Up guarantees an internship placement to every L&D completer. Throughout the year, Year Up staff work with existing and new corporate partners to "sell" (in program parlance) the required number of slots. As documented in Section 4.1, internship sales are a major source of program revenue.

Year Up offices succeeded in placing all L&D completers in the PACE treatment group in internships, and nearly all (92 percent) interns completed their internships.

The internship positions closely reflect the occupational fields targeted by Year Up training tracks. The most common IT internships involved helpdesk and desktop repair. Financial operations positions typically entailed assignments in accounting, portfolio administration, and related financial services. Internships in customer services often involved work in call centers and junior sales roles.

Year Up's pitch to employers presented internships as a way to give back to society and as a source of talented entry-level employees. During PACE, national leaders initiated a system-wide shift to put the primary emphasis on meeting customer-specific hiring needs.

In pitching internships to employers, Year Up historically emphasized both social responsibility and corporate self-interest. One staff member described how he varyingly emphasized the two messages: "I present both because you never know what they'll pick up on, impact to the student or impact for the company." Another staff member agreed: "Our partners don't partner with us for one reason. Some of them see the diversity perspective and see the community impact; others just have a really hard time finding talent interested in starting and entering at an entry level."

Employers often mentioned responding to a mix of the two motives. One initially said, "It's about 90 percent trying to help the community, because we could get contract workers from professional staffing agencies. But we're a part of the city and they're a part of the city, [so our view is] let's do something good for everybody." She then went on to enthuse, "They are an awesome source of new hires." Similarly, after describing the benefits of getting involved in the community, a manager at a large investment management firm turned to the bottom line: "We're an investment company. If it wasn't worth it, we wouldn't do it."

During PACE, Year Up's leaders accelerated efforts to shift internship marketing to a "customer solutions" approach. This approach involves working with employers to identify hiring difficulties or "pain points" and then customizing recruitment and training to meet these needs. Year Up already had such an arrangement at one office, where it provided a substantial flow of interns to a large financial services firm. The firm supported 40-50 internship positions per cycle and offered jobs to about half of its interns.

The motivation for a broader shift to this model was the recognition that corporate citizenship is difficult to scale. Historically, most Year Up partners were able to host at most a small handful of interns. Substantial up-scaling under this model required expanding relationships to a large number of companies. From both sales and relationship management standpoints, such expansion rapidly becomes difficult and expensive to manage. The customer solutions

approach, focusing on fewer key relationships, is more feasible to scale. In principle, customization also can improve the fit of interns to hiring needs and improve young adults' opportunities for post-internship employment.

Specialized staff in all offices monitored interns closely and provided support as needed. Outside mentors provided additional guidance.

Intern supports begin with close monitoring of each participant's progress by Year Up local office Internship Services managers. Monitoring involves regular—typically weekly communication with interns by email and phone and occasional site visits. There is also regular contact with work supervisors, particularly in the early weeks and if supervisors are new to Year Up. As described in Chapter 2, Year Up solicits formal input through online surveys of interns and worksite supervisors at two points during the internship phase.

PACE interviews and Year Up statistics suggest that this monitoring and troubleshooting system was well implemented. Response rates for Year Up's online survey were very high—around 90 percent for both the student and supervisor assessments. Interns and employers consistently told PACE interviewers that Year Up staff stayed in close touch and were very responsive as needs arose.

During the internships, interns return to Year Up every Wednesday afternoon to reconnect with staff and peers, get help with special challenges, and work on career planning and job search. In interviews, national and local staff and students consistently identified a need for more structured and valuable activities during these Wednesday sessions. As students become more engaged in their internships, their interest in returning to Year Up for these meetings reportedly tends to decline. To address the challenges with buy-in, one Year Up office hired a new staff member to revamp the approach to Wednesday afternoons and began offering supplemental workshop programs on high-interest topics such as preparation for certification exams.

Each local office also runs a mentoring program, assigning each student an outside mentor from the community. The purpose is to foster additional connections, support, and career awareness beyond Year Up activities. Once paired, Year Up expected students and their mentors to meet once a month in person and communicate weekly over email, phone, or text. Year Up offices varied in the guidance and direction provided to mentors. Most offices offered initial training, but few specified requirements on content and structure once the relationships began. In general, Year Up expected that mentors would provide students with career-related advice—on internship challenges, professional goals, and finding a job after Year Up graduation—but believed that relationships should develop organically.

Employers' experiences with interns were generally positive.

Employers gave interns high marks in the online survey Year Up conducts towards the end of each internship cycle. Nearly all interns either met (55 percent) or exceeded (42 percent) managers' expectations for professional and communication skills, and 66 met and 30 percent exceeded expectations for technical skills.³⁸ Nearly nine in ten (89 percent) said it was likely that they would recommend Year Up to a friend or colleague.³⁹

Similarly, in PACE interviews, employers praised interns' positive attitudes and professionalism. One hospital administrator described an experience setting up IT systems in a new facility: "The Year Up kids ran circles around the 45-year-old professionals. They did everything we asked them to. They did it with a smile. They did it confidently." Another employer reported assigning Year Up interns to work directly with high-level government clients. A number noted positive effects on the climate at work: "They're eager and excited. They want to learn and engage. It helps with our employees as well, keeping up the morale."

Several employers compared interns favorably with interns and recent graduates from fouryear colleges:

[At Year Up] they do get all the right skills ... especially customer service and professionalism. ... Year Up interns hold their own and get hired over the stereotypical college graduate from a stable home. Those [college] kids don't know how to interact with a manager. They don't know how to make small talk in an elevator or with a director. They don't know how to write a professional email that doesn't use text abbreviations, but the Year Up interns do.

When interns had difficulties at work, employers noted that these often stemmed from outside issues affecting attendance or performance. Examples included needing to attend court hearings related to ongoing legal problems, medical issues, pregnancy, and homelessness.

Additional challenges cited by employers include lack of professional dress, etiquette, and vocabulary, as well as motivation and attendance. One employer commented that these are the same struggles the employer may have with four-year college graduates. For this employer, however, the difference is that with Year Up, "once you give feedback, the intern and Year Up are trying to make that positive change."

4.5 **Promoting Transitions to Careers**

Of the 96 percent of treatment group members who enrolled in Year Up, 78 percent graduated from the program (Exhibit 4-3). This high completion rate compares favorably with other workforce programs with less rigorous requirements. Completion rates were fairly consistent across the eight local offices, varying between 75 and 85 percent, except for one office with a 64-percent rate.

Efforts to support successful transitions to regular employment begin in the latter half of internships, where staff specialists work with students on career planning and pursuing

Based on calculations from an internal Year Up report ("Historical Survey Analysis") covering all cohorts served during the PACE period (Year Up's 1/14-7/15 completion cohorts) and based on ratings of about 1,700 interns. Statistics include a small number of ratings of Professional Training Corps interns, which were not separated in the report.

Calculated from Year Up statistics by averaging percent of employers who said they were likely to recommend Year Up across core offices (7/14-7/15 completion cohorts). The report defined "likely" as a rating of 7 or above on a 10-point scale ranging from not likely at all to extremely likely.

employment opportunities with internship and other employers. Intensive job search and placement supports extend for four months after graduation.

Employment outcomes for alumni were very positive at Year Up's four-month postgraduation follow-up.

Program data for the PACE sample show that 83 percent of Year Up graduates were working full-time (74 percent) or part-time (nine percent) at the program's four-month post-graduation follow-up (Exhibit 4-3). Of those working, 41 percent were at the firms where they had interned, and 88 percent were in a Year Up target occupation. Some 77 percent had hourly wages at or above Year Up's \$15/hour target wage. The average wage was \$17.41 (not shown in exhibit). Full-time employment rates were above 70 percent in all but two offices.

In interviews, local staff and employers noted a strong trend of increasing reliance on shortterm contracts in hiring in the IT sector. Compared with such arrangements, permanent positions typically offer greater job security, advancement possibilities at a firm, and benefits. Program data indicate that a majority (57 percent) of Year Up graduates overall held permanent positions, ranging from 34 percent to 73 percent across offices.

Wages were \$3.92/hour higher among graduates who worked for their internship employers (\$19.70/hour) than among those who did not (\$15.78/hour, not shown in exhibit). The premium for working in an occupation related to Year Up training, \$6.29, was even larger. Permanent positions paid slightly less (\$16.93) than contract jobs (\$18.07).

Employers identified a wide variety of factors in decisions on hiring Year Up interns.

Some firms working with Year Up maintained longstanding college degree requirements for career-track positions, whereas others were eager to hire well-trained entry-level workers without college degrees. In some instances, experience with Year Up led to the establishment of a new layer of entry-level jobs:

There are some things our senior guys get bored of doing after 10 years, but it is exciting for a new person. We crafted a different type of [job] to match the skills of [interns] coming in. We got real business value from someone junior coming in and getting trained: they contributed to the success of our company.

For one large financial investment firm, Year Up was an important catalyst for wider retooling of entry-level hiring practices:

Previously, we only brought on people with a traditional four-year degree. ... In 2005, we weren't able to find the candidates we were looking for ... just from four-year schools, so we expanded the market [first, with Year Up interns]. [Year Up] is why we've started working with the other programs. ... If it wasn't for the success of Year Up, we wouldn't be expanding to other community organizations. These years we bring in about 1,000 new employees a year [mostly from a variety of internship programs].

Of course, an interest in hiring Year Up interns does not guarantee that particular students and employers will be compatible. Notwithstanding intensive screening and training, students may not be able to perform at the level required by a given employer. And in-depth interviews

documented that some participants did not like the work environment or job possibilities at their internship sites (see Section 5.3 in Chapter 5).

Although students, Year Up staff, and employers all acknowledged the importance of a college degree, only one in six alumni were enrolled in college four months after graduating.

Year Up aims to support college persistence after the program by securing credit for the program's courses at local colleges and through career advising towards the end of the program. However, NSC records show that only 16 percent of its graduates were enrolled in college in the calendar quarter in which Year Up's four-month post-program follow-up measurement falls (see Exhibit 4-3). About a third (34 percent) of this enrollment was at Year Up's local partner college, and the rest was at other colleges.

These results affirm that Year Up places a much strong emphasis on employment than on continuing education after graduation. Year Up leaders understand the economic forces underlying the increasing earnings disadvantage facing workers without college degrees. But the program's core philosophy is that entry-level professional jobs are the best first step in career pathways—providing financial means and experience that would better position young adults to succeed in college as a concurrent (e.g., part-time) or a later activity.

Reflecting the tensions between work and school, alumni were less likely to be enrolled in college if they were working full-time (12 percent) than if they were working part-time (25 percent) or not working (also 25 percent) as of Year Up's four-month period of postprogram employment services (not shown in exhibit).

During the PACE years, Year Up began to expand its post-program follow-on services.

As described in Chapter 2, Year Up's Career and Alumni Service teams actively monitor employment outcomes and provide guidance and job search support after graduation. These teams also devote substantial effort to developing placement opportunities through existing corporate partnerships and wider networks. At the start of the PACE period, post-graduation support was limited to four months of such services.

In 2014, Year Up launched Year Up Professional Resources (YUPRO), an affiliate providing career supports to alumni and fee-based talent acquisition services to employers. YUPRO maintains an active database of Year Up alumni and position listings. Its financial goals are to be self-sustaining, returning any profit to Year Up to support expanded alumni programming.

Though newly launched around the time PACE cohorts were finishing the program (2014-2015), YUPRO was in place for much of the post-program period covered in this initial PACE report and may have benefited some members of the study's treatment group. In the last few years, Year Up also has taken steps to extend its own follow-up and employment services from four to 12 months post-graduation. Some treatment group members also may have benefited from these efforts.

Exhibit 4-3: Program Completion and Selected Post-Program Outcomes by Office

Outcome	All Offices	Office A	Office B	Office C	Office D	Office E	Office F	Office G	Office H
Percentage Completing Year Up:									
Of all treatment group members	74.6	61.0	73.8	84.3	73.8	71.9	74.5	77.3	82.1
Of those starting L&D	77.7	63.7	78.0	84.8	75.3	79.0	77.5	79.2	85.3
Percentage of Graduates Who at the Program's Four-Month Post-Graduation Follow-up Were:									
Working full-time	74.0	63.3	73.8	86.6	73.3	78.6	65.2	74.4	79.7
Working part-time	9.3	16.3	10.1	5.2	6.7	5.6	10.6	11.2	9.8
Not working	16.7	20.4	16.0	8.2	20.0	15.9	24.2	14.4	10.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Working full-time in target occupation at \$15+ hourly	57.9	50.5	53.8	65.7	49.4	62.7	54.1	59.0	75.0
Enrolled in college during quarter									
At any college	16.2	29.0	18.6	14.9	12.2	14.1	17.4	6.4	18.8
At a Year Up partner college	5.6	16.0	1.7	9.7	4.4	6.3	6.3	4.0	1.5
Percentage of Working Graduates Who Were:									
At internship sponsor firm	41.3	43.6	44.2	34.1	25.7	43.4	40.8	43.9	58.0
In a Year Up target occupation	88.1	84.6	83.4	91.9	77.1	98.1	91.7	89.7	92.4
At \$15+ hourly (starting wage)	77.3	73.3	70.1	72.3	78.0	78.3	79.6	77.6	92.0
In permanent (vs. contract) position	68.4	91.8	79.0	72.6	53.0	77.4	68.9	71.0	38.5
Sample Size									
All graduates	1,245	100	237	134	180	128	207	126	133
Graduates working 4 months after graduation	1,037	80	199	123	144	108	157	108	119

SOURCE: PACE calculations based on a December 2016 extract of participant records in Year Up's Salesforce® management information system.

NOTES: Offices ordered from smallest to largest impact on the confirmatory earnings outcome (see Exhibit 6-11 in Chapter 6). For sample sizes underlying completion statistics in the top panel of this exhibit, see Exhibit 4-2.

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4.6 Summary

Overall, this analysis finds that Year Up generally implemented its services with high fidelity to the program model. Each of the four offices visited for PACE was operating all major Year Up components. Quantitative measures attest to strong implementation of major program components such as recruitment, retention, internship sales, and post-program employment services in all eight local offices. Overall, nearly four in five students completed the program.

Though all offices implemented each of the program's major components, there was some variation in the strength of implementation. For example, the overall completion rate varied from 61 percent (Office A) to 82 percent (Office H). Such differences are not in themselves an indication of differential quality of implementation. The offices operated in diverse urban environments, and served young adults with varying characteristics.

Differences in local environments, student characteristics, and operating styles led to different approaches to many program services. This variation was to a degree intentional under a national management approach that emphasized meeting performance metrics and sought to maximize flexible adaptation to local conditions.

But growth in the number and size of local offices also brought challenges—notably of distinguishing functional local innovations from less functional divergences and of minimizing costly duplication of effort. Pressures from rapid growth and high performance expectations heightened stress and turnover among staff.

If the program that PACE cohorts experienced in 2013-2014 was well developed, it was by no means static. During the PACE years, Year Up expanded its mission, launched the first of multiple initiatives to strengthen alignment and standardization, revised its strategy for engaging employers, and increased its emphasis on hiring staff with business backgrounds.

Services Received by Treatment and Control Group Members

This chapter assesses the degree to which young adults in the study's treatment and control groups received training, support, and employment services and examines their perceptions of those services. Quantitative analyses are based on information from 1,301 treatment and 638 control group members who completed the 18-month follow-up survey. Many comparisons focus on the nature of education and training (E&T) experiences and are limited to the subset of students in each group who participated in at least some E&T after random assignment. 40

Qualitative analyses draw on in-depth interviews with 19 treatment and 13 control group members randomly chosen from the four local Year Up offices visited for the implementation study. Interviews occurred during the latter half of the first year following random assignment, when the average treatment group member was in week 16 of the 26-week internship phase.

Chapter sections correspond to Year Up's broad phases and services—starting with application to the program and moving to instruction, supports, work-based learning experiences, and post-program career planning and related services.

5.1 **Applying to Year Up**

PACE sample members' first experiences with Year Up—during recruitment—preceded random assignment and thus were identical for treatment and control group members. This section describes sample members' circumstances prior to applying to Year Up and their motives and experiences in applying to the program. It draws on the full in-depth interview sample.

Many young adults cited difficulties in prior school and work experiences.

As documented in Chapter 3 (Exhibit 3-2), Year Up targeted young adults facing a variety of disadvantages. Baseline data on the full sample showed that most were black or Hispanic, many had struggled in high school and were not currently in college or working full-time, and that many recently had experienced financial hardships. Although nearly half (46 percent) had attended some college, only three percent had an Associate's degree or higher.

In in-depth interviews, young adults cited a variety of reasons for dropping out of college. One student dropped out of community college when her parents were deported and she became the primary caretaker for her younger siblings. Another ran into difficulties getting a student loan after falling into arrears on tuition payments for the prior year. For a number of sample members, juggling school and full-time work had been very difficult.

Many informants described poor experiences at school and work in the past. Difficulties at school involved boring classes, lack of motivation, and spells of homelessness and other life challenges. One respondent's description is fairly typical:

Because different subsets of each group participated in E&T, differences in statistics might be affected by differences in each group's characteristics as well as in the kinds of E&T they received. Exhibits 5.1 and 5.2 present such differences, with statistical tests but without regression adjustment, as they are useful in indicating general differences in experiences. The exhibits also include several measures that are measured for the full treatment and control group samples. In these instances, shown as non-italicized rows, estimated differences do represent experimental impacts and are regression-adjusted.

I'm someone who's really curious. I like learning, but don't feel school did it correct. ... I didn't feel any motivation. It was dry all the time. Either too fast or too slow, not individualized, just this place I'm forced to go to every day. Didn't seem I had any control over where I'm going.

Uninteresting work experiences in low-wage jobs also fostered a desire for change: "There [wasn't] much mental stimulation there ... besides it was incredibly physically laborious. ... I did not like it. It told me that low jobs were terrible. It told me that."

Students cited different aspects of Year Up as resonating as they learned about the program.

Given past struggles in high school and college, Year Up's appeal for many was how it seemed to address the problematic aspects of past school and work environments. As one participant put it, "It was an alternative, and I knew that traditional school was not quite my cup of tea. ... I felt it might actually let me enjoy learning."

Many students cited Year Up's offer of college credits and financial stipends as a strong draw: "It interested me because they said that you can go to school for free and get paid. I thought it was unreal. I was like, 'This is a win-win-win.'"

The sense of community at Year Up appealed to some applicants. As one said, "The main thing was that I could be part of something, not so alone. [It] gave me the sense I could be part of something again with the internship and get a job afterwards."

Some informants said that strong interests in technology made them excited about the chance to train for jobs in the IT sector. Others liked the opportunity to get connected with big, prestigious employers. As one put it: "[I liked] the fact that they had connections to jobs [at those places]—like the White House, AOL, BET—just some of those names. Even if you don't stay working there, just having some of those names [on your resume]—they'll catch peoples' eye."

For some applicants, the most important motivator was simply the offer of a route out of their current situation. One informant described her reaction to Year Up thusly: "Why not? I'm working at Walmart, I'm not really doing anything... [T]his is a good opportunity to... create a better future."

5.2 Receipt of Education and Training Services

This section examines participation in employment and services by young adults in the evaluation's randomly assigned treatment and control groups. Exhibit 5-1 provides a quick primer on reading impact tables in this report. As the exhibit explains, some comparisons involve the full sample and represent experimental impacts, whereas others (italicized rows in Exhibits 5-2 and 5-3) apply to sample members who received education and training and are non-experimental.

Exhibit 5-1: How to Read Impact Tables

This box provides a brief guide to reading impact tables in this chapter (Exhibits 5-2 and 5-3) and Chapter 6. In these tables, the first (left-most) column identifies the Outcome for which results appear in subsequent columns and notes the measurement units for outcomes and impacts. The next column presents the average outcome value for the **Treatment** group, and the following column gives the average value for the Control group. The next column -- Impact (Difference) -shows the impact, or difference between the treatment and control group means.

Statistics in non-italicized rows apply to the full survey sample: differences estimate "experimental" impacts and are "regression-adjusted." As explained in Chapter 3 and Technical Appendix A, regression adjustment helps to correct for any small differences arising by chance during random assignment. Statistics in italicized rows apply to a subset of treatment and control group members. Because the latter groups are no longer comparable, the statistics represent simple descriptive comparisons (rather than experimental impacts) and are not regression-adjusted.

The next column, Standard Error, is a measure of uncertainty in the estimated impact (difference) that reflects both chance variation due to randomization and any measurement error.

The final column, p-Value, is the probability that the observed or larger difference between the treatment and control group values would occur by chance, even if there was no difference in the outcomes of the two groups. There are several common standards for judging statistical significance. In this report, tests are considered statistically significant and highlighted in tables (with one or more asterisks) if the p-value is less than or equal to .10. Tests with smaller p-values are separately flagged:

* for .10

** for .05

*** for .01

Analyses of administrative data in Chapter 4 showed that nearly all treatment group members (96 percent) started the L&D phase of the program. In the 18-month follow-up survey, close to 100 percent of treatment group respondents reported participating in Year Up. A more generic survey question on education and training experiences after random assignment produced a lower estimate (79 percent, see Exhibit 5.2), possibly due to confusion about dates or respondents not thinking of Year Up as a typical instructional program.

More than half (57 percent) of control group members also reported attending school between random assignment and the 18-month survey. Most of the control group members who took courses did so at a two-year (58 percent) or four-year (20 percent) college (not shown in exhibit).

Treatment group members were more likely to cite promising instructional practices than were control group members who attended other programs.

Among respondents in each group with some postsecondary education during the follow-up period, treatment group members were 8 to 16 percentage points more likely than control group members to say that "most" or "all" of class time was spent on project- and group-based work, and eight points less likely to say that "most" or "all" of class time was spent on lectures (Exhibit 5-2). Nearly twice as many treatment (56 percent) as control (29 percent) group members receiving education and training said that their classes incorporated active learning methods most or all of the time, and more treatment (69 percent) than control (51 percent) group members agreed that courses they took were relevant to their life or career.

Treatment group members who completed in-depth interviews similarly described Year Up classes as more hands-on, interactive, and applicable to the real world than their previous

experiences in school. One young adult said, "There's more interaction than lecture. You can talk more, be more communicative. ... It's easier interacting with other students. I [also liked] that it was more hands on." Another described how their IT class approached group work: "For my group, they gave us two really technical people and then threw in a couple of us that weren't as technical—so it was easy to learn from them. ... They pushed for us to be self-reliant, which I really liked."

Exhibit 5-2: Education and Training Experiences by Treatment-Control Status

Outcome	Treatment	Control	Impact (Difference)	Standard Error	<i>p</i> -Value (Two- Sided)
Percentage receiving education and training after random assignment	79.3	56.6	+22.6***	2.2	<.001
Among respondents receiving E&T, the percentage					
Reporting that classes at first place attended spent most/all time on:					
Lectures	33.9	41.8	-8.0***	3.0	.008
Group discussion	43.0	30.6	+12.4***	2.9	<.001
Group projects	30.2	14.6	+15.6***	2.3	<.001
Individual projects	25.4	17.2	+8.2***	2.4	<.001
Indicating that classes at first place often used active learning methods	56.4	28.5	+28.0***	2.8	<.001
Strongly agreeing that classes at first place were relevant to life/career	68.6	51.5	+17.1***	3.0	<.001
Ever taking any course in life skills	76.3	32.0	+44.3***	2.7	<.001
Ever taking a life skills course paying a great deal of attention to:					
Study skills	45.7	16.4	+29.4***	2.5	<.001
Critical thinking	54.5	18.4	+36.1***	2.5	<.001
Time management	57.3	16.6	+40.8***	2.5	<.001
Managing stress/anger	36.6	9.1	+27.5***	2.1	<.001
Staying motivated	56.8	17.0	+39.7***	2.5	<.001
Acting professionally	70.1	21.0	+49.1***	2.5	<.001
Communicating well	65.8	18.2	+47.6***	2.5	<.001
Working in groups	54.2	13.5	+40.7***	2.4	<.001
Managing finances	43.3	8.3	+35.0***	2.1	<.001
Career planning	53.5	15.4	+38.1***	2.5	<.001
Job search	44.3	8.6	+35.7***	2.1	<.001
Dealing with other life problems	43.5	11.6	+31.8***	2.3	<.001

SOURCE: PACE 18-month follow-up survey.

NOTES: Differences statistically significant: * at the 10% level, ** at the 5% level, *** at the 1% level (two-tailed tests). Where not italicized, outcomes apply to the full survey sample (1,301 treatment and 638 control group members): differences estimate experimental impacts and are regression-adjusted. Italicized outcomes apply to the subset of survey respondents attending education and training after random assignment (1,035 treatment and 367 control group members). Treatment-control differences for italicized outcomes are simple descriptive comparisons and not regression-adjusted.

Exposure to life skills courses was much more common at Year Up than at institutions attended by control group members.

As described in Chapter 2, Year Up's Pro Skills course aims to instill skills for success in professional settings. The 18-month follow-up survey asked respondents who had received E&T if they had taken courses in skills in "how to succeed at school, work, or other areas of life." A substantially higher fraction of treatment (76 percent) than control (32 percent) group members answered affirmatively (see Exhibit 5.2).⁴¹

When asked about instruction in a series specific life skills, substantially more treatment than control group members said they took courses paying a great deal of attention to each skill. The largest treatment-control differences were for instruction in acting professionally (49) percentage points), communicating well (48 percentage points), time management (41 percentage points), and working in groups (41 percentage points).

In in-depth interviews, treatment group members also said they had learned useful professional skills at Year Up. They credited a mix of influences at Year Up, emphasizing experiences with the contract and "Year Up norms." One student described the progress she'd made in these terms:

I'm on time to classes. Dress more professional. Even on weekends I have to go to work, but I make sure everything is ironed and I'm looking up to par. I'm respecting peoples' opinion more. I know how to network with people now and talk to different people about stuff. I'm not as shy as I used to be. ... Now, I'll talk to who-ever.

Many interviewees believed that Year Up had provided effective preparation for operating in a corporate environment. One commented: "I had no idea... what the corporate world is like: how to behave in social events, what's considered acceptable, what's not."

Informants emphasized the value of specific skills and strategies for networking. For example, one described how he had prepared for an interview through online research on the CEO and director of IT and organizing questions for the interview. He had learned about the importance of questions early on at Year Up: "Way back during my [Year Up admission] interview, they asked me did I have any questions for them. I said no. I thought that was the correct answer. Little did I know it's not the correct answer."

5.3 Supports for Education and Training

Chapters 2 and 4 described the extensive services Year Up provides to support learning and program retention. Treatment group members consistently reported receiving higher levels of support at Year Up than control group members reported for other E&T programs (Exhibit 5.3).

Treatment group members were more likely than control group members to receive career counseling (by 33 percentage points), help arranging supports when needed (25 percentage points), and tutoring (18 percentage points) at the first place of instruction they attended after random assignment (i.e., Year Up for treatment group members). Year Up students also were

Because all Year Up students take Pro Skills, the 76-percent figure implies that survey reports are subject to significant underreporting of life skills instruction.

more likely to receive academic advising, financial aid advising, and grants or scholarships. Treatment group members enrolling in Year Up were less likely to take out loans than were control group members who enrolled in other education programs. In the entire sample, treatment group members were nine percentage points less likely than control group members to identify financial need as a challenge to enrolling or persisting in school.

In addition to providing services, creating a supportive community is an important goal in Year Up's "high support, high expectations" model. When asked about the emphasis on "being part of a community with other students, instructors, and staff" at the first place attended after random assignment, 71 percent of treatment group members, but only 40 percent of control group members, reported a great deal of emphasis on community.

Exhibit 5-3: Supports Received by Treatment-Control Status

Outcome	Trootmont	Comtrol	Impact (Difference)	Standard	n Volus
Outcome	Treatment	Control	(Difference)	Error	<i>p</i> -Value
Among respondents receiving E&T, percentage who at Year Up/first place of instruction ever received:					
Career counseling	58.4	<i>25.7</i>	+32.8***	2.8	<.001
Academic advising	55.7	47.1	+8.6***	3.1	0.005
Financial aid advising	41.4	32.5	+8.9***	2.9	0.002
Tutoring	43.9	26.3	+17.7***	2.8	<.001
Help arranging supports for school or work	36.3	10.8	+25.5***	2.2	<.001
Grants/scholarship	80.7	67.3	+13.5***	2.8	<.001
Loan	6.1	27.9	-21.7***	2.5	<.001
Among respondents receiving E&T, percentage who at Year Up/first place of instruction:					
Perceived a great deal of emphasis on community	70.5	39.9	+30.7***	3.0	<.001
Participated in a work experience activity	81.4	44.1	+37.3***	2.9	<.001
Received job search or placement assistance	60.7	27.5	+38.2***	2.7	<.001
Among all respondents, percentage:					
Citing financial support as a challenge in school enrollment or persistence	51.9	60.9	-9.0***	2.3	<.001
Ever receiving help with:					
Arranging supports to meet school, work, or family responsibilities	43.7	11.3	+32.5***	1.8	<.001
Career counseling	58.7	19.7	+39.0***	2.0	<.001
Job search or placement	61.5	18.3	+43.2***	2.0	<.001

SOURCE: PACE 18-month follow-up survey.

NOTES: Differences statistically significant: * at the 10% level, ** at the 5% level, *** at the 1% level (two-tailed tests). Where not italicized, outcomes apply to the full survey sample (1,301 treatment and 638 control group members): differences estimate experimental impacts and are regression-adjusted. Italicized outcomes apply to the subset of survey respondents attending education and training after random assignment (1,035 treatment and 367 control group members). Treatment-control differences for italicized outcomes are simple descriptive comparisons and not regression-adjusted.

More generally, the 18-month survey asked all respondents whether they had received supports from any organization to help meet school, work, or family responsibilities. The bottom panel of Exhibit 5.3 shows a substantial positive impact (32 percentage points) on receipt of such supports.

Students cited Year Up's initial orientation session and instruction in "feedback" skills as especially valuable.

One student described orientation as "one of the most important weeks" in the program because "you get to know everybody around you. I feel like that was what really established the whole [feeling of], 'Okay, we're in this together, we're gonna do this. We've got each other's back." As an example of how orientation activities had helped in getting to know instructors, this respondent described a "teacher museum" in which each instructor brought in three objects that represented him or her, and students had to guess the owner. "You really got to know the teachers on a more personal level before the program even started, so I felt like that was a good foundation for us."

Many students said that training in feedback during Friday Feedback sessions was one of the most valuable skills they had learned in Year Up.

One thing that I really, really like about Year Up is the way they do feedback. ... I have never had feedback that way. They focus on your strengths and commend you for what you did right and your strong points. Then they say, "With that in mind, I would encourage you to do this." See? So it's not saying, "But you do this all wrong." They say it in a way that's going to encourage somebody to keep that growth area in mind. I like that a lot.

Students described how feedback received during Year Up helped them to strengthen important skills. One said: "I had a lot of feedback on the way I talked. They wanted me to project my voice. Be more active in speaking in a group setting. Or speaking in front of people. I felt that I have improved in that." Another noted how they received useful feedback through multiple channels: "If anything needs to be addressed, someone will pull you, one by one, and tell you. There's... advisors... They give feedback... My mentor's given me feedback about my life choices. All throughout there's feedback."

Most participants interviewed felt Year Up's contract was useful and fair, though one felt it imposed too much stress.

Most in-depth interviewees understood and approved of the purpose of the contract:

I like it. I think it holds every student accountable. If they didn't have it, everybody'd be doing what they wanted. I don't think that would be fair. Now that we're on internship, we're dressed professional because of Year Up ... not using slang, getting to work on time, actually turning our work in on time too. I like it.

Another respondent cited positive outcomes from having been put on a contract amendment plan (a form of warning or probation) when he "didn't have the right mentality." He said: "That helped light the fire under me. Made me realize that, oh, man, I'm slipping. I don't wanna lose this opportunity."

One informant's comments captured the experience of the students who had the most difficulty meeting the program's expectations. He believed that the contract had made learning difficult because of a constant fear of being docked points. "Every time you see the points drop, you're just more worried about that." Looking ahead, he did not have much confidence: "I don't feel determined enough to actually go into internship and feel I'll ... be able to [handle assignments] with confidence."

5.4 **Learning from Work**

Year Up's six-month internships afford opportunities to apply and extend skills learned during the preceding L&D phase and get to know potential employer and sources of job references. Among survey respondents who received E&T, nearly two times as many treatment (81 percent) as control (44 percent) group members said they were offered opportunities for direct experience in occupations related to their studies or career goals (see Exhibit 5-3). 42

Most students reported learning a great deal during internships.

When asked about skills learned from internships, some in-depth interviewees emphasized professional skills and others emphasized technical knowledge. One intern said he learned a lot about time management: "Your supervisor, depending on what his personality, and the way he runs it, most of the time he's not gonna chase you down... You had a five-day limit. You go over those five days, then they'll say, 'Did you get this done?'" Another intern emphasized the technical skills she acquired: "I can really build a computer from the ground up and have it working... that's definitely something that came in handy."

One intern described an environment that rewarded initiative:

It's exciting—I like it. I've learned a lot. ... I hardly knew about SharePoint. Right now, I could say I'm the go-to gal. My manager, she's pretty impressed that I caught on so quickly. I've been practicing every day. If [my manager] wants to change something, I have to figure it out. I'll just Google it and do it.

Many informants reported that they were thriving in internships. One said, "I love my team. I think it's a great—it's very close. There's only 10 of us. I like the environment." Another enthused: "I would absolutely love to stay there. I could definitely see myself there in five years—obviously in a higher position—and continuing to evolve." One young woman said although she initially was very anxious ("What if I don't fit in? What if I don't know what I'm doing? What if I bring the whole company down?"), the experience had been positive: "I was definitely placed on the right team. ... We all get along. We get work done and we have fun, too."

Less-positive internship experiences often entailed less-substantive work, too much downtime, or too little interaction with co-workers.

Some interviewees found their internship environments less engaging than anticipated. One intern had expected his internship to be more exciting and "energy filled" because it was "really hyped up" during L&D, but found himself "[just working] in a cubicle for eight hours... "

The 81 percent figure is very close to the 85 percent of enrollees completing the L&D phase to advance to internships according to Year Up administrative records.

One intern described her IT position as too quiet. "[It is] a big change from Year Up: People are busy, don't interact ... you're kinda to yourself a lot of the time. I'm an intern, so I don't get jobs like everybody else. I get a lot of downtime." The quiet environment made his "mind wander."

Downtime was a theme in several informants' feedback on internships. In some offices, Year Up staff address this issue by preparing students to provide feedback to their supervisors and take initiative in identifying additional tasks. For one student, this feedback led to an arrangement in which he learned Java programming with guidance from his supervisor.

5.5 **Transitioning to Careers**

The emphasis on career planning and job search/placement at Year Up intensifies towards the end of the internship and extends for up to four months after graduation.

Treatment group members were far more likely to receive career planning and employment services than control group members.

Compared with control group members, treatment group members were 39 percentage points more likely in the 18-month survey to report ever receiving career counseling after random assignment (see last panel in Exhibit 5.3). Similarly, the percentage receiving job search or placement assistance was 43 percentage points higher for treatment than for control group members.

In in-depth interviews conducted during internships, treatment group members also cited internship experience as influential in their career plans. As one intern put it, "I want to get a software engineering special degree, a master's degree, because I want to continue this programming. I really like programming. I'm passionate." Similarly, another explained how his internship had helped to crystalize his career plans:

I like working in IT because it's challenging; it's always a new problem...I like fixing people's problems. I like when they're happy after I've fixed what their issue was and stuff.

Less-positive experiences also helped some students to identify work environments to avoid or identify career interests beyond Year Up's focal occupations (mostly in IT and finance). In a number of instances, however, these students saw their new skills as enabling them to pay the bills in the short-run while working on a college degree in another field.

Control group members also had strong career aspirations, but generally had to find the path forward on their own.

Given that Year Up screens applicants for motivation, it is not surprising that control group members also had high hopes. Some found their way to other workforce programs, while others uncovered other sources of support.

One young man's story indicates how good luck can arise in the absence of workforce programs. Things were difficult when he applied to Year Up. After struggling to find direction in college, he had dropped out with \$11,000 in debt and stayed home, struggling with depression and caring for a sick father for two years. Then he landed a job as production scheduler, earning \$19.60 an hour with good benefits, at a local factory where his mother worked. The firm proved to have a very supportive outlook in supporting training and job advancement. The plant manager took an interest and helped him map out a career plan. The plan included steps to remove a transcript hold for debt arrears at one college and enroll in an Operational Management program at another. He summed up the catalytic role his new job had played as follows: "It's like everything has fallen into place. I finally got a car—that's a huge blessing. [The job has] given me a sense of purpose, made me focus. It's like now I honestly can start life."

5.6 **Summary**

Analyses in this chapter show that treatment group members received higher levels of training and a variety of supports than control group members. In interviews, Year Up participants described many positive experiences with the program's instruction, supports, and internships.

In contrast, about half of control group members received some E&T, mostly in local college programs. They generally had more difficulties charting career directions in these programs, although motivation and luck helped some find their way to career pathways.

Year Up's Early Impacts

Evidence that Year Up implemented its program with high fidelity (Chapter 4) and substantially increased service receipt (Chapter 5) puts the impact analysis in a strong position to test the program's theory of change. This chapter presents impact estimates for a range of outcomes, including: earnings, employment, and related measures of career progress (Section 6.1); postsecondary education (Section 6.2); and other outcomes, including financial status, psychosocial skills, and family formation (Section 6.3). The last section (6.4) provides analyses of differences in impacts for key outcomes across subgroups and local offices.

6.1 Impacts on Earnings, Employment, and Career Progress

This section presents the report's main impact findings on employment and earnings. It looks first at results for the pre-specified confirmatory test of Year Up's effectiveness: whether the program affected students' average quarterly earnings in the 6th and 7th quarters following the quarter of random assignment (Quarter 0). Subsequent analyses examine the time path of earnings and employment impacts, the types of jobs participants gained, and the degree to which they believed they were making progress in a career. Measures of average earnings in the impact analysis include sample members who did not work (and thus had zero earnings) during the relevant quarters.

Year Up produced a large positive impact on the confirmatory outcome—average earnings in Quarters 6 and 7 after random assignment.

Based on data from the National Directory of New Hires (NDNH), average quarterly earnings were \$1,895 higher (53 percent) for treatment group members (\$5,454) than for control group members (\$3,559), as seen in the first panel of Exhibit 6-1. This impact is the largest reported to date in random assignment studies of programs aiming to boost earnings among low-income youth and adults (see Chapter 1).

Data from the 18-month follow-up survey provide a very similar impact estimate (as seen in the third panel): \$1,970, a 50 percent increase. 43 The small difference between impact estimates from NDNH and the survey (\$75) may result in part from underreporting of wage records to the federal NDNH database by Washington State. 44 To confirm this suspicion, we used survey data for Year

The survey figures convert the available survey measure—earnings in the prior week (calculated as hourly wage times number of hours worked)—to a calendar quarter-level estimate by multiplying by 13 (the average number of weeks in a quarter).

The Abt team identified two calendar quarters (2014 Q4 and 2015 Q2) in Washington State with lower NDNH record counts than expected based on counts in adjacent quarters. The latter of these quarters affected Quarter 7 earnings for one of two cohorts enrolled in Year Up's Washington office.

Exhibit 6-1: Impacts on Earnings and Employment

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Relative Impact	<i>p</i> -Value
Confirmatory Outcome						
Average quarterly earnings in Quarters 6 and 7 (\$)	5,454	3,559	+1,895***	(143)	53.2%	<.001
Sample size	1,638	858				
Secondary Outcomes						
Average total earnings in successive follow-up years (\$)						
Year 1 (quarters 0-3)	3,853	9,191	-5,338***	(238)	-58.1	<.001
Year 2 (quarters 4-7)	18,435	13,254	+5,181***	(474)	39.1	<.001
Year 3 (quarters 8-11)	24,422	17,400	+7,011***	(619)	40.3	<.001
Sample size	1,638	858				
Exploratory Outcomes						
Average quarterly earnings per follow-up survey (\$)	5,907	3,937	+1,970***	(183)	50.0	<.001
Hours worked last week (%)						
Not currently employed	26.0	26.5	-0.4	(2.1)	-1.5	0.829
1-19 hours	2.7	8.4	-5.7***	(1.2)	-67.9	<.001
20-34 hours	12.4	23.0	-10.6***	(1.9)	-46.1	<.001
35+ hours	58.8	42.0	+16.8***	(2.3)	40.0	<.001
Total	100.0	100.0				
Average weekly hours	27.9	24.4	+3.4***	(8.)	13.9	<.001
Hourly wages if employed (%)						
1-9 dollars	7.9	19.0	-11.1***	(1.7)	-58.4	<.001
10-14 dollars	18.9	39.1	-20.2***	(2.2)	-51.7	<.001
15-19 dollars	26.2	9.9	+16.3***	(1.7)	164.6	<.001
20+ dollars	19.7	4.7	+15.0***	(1.4)	319.1	<.001
Total	100.0	100.0				
Average hourly wage (\$)	16.06	12.20	3.87***	(0.24)	31.7	<.001
Sample size (all survey respondents)	1,301	638				

SOURCES: Confirmatory and secondary earnings outcomes are based on quarterly wage records obtained in a match to the National Directory of New Hires. Exploratory outcomes are based on the PACE 18-month follow-up survey.

NOTES: Statistically significant: * at the 10% level, ** at the 5% level, *** at the 1% level.

Significance tests are one-sided for confirmatory outcome and total earnings in Years 2 and 3. Tests are two-sided for Year 1 earnings and other exploratory outcomes. Statistics under "Relative Impact" represent impacts in column 3 as a fraction of the corresponding control group mean (i.e., 100 * [impact/control group mean]).

Up's Seattle office to adjust the corresponding NDNH estimate. 45 So adjusted, the overall NDNH (\$1,990) and survey (\$1,970) impacts were nearly identical, suggesting that Washington data explain most of the NDNH-survey discrepancy. 46

The adjustment applied a two-step procedure to office-level statistics. The first step was to run an ordinary least squares regression on point estimates for impacts from the seven non-Washington offices. Specifically, analysts regressed NDNH-based impacts on the corresponding survey-based estimates for each office (R² = 89%). The second step involved multiplying the survey-based impact estimate for Washington by the regression coefficient relating survey to NDNH estimates in the remaining offices. The result was an adjusted NDNH estimate for Washington. The same procedure was used to estimate mean NDNH earnings for the Washington control group.

The time path of earnings impacts shows the expected pattern: reduced earnings during the program year followed by higher earnings once the program ended. Extended analysis shows that earnings impacts remained substantial through the end of the third follow-up year.

Treatment group members substantially reduced their work effort early in the follow-up period to meet the demands of the full-time Year Up program—a common finding in workforce evaluations. As seen in Exhibit 6-2, they earned substantially less than their control group counterparts in Quarters 1-3 (and somewhat less in Quarters 0 and 4 when they began and completed the program, respectively). Fewer treatment than control group members worked during these quarters (Exhibit 6-3), and those who did work earned substantially less—likely because they worked fewer hours.⁴⁷

Large positive earnings impacts appear in Quarter 5 and persist through Quarter 11 (the end of the third follow-up year).

For employment, small positive impacts emerge in the second year but disappear in the third (Exhibit 6-3). The finding of much larger proportionate earnings impacts than employment impacts implies that treatment group members were earning more because of higher wages or more hours rather than because more had jobs.

Survey-based estimates for hours and wages in the prior week support this inference (see last panel of Exhibit 6-1). Year Up produced a 3.4-hour increase in hours worked (a 14-percent effect), and the treatment group was more likely than the control group to work full-time (59 percent vs. 42 percent). The program increased hourly wages by \$3.87—a 32-percent effect. There was no impact on the fraction with any employment in the prior week: in both the treatment and control groups, about 74 percent reported working at least some hours. 48

As another check on the NDNH-based estimate, we re-ran impacts for the confirmatory earnings outcome excluding sample members from Year Up's Seattle site (10 percent of the full sample). The resulting impact estimate (\$1,932) also is very similar to the adjusted full-sample (\$1,990) and survey (\$1,970) estimates.

For example, in Quarter 3, the average treatment group member who worked earned \$2,361 (dividing total earnings by the fraction worked—\$765/.324), compared with \$3,789 for control group members (\$2,766/.730).

NDNH-based employment estimates are slightly higher than survey-based estimates for treatment group members but nearly identical for control group members. The difference could be a chance result from sampling error or a result of differences in time periods covered by each measure. The NDNH-based measure captures quarterly earnings, while the survey-based estimate uses a single week's worth of earnings to estimate quarterly earnings (e.g., multiplying by 13, the average number of weeks in a quarter). NDNH thus reflects the cumulative effect of brief jobs to a greater extent than the (weekly-based) survey figure. If treatment group members were more likely to have very short job spells after graduation than control group members had in the same follow-up period, we would expect to see higher fractions of the former employed in NDNH than in the survey but smaller differences in average earnings (because the additional jobs were very brief). Higher job turnover is quite plausible given the strong drive to help participants find jobs following Year Up graduation and anecdotal reports that multiple offers and switches were not uncommon. Supporting this interpretation, employment impacts fade while substantial earnings impacts persist in Quarters 8-9.

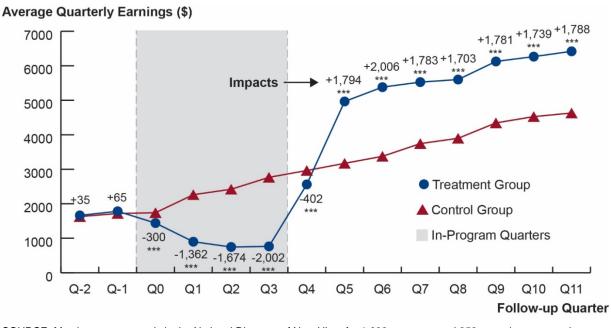


Exhibit 6-2: Impact on Average Earnings in Successive Follow-Up Quarters

SOURCE: Match to wage records in the National Directory of New Hires for 1,638 treatment and 858 control group members. NOTES: Statistically significant in a two-tailed test: * at the 10-percent level, ** at the 5-percent level, *** at the 1-percent level.

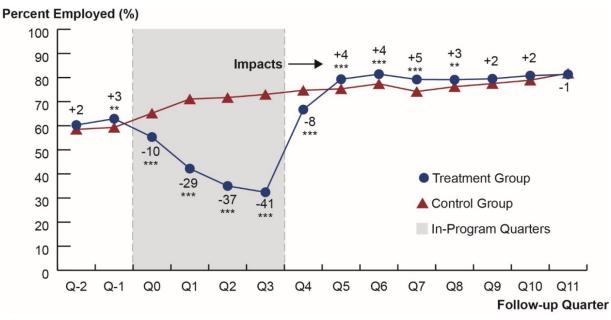


Exhibit 6-3: Impact on Employment in Successive Follow-Up Quarters

SOURCE: Match to wage records in the National Directory of New Hires for 1,638 treatment and 858 control group members. NOTES: Statistically significant in a two-tailed test: * at the 10-percent level, ** at the 5-percent level, *** at the 1-percent level.

Negative earnings impacts associated with Year Up participation in Year 1 are more than offset by positive earnings impacts in Years 2 and 3 and program stipends during Year 1.

Summing quarters for the first follow-up year (the program year), earnings impacts indicate that treatment group members reduced employment to participate in Year Up. Average earnings were substantially lower (-\$5,338) for treatment than for control group members

(Exhibit 6-1, middle panel). Impacts turn positive thereafter: the treatment-control difference is large and positive in follow-up Years 2 (\$5,181, a 39 percent impact) and 3 (\$7,011, a 40 percent impact). The total positive impact for Years 2 and 3—\$12,192—is more than twice the size of treatment group members' net loss in Year 1.

Moreover, Year Up stipends averaging \$7,172 per treatment group member (and not reported as NDNH earnings) more than made up for the -\$5,338 impact on regular earnings in follow-up Year 1.49

By comparison, the largest impacts in the existing literature are smaller in both absolute and proportionate terms. As summarized in Chapter 1, the SEIS evaluation reported earnings impacts of \$4,011 (a 29-percent increase) for the three sectoral programs pooled and \$4,663 (a 32-percent increase) for the most successful site—Per Scholas (Maguire et al. 2010). The pooled SEIS estimate for 18- to 24-year-olds was smaller, at \$3,092 (25 percent). Project QUEST's impacts for all adults reached \$5,080 (22 percent) in the sixth follow-up year, but this program had no positive impact for young adults (Elliot & Roder 2017).

Substantially more treatment than control group members were working in career-track jobs as of the 18-month follow-up.

Results strongly support the evaluation's secondary hypotheses for increased career-track employment (see Exhibit 6-4). Year Up generated substantial increases in the percentages of graduates working in jobs that paid at least \$15/hour (31 percentage points), that required at least mid-level skills (28 percentage points), and that were in Year Up target occupations (28 percentage points). It also increased graduates' perceptions of being on a good track career-wise, with modest positive effects on self-assessed career progress, confidence in career knowledge, and career networks (effect sizes of .28, .18, and .34, respectively).

Exhibit 6-4: Impacts on Selected Career Outcomes

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Relative Impact	<i>p</i> - Value
	Group	Group	(Dillelelice)	LITUI	ппраст	value
Indicators of career pathways employment (%)						
Working and \$15/hour or more	45.8	14.6	+31.2***	(1.9)	213.7	<.001
Working in job requiring at least mid-level skills	43.4	15.5	+27.9***	(2.0)	180.0	<.001
Working in a Year Up target occupation	46.2	18.0	+28.2***	(2.0)	156.7	<.001
Indices of self-assessed career development						
Perceived career progress	3.51	3.33	+0.18***	(0.03)	+0.28	<.001
Confidence in career knowledge	3.26	3.15	+0.10***	(0.03)	+0.18	<.001
Access to career network	1.78	1.68	+0.10***	(0.01)	+0.34	<.001
Sample size	1,301	638				

SOURCE: PACE 18-month follow-up survey.

NOTES: Statistically significant in a one-tailed test: * at the 10% level, *** at the 5% level, *** at the 1% level. Statistics in the Relative Impacts column are relative impacts for indicators of career pathways employment (100*[impact/control group mean]) and effect sizes for career development indices (impact/standard deviation for control group). See Appendix A for definitions of outcome measures.

The \$7,172 for PACE cohorts differs slightly from the \$6,614 figure in Exhibit 4-1 of Chapter 4, which is based on Year Up financial data for all four cohorts each office enrolled between 2013 and 2014. The PACE sample involved only two cohorts, which enrolled at different points in different offices during the same period (see Chapter 3, Section 3.3.1).

Distributions by occupation were quite different for treatment and control group members employed at the time of the survey (Exhibit 6-5). Substantially more treatment than control group members were working in information technology and computer-related fields (37 percent vs. four percent) and business and financial services (23 percent vs. 14 percent), the two main occupational sectors Year Up targets. Fewer treatment than control group members were in sales (eight percent vs. 19 percent), food preparation and service (five percent vs. 13 percent), and transportation and material moving (three percent vs. nine percent) occupations.

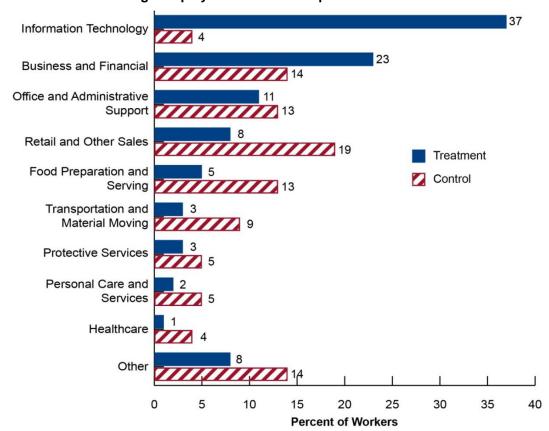


Exhibit 6-5: Percentage Employed in Broad Occupational Sectors

SOURCE: PACE 18-month follow-up survey.

NOTES: Based on samples of 954 treatment and 460 control group members reporting employment at the time of the survey. Statistics incorporate non-response weights but are not regression-adjusted.

6.2 Impacts on Postsecondary Education

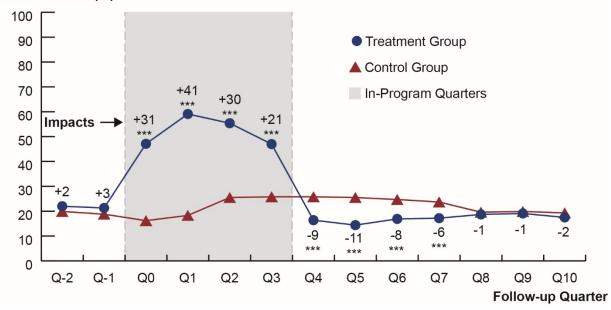
Analyses in this section trace impacts on college enrollment for up to 11 follow-up quarters after random assignment based on college records from the NSC. The section also presents impact estimates for receipt of college credits and of credentials of different types, as measured in the 18-month follow-up survey. Given uncertainty about post-program effects, the analysis treats education hypotheses as exploratory and applies two-tailed tests.

Exhibit 6-5 provides simple descriptive comparisons for respondents in each occupational group who were working at the time of the survey. The statistics are weighted, but differences are not regression-adjusted because the assumption of balance between groups is no longer valid.

Through connections with college partners, Year Up produced substantial increases in college enrollment during the first follow-up year. Enrollment rates for the treatment group fell below rates for the control group in Year 2.

NSC records show that nearly 60 percent of treatment group members, but only 18 percent of control group members, were enrolled in college in the first full quarter after random assignment (Exhibit 6-6). By the end of Quarter 3, the treatment group members had on average accumulated a 2.1-month advantage in total full-time equivalent (FTE) months enrolled compared with control group members (Exhibit 6-7).

Exhibit 6-6: Impact on College Enrollment in Successive Follow-Up Quarters Percent Enrolled (%)



SOURCE: Match to college records in the National Student Clearing House for 1,668 treatment and 871 control group members. NOTES: Statistically significant in a two-tailed test: * at the 10-percent level, ** at the 5-percent level, *** at the 1% level.

College enrollment in the treatment group fell sharply as its members left Year Up—declining from 47 to 16 percent between Quarters 3 and 4 and remaining below control group rates thereafter. The percentages of students in the study sample with any college enrollment between Quarters 4 and 7 were 26 percent for the treatment group and 33 percent for the control group. The first three quarters of Year 3 (follow-up Quarters 8-10) saw slight increases in enrollment for the treatment group and slight declines for the control group. As a result, differences in enrollment were no longer statistically significant.⁵¹

As a legacy of large positive enrollment impacts in the first year, treatment group members maintained an advantage in average cumulative FTE months of enrollment through Quarter 10 (Exhibit 6-7).

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Treatment group members were 2-4 percentage points less likely to be enrolled in college full-time than their control group counterparts, however: in Quarter 10, for example, the percentages of treatment and control group members enrolled in college full-time were 8.1 and 11.5 percent, respectively (not shown in exhibit).

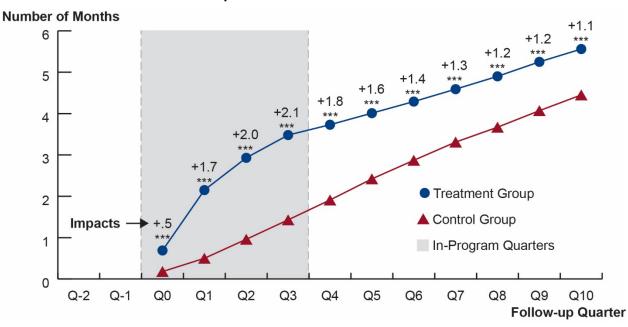


Exhibit 6-7: Impact on the Cumulative Number of Full-Time Equivalent Months of College **Enrollment in Successive Follow-Up Quarters**

SOURCE: Match to college records in the National Student Clearing House for 1,668 treatment and 871 control group members. NOTES: Y-axis indexes the average total number of months of full-time equivalent enrollment for each group in successive quarters. Statistically significant in a two-tailed test: * at the 10-percent level, ** at the 5-percent level, *** at the 1% level.

Year Up had no impact on receipt of college credentials in the first 18 months after random assignment, but it did increase the average number college credits earned. The program also increased receipt of industry certifications.

As of the follow-up survey, similar small percentages (three percent) of treatment and control group members reported receiving credentials from a college or other education and training provider (Exhibit 6-8). On the other hand, more than twice as many treatment group members as control group members (31 percent vs. 13 percent) received exam-based certifications from industry and other issuing agencies.

Whether the treatment group's advantage in total FTE months affects college completion in the long term depend in part on whether these months brought an advantage in college credits earned. As of the 18-month survey, treatment group members reported earning on average 12 college credits—four credits more than control group members. Future PACE reports will assess whether this credit advantage translates into positive impacts on college credentials in the longer term.

Exhibit 6-8: Impacts on Postsecondary Education Outcomes

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Relative Impact	<i>p</i> -Value
Any College Enrollment (%):						
In Quarters 0 to 3	63.7	32.5	+31.2***	(1.8)	96.0	<.001
In Quarters 4 to 7	25.6	32.7	-7.2 **	(1.8)	-22.0	0.035
In Quarters 8-10	23.9	25.6	-1.7	(1.7)	-6.6	0.336
In the survey interview quarter	18.3	26.5	-8.1 ***	(2.0)	-30.6	<.001
At a Year Up partner college in the survey interview quarter	6.0	3.9	+2.1 ***	(1.0)	53.8	<.001
Sample size	1,668	871				
Other College Outcomes						
Average number of credits received	12.2	8.2	+4.0 ***	(0.7)	48.8	<.001
Percentage receiving credentials from:						
A college	3.4	3.0	+0.4	(0.8)	13.3	0.640
Another education-training institution	8.2	7.2	+1.0	(1.3)	13.9	0.437
A licensing/certification body	31.1	12.7	+18.5 ***	(1.8)	145.7	<.001
Any source	37.2	16.3	+20.9 ***	(2.0)	128.2	<.001
Sample size	1,301	638				

SOURCES: Statistics on college enrollment in the top panel are based on college records from the National Student Clearinghouse. Statistics in the bottom panel are based on the PACE 18-month follow-up survey.

6.3 **Impacts on Other Outcomes**

Increased earnings from career-track employment in theory should generate positive impacts in other domains, as discussed in Chapter 3. This section summarizes findings on sample members' financial status, psycho-social skills, and family formation. Because these outcomes are more distal in the theory of change—coming in the wake of main impact on earnings—it was uncertain that they would emerge in the short-term period covered by the 18-month survey. Hence, the analysis treats them as exploratory hypotheses and applies two-tailed tests.

Year Up had positive impacts on several measures of financial status linked to higher earnings.

In principle, increased income from earnings should improve financial status and ease financial strain. Exhibit 6-9 shows that Year Up generated an 8-percentage point reduction in the percentages of students experiencing financial hardship, a 5-point reduction in public assistance receipt, and a 4-point increase in the percentage with health insurance.

The program had at most small impacts on two measures of environmental stress—a sevenitem index of life challenges interfering with school, work, or family responsibilities and a standard four-item index of perceived stress. Only the reduction in life challenges is statistically significant (p<.10). Effects may be small because these indicators capture relatively diffused and distal influences or because positive events—such as landing a challenging job—also can increase stress.

NOTES: Statistically significant in a two-tailed test: * at the 10% level; ** at the 5% level, *** at the 1% level. Statistics under "Relative Impact" represent impacts in column 3 as a fraction of the corresponding control group mean (i.e., 100 * [impact/control group mean]).

Exhibit 6-9: Impacts on Financial Status and Related Strains

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Relative Impact	<i>p</i> - Value
Percent with health insurance	81.9	77.6	+4.4 **	(2.0)	5.7	0.026
Percent in household receiving cash/in-kind supports	49.6	55.1	-5.5 **	(2.2)	-10.0	0.012
Percent experiencing financial hardship in the last 12 months	34.8	42.9	-8.0 ***	(2.3)	-18.6	<.001
Index of life challenges (1-5)	1.51	1.55	-0.04 *	(0.02)	-0.09	0.069
Index of perceived stress (1-4)	2.11	2.15	-0.04	(0.04)	-0.06	0.229
Sample size	1,301	638				

SOURCE: PACE 18-month follow-up survey.

NOTES: Statistically significant in a two-tailed test: * at the 10% level; ** at the 5% level, *** at the 1% level. Statistics for indices (life challenges, perceived stress) are effect sizes (impact/standard deviation for control group), whereas statistics for other outcomes are relative impacts (100*[impact/control group mean]). See Appendix A for definitions of outcome measures.

There was little evidence of impacts on psycho-social skills or family formation. These results for psycho-social skills are inconclusive, however, given weaknesses in outcome measures.

Results for indicators of several psycho-social skills—grit, savvy, and core self-evaluation—are also small and mixed. 52 Findings show no impact for grit, a small negative impact on savvy, and a small positive impact on core self-evaluation (see top panel of Exhibit 6-10).

Readers should view these findings with caution. Recent research on application of these measures to intervention research has raised concern about a problem known as "reference bias"—a bias that can arise if interventions alter the standards respondents apply in rating themselves. 53 The bias could result in treatment group members rating themselves as less skillful than control group members because the former apply a higher standard than the latter. Reference bias seems possible given Year Up's generally high expectations for professional behavior. Standards for self-ratings on workplace savvy also might be elevated if treatment group members are working in professional settings with higher expectations for performance.

See Appendix Exhibit D-2 for sources for these indices. A brief note on the Savvy index is warranted as it is likely to be less familiar to readers. ACT Inc. developed this index to measure employees' "tendency to read other people's motives, understand office politics, and anticipate the needs and intentions of others." The skills required to demonstrate such tendencies are likely to be greater in professional environments with more complex and nuanced approaches to organization, management, and communication.

See Duckworth and Yeager (2015) and West et al. (2015).

Exhibit 6-10: Impacts on Psycho-Social Skills and Family Formation

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Relative Impact	<i>p</i> - Value
Indices for Psycho-Social Skills (average)						
Grit	3.11	3.11	+0.01	0.02	+0.01	.758
Savvy	4.86	4.93	-0.07 **	0.03	-0.12	.014
Core self-evaluation	3.34	3.29	+0.05 **	0.02	+0.11	.018
Family Structure (%)						
Living with spouse	11.9	10.6	+1.3	1.4	12.3	.332
Had child since random assignment / currently pregnant	10.3	12.9	-2.7	2.4	-20.9	.257
Not living with parents	37.5	36.4	+1.1	2.0	3.0	.598
Sample size	1,301	638				

SOURCE: PACE 18-month follow-up survey.

NOTES: Statistically significant in a two-tailed test: * at the 90% level; ** at the 95% level, *** at the 99% level. Statistics for indices (Grit, Savvy, Core Self-Evaluation) are effect sizes (impact/standard deviation for control group), whereas statistics for other outcomes are relative impacts (100*[impact/control group mean]). Childbearing/pregnancy statistics apply to female sample members (539 treatment and 264 control group respondents). See Appendix A for definitions of outcome measures.

Estimated impacts on several family formation outcomes were small and not statistically significant (bottom panel of Exhibit 6-10). It is important to recognize that the time frame covered in the 18-month follow-up was very short, allowing little time to observe any careerrelated postponement of marriage and childbearing. Furthermore, the sample was relatively young when it entered the study. Few control group members were living with a spouse (11 percent) at the time of the survey interview or had had a baby (13 percent) since random assignment. Although one might expect young adults to prefer to live on their own given increased earnings, nearly identical majorities of treatment and control group members (63 and 64 percent, respectively) were still living with their parents as of the 18-month follow-up.

6.4 Subgroup Differences in Impacts on Earnings and College Enrollment

Knowing who benefits more and less from Year Up can help in strengthening services for certain types of students. Such information also can help in targeting recruitment to young adults most likely to benefit from the program.

This section looks at variation in impacts on average quarterly earnings in Quarters 6-7 (the study's confirmatory outcome) and on impacts on any college enrollment during Quarters 4-7 (the second follow-up year). The analysis examines subgroup variation in impacts across nine characteristics, as well as across Year Up's eight local offices.

For each characteristic, Exhibit 6-11 gives results for two kinds of statistical significance tests. Daggers for each baseline characteristic summarize whether differences in impacts between subgroups are statistically significant. Stars indicate whether impact estimates for each subgroup differs from zero.

The table shows the absolute and relative impacts for each subgroup. Absolute impacts represent the size of impacts in their original units and are calculated as the difference between average outcome levels. Relative effects express impacts in terms of the proportionate

increases/decreases they represent relative to the control group mean and are calculated by dividing impacts by control group means and multiplying by 100.54

Subgroup analyses showed positive earnings impacts for every subgroup and local office examined.

Year Up's impact on quarterly earnings was at least \$1,000 and statistically significant in every category examined (a relative increase of at least 30 percent over control group means). Thus, even at their smallest, Year Up's impacts are among the largest that rigorous evaluations have identified to date (see review in Chapter 1). The size of impacts nonetheless varied across subgroups for a number of characteristics.

Starting with several basic demographic characteristics, differences in impacts by age and gender were not statistically significant, but impacts did vary by race-ethnicity.

The first three panels of Exhibit 6-11 summarize subgroup results for age, gender, and raceethnicity.

Age. During site visits, several program staff conjectured that, compared with younger students, older students were in a better position to benefit from Year Up due to greater maturity and higher motivation from longer experience in unsatisfying low-wage jobs. The findings do not support this hypothesis: differences by age are not statistically significant, and point estimates show larger positive earnings impacts for younger sample members (see first panel of Exhibit 6-11, columns 3 and 4).

Impacts on college enrollment do show statistically significant differences by age (see upper right hand panel of Exhibit 6-11). For reasons that are unclear, negative enrollment impacts appear for the youngest and oldest sample members, but not for those in the middle age group.

Gender. Given predominance of men in the IT and financial sectors, one might expect programs focused on these occupations to encounter more barriers in increasing earnings for women than for men. Simple outcome statistics for PACE treatment group members would appear to align with this expectation: the percentage working in targeted occupations at \$15 or above per hour four months after graduation was 13 percentage points lower for women than for men.⁵⁵

It is therefore noteworthy that the program's impacts on earnings do not differ significantly for women and men. Apparently, women on net gained at least as much from Year Up participation as men, despite their relative disadvantage in the program's target occupations.

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The relative impacts provide additional perspective on the importance of impacts of varying sizes, given differences in control group means across subgroups. For example, although an impact of \$2,000 adds the same amount to purchasing power for a subgroup earning \$10,000 as for one earning \$20,000, the difference represents a more dramatic improvement in material circumstances for the former than for the latter.

Results not shown in exhibit.

Exhibit 6-11: Impacts on Earnings and College Enrollment by Subgroup^a

	Quarterly Earnings in Quarters 6-7 (\$)			College	Enrollmen	t in Quarte	rs 4-7 (%)	Sample	Size	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Impact	% Impact			Impact	% Impact		
Characteristic	Treatment	Control	(1)-(2)	(3)/(2) x 100	Treatment	Control	(5)-(6)	(7)/(6) x 100	Treatment	Control
Age			ns				††			
<20	4,912	2,705	2,206 ***	81.6	26.5	40.0	-13.5 ***	-33.8	419	219
20-22	5,480	3,564	1,916 ***	53.8	28.0	30.0	-2.0	-6.7	782	386
23-24	5,880	4,291	1,588 ***	37.0	20.2	29.9	-9.7 ***	-32.4	437	253
Gender			ns				ns			
Male	5,475	3,734	1,740 ***	46.6	23.6	29.4	-5.8 **	-19.7	968	506
Female	5,425	3,308	2,117 ***	64.0	28.3	37.5	-9.2 ***	-24.5	670	352
Race-Ethnicity			†				ns			
Hispanic, any race	6,269	4,097	2,171 ***	53.0	26.8	34.8	-8.0 **	-23.0	540	286
Black, non-Hispanic	4,603	3,026	1,577 ***	52.1	23.9	28.4	-4.4 *	-15.5	848	441
White/another, non-Hisp.	6,555	4,180	2,374 ***	56.8	28.4	44.4	-16.0 ***	-36.0	250	131
Usual High School Grades			††				ns			
A's and B's	5,677	3,478	2,199 ***	63.2	28.6	34.8	-6.2 ***	-17.8	961	527
C's or below	5,152	3,689	1,463 ***	39.7	20.8	29.3	-8.5 ***	-29.0	677	331
Educational Attainment			†				ns			
High school	4,892	3,338	1,553 ***	46.5	19.0	28.9	-9.9 ***	-34.3	838	461
<1 year college	5,602	3,426	2,176 ***	63.5	29.2	31.4	-2.1	-6.7	369	184
1+ year college	6,469	4,152	2,317 ***	55.8	36.1	42.1	-6.1	-14.5	431	213
Training Commitment			†				ns			
Low	5,496	3,309	2,186 ***	66.1	22.9	29.1	-6.3 **	-21.6	549	279
Medium	5,588	3,530	2,058 ***	58.3	28.9	32.1	-3.2	-10.0	501	283
High	5,291	3,823	1,468 ***	38.4	25.2	36.8	-11.6 ***	-31.5	588	296

Continued

	Quarterly Earnings in Quarters 6-7 (\$)			College	Enrollmen	Sample	Size			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
			Impact	% Impact			Impact	% Impact		
Characteristic	Treatment	Control	(1)-(2)	(3)/(2) x 100	Treatment	Control	(5)-(6)	(7)/(6) x 100	Treatment	Control
Depressive Symptoms			ns				ns			
Low	5,565	3,425	2,140 ***	62.5	23.5	33.7	-10.2 ***	-30.3	666	359
Medium	5,627	3,993	1,635 ***	40.9	27.3	29.4	-2.1	-7.1	346	212
High	5,210	3,407	1,803 ***	52.9	26.8	34.0	-7.2 **	-21.2	626	287
Life Challenges			ns				ns			
Low	5,998	3,833	2,165 ***	56.5	26.2	36.6	-10.4 ***	-28.4	636	334
Medium	5,442	3,651	1,792 ***	49.1	23.7	30.2	-6.4 **	-21.2	477	256
High	4,797	3,131	1,666 ***	53.2	26.3	30.4	-4.1	-13.5	525	268
Expected Work Hours			ns				ns			
<10/week	5,102	2,998	2,104 ***	70.2	27.8	38.2	-10.4 ***	-27.2	643	348
10-29/week	5,889	4,010	1,878 ***	46.8	25.2	30.9	-5.7 **	-18.4	719	359
30+/week	5,205	3,780	1,425 ***	37.7	22.5	25.6	-3.0	-11.7	276	151
Office			††				†††			
Α	4,192	2,825	1,367 ***	48.4	29.5	36.8	-7.2	-19.6	161	85
В	5,994	4,602	1,392 ***	30.2	18.5	26.5	-8.0 **	-30.2	316	161
С	6,350	4,617	1,732 ***	37.5	46.6	35.3	11.3 *	32.0	156	85
D	4,951	3,070	1,880 ***	61.3	19.7	17.9	1.8	10.1	242	120
E	4,427	2,483	1,944 ***	78.3	22.7	34.3	-11.6 **	-33.8	173	98
F	5,116	3,042	2,075 ***	68.2	25.3	33.8	-8.4 **	-24.9	273	149
G	5,900	3,455	2,445 ***	70.8	21.4	39.0	-17.6 ***	-45.1	158	82
H SOURCES Overterly consissed as	8,096	4,430	3,666 ***	82.8	30.6	50.0	-19.4 ***	-38.8	159	78

SOURCES: Quarterly earnings are based on wage records obtained in a match to the National Directory of New Hires. College enrollment is based on college records from a match to the National Student Clearinghouse. Measures of baseline characteristics are from the PACE baseline surveys.

NOTES: ^a Daggers appearing in the top row for each characteristic identify characteristics for which subgroup impacts differ † at the 90% level, †† at the 95% level, †† at the 95% level, †† at the 99% level, based on a two-tailed test. Stars summarize tests of whether impacts for individual subgroups are statistically significant: * Impact for subgroup differs from zero in a two-tailed test at the 90% level, *** at the 95% level, *** at the 95% level, See Appendix A for definitions of characteristics.

^b Total sample size for treatment and control groups are 1,638 and 858, respectively, for earnings and 1,668 and 871 for college enrollment. Columns 9 and 10 show subgroup samples for earnings analyses.

Race-ethnicity. Reflecting Year Up's longstanding commitment to inner city youth, more than half of its participants identify as non-Hispanic black. The special challenges facing this population are evident in substantially lower quarterly earnings and college enrollment for control group members who identify as non-Hispanic black (\$3,026 and 28 percent, respectively) versus those who identify as Hispanic (\$4,097 and 35 percent) or non-Hispanic white/another race-ethnicity (\$4,180 and 44 percent).

Year Up's impact on quarterly earnings also was lower for black sample members (\$1,577) than for the Hispanic (\$2,171) and white/another race-ethnicity (\$2,374) subgroups. These differences are statistically significant (at p<.10). The results indicate that Year Up does not benefit young adults who identify as non-Hispanic black to the same degree as it benefits other groups.

An important caveat is that the earnings impact for blacks was still positive, statistically significant, and large. Indeed, the relative impact (the proportionate increase in earnings over the control group mean) for blacks (52 percent) is very similar to the relative impacts for the other two subgroups (53 and 57 percent for those identifying as Hispanic and white/another race-ethnicity, respectively).

Race-ethnicity differences in college enrollment impacts were not statistically significant. Point estimates show the smallest reduction for blacks (4 percentage points) and the largest reduction for the white/another race-ethnicity group (16 percentage points). Absent Year Up, control group means again show less favorable outcomes for blacks (28 percent enrolling in college) than for the white/another group (44 percent enrolling).

Impacts are more favorable for young adults with stronger education backgrounds.

High school grades reflect academic ability as well as other factors influencing school performance, such as self-discipline and home environment. Self-reports on high school grades strongly predict college enrollment and persistence (Fein 2016b).

Usual high school grades. Among members of the control group, young adults who reported receiving mostly A's and B's in high school earned slightly less (\$3,478) than those reporting mostly C's or below (\$3,689), possibly because the former were more likely to be in college than were the latter (35 and 29 percent, respectively).

But Year Up's impact on earnings was substantially larger for better high school performers (\$2,199) than for poorer performers (\$1,463)—a difference significant at the .05 level. This greater earnings boost did not appear to exact a larger price in college enrollment. Reductions in college enrollment are similar for those earning A's and B's in high school (6 percent) versus those earning C's and below (9 percent).

Educational attainment. Prior college experience also may signal qualities favorable to success in employment and training. Supporting this notion, control group members with at least a year's worth of college credit at the outset had higher earnings (\$4,152) and college enrollment (42 percent) than control group members with less than a year of college (\$3,426 and 31 percent) or only a high school credential (\$3,338 and 29 percent).

Differences in Year Up's impacts on earnings by prior educational attainment also were statistically significant (at p < .10). Sample members with a year or more of college before Year Up gained \$2,317, compared to \$1,553 for those with only a high school credential.

Smaller positive earnings impacts for sample members with only a high school credential were accompanied by a statistically significant negative impact on college enrollment (-10 percentage points), while enrollment impacts for those with some college were smaller and not statistically significant. The differences in enrollment impacts across these subgroups are not statistically significant, however.

Earnings impacts for sample members who were most motivated at baseline were smaller than impacts for less motivated sample members.

Though Year Up admissions teams aim to recruit applicants with sufficient motivation and supportable life challenges, the standards are flexible and result in a reasonably diverse clientele. As a result, the research sample provides the basis for informative comparisons between enrollees at different levels on these attributes.

Training commitment. To measure motivation, the baseline survey included a 12-item index of training commitment developed by the testing firm ACT Inc. Values for control group members in Exhibit 6-11 provide some evidence for the measure's validity: mean quarterly earnings and college enrollment both increase with increasing baseline training commitment. 56

In screening, Year Up staff aim to select relatively motivated applicants, reflecting the assumption that motivation is important for success in the program. However, subgroup analyses show somewhat lower impacts for the most highly motivated sample members compared to less motivated ones—a statistically significant difference (at p<.10). The impact is \$1,468 for sample members ranking in the upper third on training commitment versus \$2,058 and \$2,186 for those in the middle and bottom thirds, respectively.

One possible explanation—that Year Up leads youth with higher motivation for training to opt for college over work—is not supported by results for college enrollment (see right-hand panel of Exhibit 6-11). To the contrary, point estimates are negative and relatively large for the most motivated sample members (12 percentage points) compared with less motivated sample members (though the differences are not statistically significant). Given improved job prospects, young adults who are initially the most training-oriented may be especially willing to postpone college plans.

Depressive symptoms/Life challenges. Impacts do not appear to be related to baseline levels of depression and other life challenges: differences in earnings and college enrollment impacts are not statistically significant for these characteristics. The result suggests that Year Up admitted students whose difficulties on these factors were manageable. That said, the depressive symptoms index is based on self-reports rather than a psychological assessment,

The division into lower, middle, and upper "thirds" for Exhibit 6-11 was necessarily approximate because clustering created many ties on values straddling thirds.

and the index of life challenges developed for PACE did not include many of the risks that Year Up seeks to identify in screening and may not fully capture challenges constraining impact.⁵⁷

Earnings impacts were somewhat lower for young adults who initially expected to work full-time while attending Year Up.

Initial expectations for work during Year Up could affect post-program earnings impacts in several ways. On the one hand, earnings might be necessary to meet living expenses while participating in Year Up and support success in the program. On the other, working may siphon valuable time and energy from effort needed in the program. Another possibility is that for some respondents, expectations for little/no work signal additional barriers to employment that Year Up might or might not be able to help address.

Although a global test showed no difference in earnings impacts across all three levels of expected work hours, a pairwise test shows that earnings impacts do differ significantly between the lowest and highest levels of expected work hours. The \$679 difference between impacts for sample members expecting to work fewer than 10 hours a week (\$2,104) and those expecting to work 30 or more hours a week (\$1,425) is statistically significant (at p<.10).

Bolstering the "competition for time and energy" hypothesis, separate analyses show that treatment group members who at baseline said they expected to work at least 20 hours/week in the next few months were four to six percentage points less likely to complete Year Up than those who did not expect to work (not shown in exhibit).

Impacts on college enrollment also did not vary by initial expected work hours in a global test across the three categories. Point estimates here show statistically significant negative enrollment impacts only for students who initially expected to work less than 30 hours/week, perhaps suggesting increased work effort in this group.

Impacts on earnings were substantial and statistically significant for all eight local offices, though the size of effects varied considerably.

Findings in Chapter 4 showed that though all eight local offices implemented Year Up with reasonable fidelity, some offices encountered more difficulties and scored lower on performance benchmarks (e.g., completion) than others. Impacts might vary across offices for this reason, or because the composition of program participants and other local conditions varied.

Variability in the size of earnings impacts is substantial and statistically significant (p<.05). Estimates range from \$1,367 to \$3,666 (in Offices A and H, respectively), and proportionate

The index summarized the extent to which applicants indicated that difficulties with each of the following had interfered with school, work, or family responsibilities in the past year: child care, transportation, drug/alcohol use, illness/health problem, family arguments, and domestic violence. Analyses using Year Up's own risk index also would have been interesting, but the program was unable to provide risk data for control group members.

impacts vary from 30 to 83 percent (Offices B and H). 58 Taken together, the results suggest that the program was effective in a wide range of urban environments.

Differences in college enrollment impacts also are statistically significant (p<.01) and considerable—varying from a 19-percentage point decline in enrollment (Office H) to an 11percentage point increase (Office C). Differences in Year Up's connections with college partners during the program year, discussed in Chapter 4, are likely a contributing factor. Further analysis indicates that the two offices with no enrollment declines in Quarters 4-7 (Offices C and D) were the ones generating the largest enrollment impacts in Quarters 0-3 (60 and 68 percentage points, respectively), suggesting that more robust efforts to engage participants in college during the program foster longer lasting attachments to college. 59

The offices with large reductions in college enrollment tended to have large positive earnings impacts. For example, the two offices with the largest reductions in college—Offices G and H, with 18 and 19-point declines, respectively—also had the largest earnings gains (\$2,445 and \$3,666, respectively). This finding suggests that increased time in career-track jobs after Year Up may reduce the time young adults are willing to devote to school, at least in the short-term.

Impacts and means for Year Up's Seattle office in this panel are adjusted to correct for under-reporting of wage records to NDNH by Washington State (see Section 6.1).

Results not shown in exhibit.

7. Conclusions

This report has provided rigorous evidence on the implementation and early impacts of the Year Up program. The findings show that Year Up implemented the program with high fidelity to its design. Earnings impacts, estimated over a three-year follow-up period after random assignment, are the largest found to date for workforce programs tested with an RCT design. ⁶⁰

This concluding chapter summarizes the report's major findings (Section 7.1) and reflects on their wider implications (Section 7.2). A concluding section (7.3) discusses questions for future research in the ongoing PACE evaluation and beyond.

7.1 Summary Assessment

Results from field research and quantitative analyses of program data show that the eight local Year Up offices fully implemented most components of the program. This is a substantial achievement, given the number and complexity of program elements, varying local environments, and need for coordination across many services.

Quantitative measures of implementation. Statistics generally attest to a high level of implementation. All offices met the goal of expanding recruitment by 50 percent for PACE. They did so while maintaining applicant quality, admitting one in six applicants as in the past.

Participation and retention in Year Up were high: 96 percent of treatment group members enrolled in the program, and 81 percent (85 percent of enrollees) completed the six-month L&D phase. Nearly all enrollees (96 percent) received citations for at least one behavior contract infraction, and 45 percent received 10 or more infractions. Year Up placed virtually all Learning and Development phase (L&D) completers in internships, and 75 percent of the all treatment group members (78 percent of enrollees) finished the program.

Four months after graduation, 83 percent of graduates were working either full-time (74 percent) or part-time (nine percent). Of those working, 88 percent were in an occupation relevant to Year Up's training, 77 percent were earning at least \$15/hour, and 41 percent had a job with their internship sponsor.

Year Up secured the full \$920 weekly payment from employers for 96 percent of positions, netting an average \$22,404 per placement. Revenue from employers financed 59 percent of the program's \$28,290 per participant cost, with most of the balance provided by foundations and private donors. Year Up met its goal of relying minimally on government financing: only two percent of overall revenue was from public agencies.

Although generally high, outcomes varied somewhat across offices. For example, completion rates ranged from 64 percent in one office to 85 percent in two offices, with the remainder in the 75-79 percent range. Rates of co-enrollment at local college partners ranged from 12 percent to 96 percent. Although all offices recorded at least one infraction for a very high fraction of enrollees, citations for 10 or more fractions ranged from 21 percent to 60 percent. Possible sources of variation in these outcomes include differences in local environments and

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 $^{^{60}}$ See literature review in Chapter 1, Section 1.3.1.

participant characteristics, as well as in implementation. The number of offices was too small to support a statistical investigation of the factors responsible.

Culture. Year Up's leaders promoted active, ongoing discussion of mission and values and how to align services with them. This emphasis on culture helped to integrate Year Up's wide array of services across varied stakeholders (e.g., staff, students, college and corporate partners) and locations.

In fieldwork, the PACE team documented widespread awareness of Year Up's values and many examples of staff and students applying them to their activities. A notable example is the core value "strive to learn." Intentional efforts to apply this value led students to take responsibility for their studies, local staff to put energy into improving services, national staff to create program-wide mechanisms for continuous improvement, and all to give and accept constructive feedback.

Year Up's culture also fosters a strong business ethos. This ethos encourages initiative and entrepreneurial behavior, as well as substantial use of language and tools from the business world. Interviews with students, staff, and employers suggested that this aspect of the culture helps to motivate students and staff to work hard and to connect well with Year Up's employer partners.

Leaders used the program's performance measurement system—FM-RADIO—to promote alignment on common goals across and within offices. This tool provided a way to monitor and troubleshoot varying approaches to services while encouraging innovative adaptation to local conditions. Its measures of multiple outcomes helped to promote awareness of the relationships between work performed by different staff specialties—highlighting, for example, the connections between admissions screening, L&D retention, and internship revenue.

Service receipt. Nearly all young adults assigned to the treatment group (96 percent) enrolled in Year Up and received at least some training. More than half (57 percent) of control group members also got some training, mostly at community colleges. But treatment group members were far more likely to cite promising instructional approaches in the courses they took (e.g., discussion, group projects, active learning, real-world relevance); to take courses in life skills; get related work experience; and to receive an array of support services (e.g., academic guidance and career counseling, tutoring, financial assistance, supportive services, and job search and placement assistance).

Overall impacts. Year Up increased average quarterly earnings by \$1,895 (53 percent) in the sixth and seventh quarters after random assignment—the outcome pre-specified in the main confirmatory hypothesis for this analysis. Large positive impacts persisted through the third follow-up year. Overall impacts were \$5,181 (39 percent) and \$7,011 (40 percent) in the second and third years, respectively.

By comparison, the largest impacts from RCTs in the workforce literature have been smaller, particularly for young adult subsamples. As reviewed in Chapter 1, the SEIS evaluation reported some of the largest annual earnings impacts prior to this study—\$4,001 (29 percent) in the second follow-up year for a adults of all ages pooled across three leading sectoral programs (Maguire et al. 2010). The pooled impact for young adults (18-24) was \$3,092 (25 percent).

Earnings impacts for Project Quest, another sectoral training program, reached \$5,080 (22 percent) in the fifth follow-up year among adults of all ages, but subgroup analysis found no positive effects for young adults (Elliot & Roder 2017).

Training programs typically produce negative earnings impacts in the first follow-up year, as participants prioritize training over work. Year Up was no exception, with a \$5,338 reduction in earnings in the first year. The total earnings gain of \$12,192 over the next two years (\$5,181 + \$7,011) more than offset this reduction. Moreover, the Year 1 earnings impacts do not count \$7,172 in Year Up stipends received by the average treatment group member.

Although Year Up produced strong positive earnings impacts, its impacts on college enrollment were negative in the second follow-up year. Treatment group members maintained a small advantage in cumulative months of FTE enrollment and college credits, thanks to co-enrollment at Year Up's local college partners during the program. But this advantage was not sufficient to increase receipt of college credentials in the short-run.

Subgroup impacts. Year Up substantially increased earnings for every subgroup of students examined across 11 different characteristics and across Year Up's eight local offices. Impacts on quarterly earnings in Quarters 6-7 were at least \$1,000 and statistically significant in every subgroup examined.

Though generally large, the size of impacts varied substantially. For example, earnings impacts were lower for students with weaker high school performance and for those expecting to work full-time—suggesting possible benefits from strengthening help with academics and with balancing school and work (perhaps by supporting reduced work hours). Smaller earnings gains for blacks signal that well-documented disadvantages facing this group—including greater discrimination and social and economic challenges—also require greater efforts to overcome.

Impacts were *more* favorable for students who rated *lower* on training commitment than for those who rated higher at the outset. This finding raises the possibility that Year Up may be effective for less motivated young adults than the program historically has targeted. Perhaps low motivation is malleable for some young adults, given sufficient time in a highly structured and supportive program.

Substantial positive impacts in all eight local offices attest to Year Up's replicability in different urban environments. The size of impacts nonetheless varied substantially across offices. This variation might arise from differences in local environments, the quality of implementation, or both. Considerable differences in average control group earnings across offices indicate that contextual factors—such as local population characteristics, labor markets, and access to transportation—could play an important role. But with only eight offices and many dimensions to local context and implementation effectiveness, it is not possible to identify contributing factors with any confidence.

Continuous improvement. Though mature in many respects, Year Up continued to evolve during and after the PACE years (2013-2014). National program improvement efforts sought to address challenges arising from rapid growth and create a stronger platform for future upscaling. These challenges included some divergence from desired practices and some over-

compartmentalization of specialized staff functions. In response, national staff took a series of steps to strengthen monitoring and improve service coordination.

Leaders' response also included steps to standardize services and shift authority to the national level. The 2013-2014 period brought initiatives to standardize admissions processes, centralize curriculum development, expand flows of interns to large employers, and extend the period of post-graduation employment supports.

Rapid growth and high performance expectations increased pressures on staff, and a number of interviewees described the work environment as involving high levels of stress and staff turnover. In response, Year Up's leaders advised national staff to minimize unnecessary demands on local staff, introduced wellness initiatives, and sought to hire staff highly committed to the organization's mission.

Recognizing limits to upscaling a model requiring ongoing infusions of philanthropic funding, in 2014, Year Up decided to stabilize the size of its stand-alone core program (the version evaluated in PACE) and concentrate efforts to scale on adaptations for college and workplace settings. The revised models aim to reduce costs by leveraging instruction and other resources at partner institutions. ⁶¹

7.2 Implications

This report's findings add to growing evidence on the promise of well-implemented career pathways approaches with a strong sectoral focus. These approaches tend to be intensive and comprehensive, address psycho-social skills as well as occupation-specific competencies, provide opportunities for work-based learning, engage employers, incorporate evidence-based practices, and emphasize continuous improvement.

The PACE findings should allay concerns that programs like Year Up that screen for ability, motivation, and manageable life challenges necessarily are serving young adults who would do just as well without such interventions. Baseline statistics show substantial socioeconomic disadvantages in the young adults Year Up recruited, and the study's random assignment design—providing a valid comparison to similar non-recipients—establishes that they truly benefitted from the program's services.

Stringent screening does raise the question of whether Year Up is appropriate for more than a narrow segment of Opportunity Youth. This study's findings of large positive impacts for participants with weaker academic backgrounds, lower motivation, lower incomes, and a wide variety of demographic characteristics hint that the program might be effective with lower-skilled, more disadvantaged populations. But they do not prove that it would be more widely effective or establish how far beyond the current population wider benefits might extend. Future experiments testing the model with expanded target populations would be valuable.

Year Up's success in engaging employers demonstrates potential for not only expanding opportunities for work-based learning in fast-growing professional occupations, but also for mobilizing private-sector financing of organizations that serve as intermediaries between newly

See Fein (20126a) for a description of Year Up's approach to scaling up.

skilled job seekers and employers. Thus, while exemplifying more familiar forms of engagement such as appointing business representatives to advisory boards and working together in identifying skills in demand and designing training programs, Year Up's experience also highlights the potential for employers to play central roles in funding and service delivery in workforce programs for economically disadvantaged adults.

Several employers noted that experience with Year Up interns led them to revamp career pathways in technical occupations to create new career entry points at lower skill levels. One large firm re-oriented its entry-level hiring practices to recruit sub-baccalaureate-level interns. For another, creating assignments for interns stimulated the realization that a layer of tasks currently handled by mid-level employees could be performed by Year Up graduates. Although anecdotal, such reports support the notion that effective sectoral programs can lead employers to substitute a trusted workforce intermediary's "brand" for academic credentials in hiring decisions.

Year Up occupies an important position in the continuum of demand-focused workforce interventions—a continuum ranging from programs offering several weeks of training to multi-year career pathways initiatives and apprenticeship programs. That Year Up is more effective than the former bolsters the case for more intensive interventions with substantial training, supports, and employment experience. Compared with traditional apprenticeships, Year Up provides a shorter path to good-paying jobs, and its internships require less up-front commitment from employers. This greater flexibility and freedom may fit hiring preferences at many U.S. firms better than traditional European-style apprenticeships (Hoffman 2011). 62

Another concern sometimes raised is that the effectiveness of sectoral approaches may be limited to times when targeted jobs are plentiful—or to localities where relevant industries are thriving. This report's positive findings apply to a period of accelerating recovery from recession. But a small preceding experiment also found substantial positive impacts for Year Up at the height of the Great Recession (Elliot and Roder 2014). Thus, there is some reason to believe that programs such as Year Up can be effective in different economic climates.

Year Up has recognized that its services to date have operated on a small scale relative to projected shortfalls in skilled technical workers and the number of Opportunity Youth who could benefit from services. In the organization's estimation, substantial increases in scale will require addressing the major workforce needs of large firms. Employers interviewed for PACE cited a mix of motives for hosting Year Up interns—including contributions to society as well as screening for prospective hires. Year Up leaders believe that large-scale expansion will require assessing and addressing the larger workforce challenges facing employers. The organization is in the process of re-engineering its approach to test this proposition.

7.3 Remaining Questions

While answering one set of questions about Year Up's implementation and early impacts, this report also raises many questions for future research. Future data collection and analysis for

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Consistent with such preferences, recent U.S. apprenticeship initiatives encourage shorter-term training programs in IT and other professional fields. See https://www.dol.gov/apprenticeship/index.htm.

the PACE evaluation will address some of these questions, whereas others will require separate studies.

One series of questions for the ongoing PACE evaluation concerns how Year Up's impacts will evolve over the longer-term:

- Do impacts on earnings persist or fade?
- To what extent do the program's positive initial impacts on employment in entry-level career-track jobs position young adults to continue along career pathways in occupations Year Up targets?
- What role does college play in participants' career pathways, compared to young adults
 who did not go to Year Up? At what rates do Year Up graduates return to school and
 earn college credentials in the longer-term?
- To what degree does career progress affect well-being in other domains?

Future reports on program impacts covering up to six years of follow-up will address these and other questions.

Another important set of questions concerns Year Up's costs and benefits. A planned cost-benefit study will estimate the net financial returns from the perspectives of participants, government, the balance of society, and society as a whole (i.e., summing the first three). Positive earnings impacts and unique features of Year Up's financial model raise interesting questions about longer-term costs and benefits. Although Year Up's costs per participant are relatively high, revenue from employers covers a substantial share of costs, and dependence on public funds is minimal. From participants' perspective, foregone earnings during the program year are more than offset by program stipends. The potential societal benefits are considerable: one set of simulations estimates that the average lifetime cost of being disconnected from education and work during young adulthood is \$600,000 per youth (Belfield et al. 2012).

Year Up's model also raises important questions about returns on employers' investments in interns: Do benefits from reduced hiring and turnover costs, increased productivity, tax deductions for charitable giving (for those booking their investments in this way), and improved public perceptions of companies exceed the costs of what they pay Year Up for interns? Analysis of these questions falls outside the PACE evaluation's scope and would need to be pursued as a separate study.

As discussed in Chapter 3, the PACE evaluation design generates rigorous estimates of Year Up's overall effects, but does not support rigorous assessment of the contributions of its

The figure is Belfield et al.'s (2012) estimate for the roughly half of all Opportunity Youth who are "under-connected"—defined as those with some spells of school or work while aged 16-24. This segment of the population is more similar to Year Up's target population than the remaining half they describe as "chronically disconnected" youth (i.e., those with virtually no school or work from 16-24). Their calculations represent lifetime estimates for the total cost to society in lost earnings and tax revenue, increased costs of crime, diminished health and higher health care costs, and higher welfare payments minus "savings" from diminished use of public education subsidies. The figure does not include potential benefits from improved economic growth that a more adequate supply of skilled technical workers might bring.

components. As outlined below, some non-experimental analysis could be fruitful within the PACE design, but rigorous estimates will require new experiments.

Within the current design, one approach to identifying influential ingredients would be to trace the presence and absence of effects on intermediate outcomes specifically targeted by program components or clusters of components. For example, one set of Year Up components aims to improve earnings prospects by strengthening skills—including the general cognitive and psycho-social skills many employers cite as critical needs, as well as technical skills (Accenture et al. 2014). A separate set of services involve recruiting and matching suitable young adults with positions employers need to fill. The two sets of components—training and recruitment-matching—are intended to be synergistic, but may contribute differentially to overall impacts.

The relative effects of skills training could be analyzed by measuring the targeted skills and statistically estimating the degree to which impacts on skills explain (or "mediate") impacts on earnings. To date, PACE has attempted to measure just a few of the many skills that Year Up targets, and, as noted in Chapter 6, recent research raises serious questions about the validity of self-report items like those in the PACE follow-up survey. So supplemental data collection—involving innovative survey methods and direct skills assessment approaches (e.g., performance testing) for the Year Up sample—would be needed.

More rigorous estimates of the incremental contributions of program components could be obtained through randomized experiments selectively deleting or adding components of interest to the base model. Such experiments would need to be limited to components that could be varied.

Experiments also could be useful in testing revised approaches to selected services. Year Up already has one such experiment underway. The test focuses on the effects of strengthened approaches to monitoring and supports for students who are struggling academically. The study is part of a parallel evaluation of Year Up's newer Professional Training Corps (PTC) model (an adaptation of the core program for college settings). The PTC study also includes an RCT measuring the program's overall impacts. ⁶⁴

A third promising category of experiments is tests of Year Up's effectiveness for wider populations. Such experiments might test expansions to youth with lower skills and more life challenges than the program currently targets, to younger and older age groups, and to youth in non-urban settings.

Finally, replication has been the Achilles' heel of many promising workforce programs. Although Year Up has been effective in expanding its own operations, it is unclear whether and how other organizations might be equipped to replicate Year Up's approach. In particular, Year Up's capacity to connect with the business world took a highly entrepreneurial team of former business executives over a decade to develop. Whether and how this capacity can be transferred to a wider array of workforce intermediaries, postsecondary education providers, and employers are among the more important questions raised by Year Up's success.

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For more on this work, see http://www.abtassociates.com/Perspectives/November-2016/Learning-Together-Building-Stronger-Practitioner-R.

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