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REPORT

FINAL REPORT

Youth CareerConnect: Engaging Employers and Workforce Agency Partners

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DISCLAIMER

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EXECUTIVE SUMMARY

Too many young adults leave school without the training and skills needed to pursue postsecondary education and careers in high-demand fields. In 2017, 1.6 million young adults ages 18 to 24 were unemployed (U.S. Department of Labor 2018). Despite the availability of this labor pool, employers submitted petitions for over 300,000 H-1B visas for foreign workers to fill jobs in high-demand industries such as information technology, engineering, and health care (U.S. Citizenship and Immigration Services 2017). In response to this shortage of skilled workers, in 2014 the U.S. Department of Labor (DOL) awarded \$107 million in four-year grants to 24 applicants to implement the Youth CareerConnect (YCC) initiative, a high school–based program that blended academic and career-focused learning to better prepare students for both college and careers.

YCC grantees included a diverse array of organizations located in 18 states and Puerto Rico. Sixteen of the 24 grantees were local education agencies, and others included nonprofit organizations (5), local workforce entities (2), and an institution of higher education. YCC programs were organized into three program components: preparing students for both college and career, connecting students with career-track employment, and offering academic and nonacademic supports. To ensure YCC programs aligned with employer needs, DOL required YCC grantees to include at least one employer partner and one local public workforce system agency (called workforce agencies) in their grant application. Employer and workforce agency partnerships within the YCC programs were intended to help grantees provide students with access to work-related experiences; ensure that career curricula met industry standards; and offer enhanced career counseling, mentoring, and work readiness training.

To understand how grantees implemented YCC and its effectiveness, DOL contracted with Mathematica Policy Research and its subcontractor, Social Policy Research Associates, to conduct an evaluation that included an impact study, which examined the impact of participation in the YCC program on student success during high school, and an implementation study, which examines how the YCC program developed throughout the four years of the grant. The first report from the implementation study explored the implementation of the YCC program through the 2015-16 school year, after two years of YCC funding (Maxwell et al. 2017). The second report continued to explore YCC program implementation through the 2017-18 school year, the scheduled end of YCC grant funding, along with grantee plans for sustaining the YCC program after grant funding ended (Geckler et al. 2019).

This report builds on the previous implementation reports by exploring how schools engaged employers and workforce agencies as partners. The report draws on data from three sources: a survey of all 24 YCC grantees fielded in 2015 and 2017, information reported by grantees in the YCC Participant Tracking System (PTS) as of spring 2016 and spring 2018, and three rounds of visits and telephone calls from 2015-16 to 2017-18 to selected schools and partner organizations of 10 grantees. The survey gathered information about YCC program activities and services offered in one of the grantee's high schools, the PTS collected information about the activities and services each YCC student received, and site visits and telephone calls provided in-depth information on the planning, design, and implementation of the YCC program. Key findings from analysis of these data suggest the following:

- Employer partnerships grew stronger over the course of the grant and were supported by dedicated YCC staff. Employer partnerships grew stronger between 2015, the beginning of the second year of the grant, and 2017, the beginning of the fourth year of the grant, for 83 percent of the schools described by YCC grantees in the grantee survey (grantees answered questions for one YCC school). Discussions with YCC staff and employer partners during visits and telephone calls indicated that YCC staff dedicated to cultivating employer partnerships were critical because they had responsibility for the outreach and networking needed to recruit new employer partners and maintain existing partnerships. In discussions, employers and YCC staff noted that access to a pipeline of skilled employees and the ability to help develop the future workforce motivated employers to become partners.
- Employer partners advised on program planning and curriculum, and supported increases in internships and mentoring over time. From the beginning of grant implementation, employers were valuable partners in program planning and curriculum design. Employer involvement in internships and mentoring grew as YCC program enrollment grew and YCC staff sought to increase the number of work experiences and mentorships. The percentage of schools with employer partners providing paid internships increased from 45 to 70 percent between 2015 and 2017, and the percentage with mentoring for at least one year grew from 17 to 67 percent. As a result, PTS information on students' activities shows that between spring 2016, the end of the second year of the grant, and spring 2018, the end of the fourth year of the grant, the number of students with internships increased from 1,843 to 4,758 and the number of students receiving mentoring grew from 3,857 to 9,108.
- YCC staff faced several challenges to providing work experiences and mentoring. Despite their success in recruiting employer partners to provide work experiences and mentoring, YCC staff faced challenges in providing all students with these experiences. During visits with schools, staff described a lack of transportation to job sites, workplace age restrictions and employer liability concerns, school district regulations, and coordinating school schedules and employee work schedules as challenges. Schools used different strategies to overcome some of these challenges, including creating a hold harmless contract and providing insurance to address employer liability concerns, using existing summer job programs for district-required employer background checks, and creating time during the school day for work experiences and mentoring.
- Workforce agency involvement was uneven across grantees, but these agencies provided program planning support and direct student services at some YCC grantees. In 2017, 25 percent of grantees described workforce agency partner involvement at YCC schools as 'high." A key challenge that YCC staff identified was that workforce agencies do not typically engage with in-school youth because they have a legislative mandate to focus primarily on out-of-school youth, which made it difficult for agencies to adapt their services to meet YCC program needs. Where workforce agencies did partner successfully, they provided information on the local economy and labor market, helped recruit employers, and provided student services such as work readiness training and career counseling.

• Schools planned to maintain employer partnerships and the YCC services that employer and workforce agency partners provided. All grantees expected employer partnerships to continue at schools after grant funding ended, and 82 percent expected workforce agency partnerships to continue. Over 90 percent of schools described in the grantee survey had begun sustainability planning for employer engagement and the YCC advisory board as of 2017. However, discussions with staff at schools visited indicated that they were uncertain about how to sustain the staff positions that were responsible for developing and maintaining employer and workforce agency partners, and were either planning to transition responsibilities to other staff or working to find funding to maintain these positions.

Strong employer and workforce agency partnerships are an important element of college preparation and career readiness programs such as the YCC program. The work experiences, mentoring, and career preparation that come from strong partnerships may improve students' success in high school, an outcome measured by the evaluation's impact study, by making school more relevant and improving student engagement. Implementation findings from YCC employer and workforce agency partnerships suggest five practices that are key to developing and maintaining these partnerships. Practices include: (1) establish a dedicated partner liaison to develop and maintain employer and workforce agency partnerships; (2) regularly engage partners through advisory boards or other avenues for eliciting partner input and by establishing clear roles for partners within the program; (3) anticipate and problem-solve for barriers to internships and mentoring beyond recruiting enough employer partners; (4) motivate employers with a pipeline of skilled workers and (5) utilize workforce agency partners to identify local economic and labor market conditions, establish employer partnerships and provide work readiness training and career counseling.

I. INTRODUCTION

In 2017, 1.6 million young adults ages 18 to 24 in the United States were unemployed. Youth in this age group faced an unemployment rate of 8.5 percent, nearly double the national unemployment rate of 4.4 percent. Unemployment rates for black and Hispanic youth were even higher (U.S. Department of Labor 2018). Despite the availability of this labor pool, employers submitted petitions for over 300,000 H-1B visas for foreign workers to fill jobs in highdemand industries such as computers, engineering, and health (U.S. Citizenship and Immigration Services 2017). The disconnect between the number of youth who are available and willing to work and the need for visas for foreign workers indicates that many American students are leaving secondary or post-secondary school without the education, training, and employer connections needed for careers in highgrowth industries.

To address this challenge, the U.S. Department of Labor (DOL) established the Youth CareerConnect (YCC) grant to better connect the skills employers need and the education and training students receive. The YCC initiative is funded by fees American companies pay to certify that job openings qualify for the H-1B visa program. This visa program allows employers to hire foreign workers for high-skilled jobs when qualified domestic workers are not available. Using these funds, DOL awarded \$107 million in four-year grants to establish 24 YCC programs (see sidebar) across the country,

Youth CareerConnect Grantees

- 1. Academica de Directores Médicos de Puerto Rico, Inc.
- 2. Anson County Schools (North Carolina)
- 3. Board of Education, Buffalo (New York)
- 4. Bradley County School District (Tennessee)
- 5. Colorado City Independent School District (Texas)
- 6. East San Gabriel Valley Regional Occupational Program (California)
- 7. Galveston Independent School District (Texas)
- 8. Ivy Tech Community College of Indiana
- 9. Jobs for the Future, Inc. (Massachusetts)
- 10. Kentucky Educational Development Corporation
- 11. Laurens County School District 56 (South Carolina)
- 12. Los Angeles Unified School District (California)
- 13. Manufacturing Renaissance (Illinois)
- 14. Metropolitan School District of Pike Township (Indiana)
- New York City Department of Education (New York)
- 16. Pima County (Arizona)
- 17. Prince George's County Economic Development Corporation (Maryland)
- 18. Putnam County Board of Education (Georgia)
- 19. Rosemount Independent School District 196 (Minnesota)
- 20. St. Paul Independent School District #625 (Minnesota)
- 21. School District Number 1 in the City and County of Denver (Colorado)
- 22. Toledo Public Schools (Ohio)
- 23. Upper Explorerland Regional Planning Commission (Iowa)
- 24. Westside Community Schools (Nebraska)

each tailored to their local employment context and focused on a high-growth industry in need of more skilled domestic workers.

To ensure the YCC program aligned with employer needs, DOL required YCC grantees to include at least one employer partner and one local public workforce system agency (called workforce agency in this report) in their grant application. Employer and workforce agency partnerships with the YCC program were intended to help grantees provide students with access to work-related experiences; ensure that career curricula met industry standards; and offer

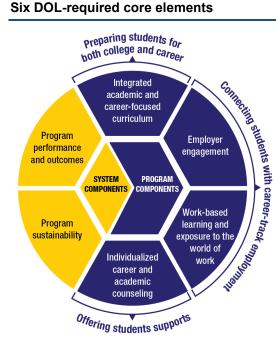
enhanced career counseling, mentoring and work readiness training. Eligible YCC employer partners included local employers or a consortium of employers in the YCC grantees' selected industry sector. Eligible workforce agency partners included Workforce Development Boards (WDBs) and American Job Centers (AJCs), both of which are part of the public workforce system authorized under the Workforce Innovation and Opportunity Act (WIOA).

Strong employer and workforce agency partnerships are an important element of college preparation and career readiness programs such as YCC. Well-developed employer partnerships can improve students' connections to and understanding of careers and help ensure students receive training in marketable skills (Greenstone and Looney 2011; Grobe et al. 2015; Maguire et al. 2010). Workforce agencies and other industry organizations can be valuable in connecting schools with employer partners because they have the industry connections and understanding of work-based learning needed to facilitate school-employer communications and establish student work experiences (Darche et al. 2009; Grobe et al. 2015).

Despite the potential value to schools of employer and workforce agency partnerships, little research exists on how best to engage them in college preparation and career readiness programs. One survey found that employers were partly motivated to participate in such partnerships by access to a pool of qualified workers, suggesting that programs might want to emphasize this benefit to potential employer partners (Bailey at al. 2000). Other research found that highly structured employer partnerships—those with a formal partnership agreement and advisory board, along with a full-time staff person dedicated to coordinating partnerships—led to higher levels of career awareness and more student participation in work-based learning (Kemple et al. 1999). By examining how the 24 YCC grantees established and maintained partnerships, this report provides additional understanding of how college preparation and career readiness programs can effectively partner with employers and workforce agencies.

A. Youth CareerConnect

YCC grants ranged in size from \$2.25 to \$7 million and were awarded to a diverse array of organizations, including 16 school districts, five nonprofit organizations, two local workforce entities, and one institution of higher education (Appendix A provides additional details on each YCC grantee). YCC grantees were located in 18 states and Puerto Rico. Through the YCC initiative, grantees were to bring together community partners-including local education agencies (either schools, districts, or both), institutions of higher education, employers, workforce agencies, and support service organizations-to deliver at least two years of career-focused training and support to participants. YCC grantees were required to implement six core elements (see sidebar), which can be grouped into systems components (program performance and outcomes and program sustainability) and three program components:



- 1. **Preparing students for both college and career.** Students received an integrated academic- and career-focused curriculum aligned with the state's college and career-readiness standards, postsecondary education supports to help with placement into higher education and training, and work readiness training. These services were designed to provide youth with a career focus in selected high-growth H-1B industries or occupations in the local labor market.
- 2. Connecting students with career-track employment. Students received exposure to the world of work at school and in the workplace through hands-on career development experiences that connected classroom instruction to work and career opportunities. Students particularly those in higher grades participated in work-based learning activities like mentoring and internships. These activities often were facilitated by partnerships with and opportunities offered by employers.
- 3. Offering students academic and nonacademic supports. To support student success, grantees offered individualized career and academic counseling, including developing and maintaining an Individual Development Plan (IDP), and other personalized supports. In addition schools implemented YCC within a SLC and provided students with academic (for example, tutoring and homework assistance) and nonacademic supports (for example, assistance to help students with academics, finances, health and well-being, and special needs) (Maxwell et al. 2017).

Evaluation findings about the YCC program

Summary of all results

• *Brief.* Summarizes the findings of the evaluation's impact and implementation studies (Maxwell and Dillon forthcoming).

Implementation study results

- *Early years*. Explores implementation of the YCC program through the 2015-16 school year, after two years of YCC funding (Maxwell et al. 2017).
- *Implementation.* Explores the evolution of YCC program implementation through the 2017-18 school year, and the approaches grantees planned for sustaining the YCC program after grant funding ended (Geckeler et al. 2019).
- *Employer and workforce agency partnerships.* Examines YCC programs' partnerships with employers and local workforce development system agencies (this report).

Impact study results

- *Impact findings.* Examines the impact of participation in the YCC program on student success during high school. (Maxwell et al. 2019).
- *Technical documentation.* Provides a technical discussion about the data, samples, and analysis that underlie the estimated impacts presented in the impact findings report (Burkander et al. forthcoming).

At a systems level, program sustainability and program performance and outcomes comprise the final core components. In addition, grantees were required to provide professional development to teachers and other staff. The training would build the knowledge and skills needed to develop the core curricula and support services that guide students to a career in their chosen focus.

B. The YCC evaluation

To learn about the implementation and effectiveness of the YCC initiative, DOL's Employment and Training Administration, in collaboration with the Chief Evaluation Office, contracted with Mathematica Policy Research and its subcontractor, Social Policy Research Associates, to conduct an evaluation that began alongside the YCC grants in 2014. The evaluation consists of two distinct, but interrelated studies: an *implementation study*, which examines how YCC programs developed over the grant period, and an *impact study*, which consists of a randomized controlled trial in four school districts and a quasi-experimental design in 16 districts (see evaluation findings sidebar).

This report builds on the early implementation report (Maxwell et al. 2017) and the followup implementation report (Geckeler et al. 2019) to further explore how YCC grantees partnered with local employers and workforce agencies. The YCC evaluation's report on the first two years of grant implementation found some early successes in these partnerships: 22 of 24 YCC grantees reported that the school described in the survey had identified employer and workforce agency partners in the first year of the grant and employers were engaged in developing program strategy and curriculum design at the school (Maxwell et al. 2017).¹ In addition, YCC students were more likely than other students (not in a YCC program) to have access to activities involving employer and workforce agency partners, including field trips to workplaces, job shadowing, and class speakers from employers.

Using data collected throughout the implementation of the YCC grant, this report describes how grantees recruited employer partners and maintained employer and workforce agency partnerships; the services and activities partners provided; and plans for sustaining partnerships after the grant ended. The report draws on a mix of quantitative and qualitative data from three sources that bring together information at different time points (Figure I.1). Appendix B provides details on each of these data collection efforts relevant to this report.

¹ Because some grantees implemented YCC at multiple schools, each of the 24 YCC grantee survey respondents answered questions to describe one of their schools. This approach was used in both grantee surveys, with respondents answering questions about the same school in each survey.

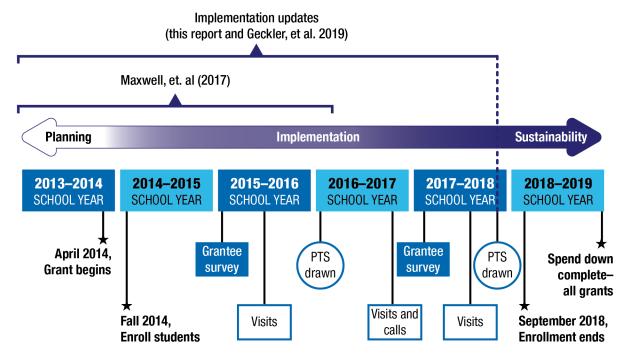


Figure I.1. Timeline for data collection

PTS = Participant Tracking System

- 1. **Two rounds of the grantee survey.** The first round was administered in May to September 2015, between the first and second year of the grant, and the second round in June and July 2017, between the third and fourth year of the grant. These surveys provided information on service delivery models, staffing, staff development, partnerships, and implementation of the program components for the one grantee school with the largest planned YCC enrollment in the earliest grade.² In both years, the survey directed respondents to answer questions for only one high school implementing the YCC program. To ensure that the survey yielded information for a consistently defined set of schools, the research team worked with grantees that offered the YCC program in several schools to select the school for which questions would be answered in both years. Grantees were instructed to identify the school with the earliest program start grade (usually grade 9). If multiple schools offered the YCC program beginning in that grade, the research team asked the grantee to select the school from that pool with the largest YCC enrollment.
- 2. Site visits and telephone interviews. In the second, third, and fourth years of grant implementation, from 2015–2016 to 2017–2018, the research team visited or called the 10 grantees considered for inclusion in the randomized controlled trial. These grantees were selected because the team believed they met two conditions in at least one of their schools: oversubscription into the YCC program and considerable contrast with other (non-YCC) programs. Grantees included three non-profit organizations, one workforce entity, and six

² The grantee survey also asked respondents about the extent to which students not in the YCC program received similar services and activities. Response rates for these items were too low to produce meaningful analysis.

school districts. These grantees implemented their YCC program in a single school (3 grantees), multiple schools within one school district (3 grantees) and multiple schools across multiple districts (4 grantees). Among the three grantees that implemented their YCC program at a single school, that school was the focus of the visit. Among the remaining seven grantees that implemented their YCC program in multiple schools, between one and four schools were included in each visit; for one grantee, the schools visited were located in different districts (Appendix Table B.3). Visits and telephone calls included interviews with grantee staff, school and/or district staff, students, and staff at partner organizations, including employer and workforce agency partners. These efforts provided in-depth qualitative information about the planning, design, and implementation of YCC programs, and the process for mobilizing key partners and sustaining the activities and services after the grant ends. The information also included YCC activities, challenges encountered, and solutions identified.

3. Records from the participant tracking system (PTS), which was used by all grantees to record their program performance data for DOL. These data provided information on all YCC participants and the YCC activities and services they received through a given time period. Data presented in this report includes information all students enrolled through spring 2016, the end of the second year of the grant, and all students enrolled through spring 2018, the end of the fourth year of the grant, for 23 of the 24 YCC grantees.³

C. Structure of this report

Section II of this report discusses how YCC grantees cultivated employer partnerships over the course of the grant and the role employers played in advising on program implementation and providing work-based learning experiences and mentoring. Section III explores the role workforce agencies played in YCC programs and the challenges grantees faced in establishing and maintaining those partnerships over the grant period. Section IV discusses grantees' plans for sustaining employer and workforce agency partnerships. Finally, Section V reviews key YCC program practices that might support employer and workforce agency engagement in college preparation and career readiness programs.

³ Because one of the 24 YCC grantees did not have a Memorandum of Understanding in place with DOL at the time of data analysis, its PTS data are not included in this report.

II. EMPLOYER ENGAGEMENT IN YCC

Employer engagement was "integral to the design, sustainability, and success" of YCC programs (U.S. Department of Labor 2013). Employer partnerships were intended to help align curricula with industry needs and credentials, provide mentoring, and support career exploration through job site tours, classroom presentations, and student internships.

Information gathered during the implementation study indicates that YCC grantees were largely successful in engaging employer partners in these activities. Responses to the grantee survey suggest that the number and strength of employer partnerships grew during the grant period and that employer partners provided advice on program implementation and curriculum design throughout the grant. In addition, information from the PTS suggests that employers provided more internships and mentors over time to meet student demand for these activities. Finally, discussions during visits and telephone calls with YCC staff and partners indicated that having YCC-funded staff dedicated to cultivating, establishing and maintaining employer partnerships was critical. Employers were also motivated to partner with YCC grantees for the potential benefit of developing a pipeline of skilled workers. This section of the report elaborates on these findings.

A. Employer partnerships strengthened over time and most grantees reported that employer involvement was high

Both the grantee survey and discussions with school staff indicate that schools were successful in engaging employer partners in the YCC program early in grant implementation (Maxwell et al. 2017). In 2015, 22 of the 24 YCC grantees reported that the school described in the grantee survey had at least one employer partner, with an average of nearly 19 employer partners per school. Seventeen grantees reported that their school had letters of agreement or memoranda of understanding with their employer partner(s). In addition, schools grew and strengthened employer partners in the following two years: 22 grantees reported that the number of employer partners at their school increased

between 2015 and 2017, and 20 reported that partnerships had grown stronger by 2017. Moreover, 19 grantees described employer partner involvement at schools as high in 2017 (Figure II.1).

"YCC is a model of how to engage employers who are passionate about youth development."

-YCC workforce agency partner

Figure II.1. Employer involvement in YCC programs, 2017 (percentage of grantees reporting on their selected schools' employer involvement)



Source: Grantee survey, 2017, Table B.1, Appendix B.

Notes: Survey respondents answered questions for one school in each of the 24 YCC grantees, though itemspecific nonresponse lowered the number of respondents in some categories.

Discussions with school staff and employers highlights how two factors might have contributed to the growth and strengthening of employer partnerships. At the school, work-based learning coordinators devoted time to cultivating employer partnerships, and in the workplace, employers saw value in building a pipeline of skilled workers to grow their workforce.

1. YCC work-based learning coordinators cultivated relationships with employer partners

DOL required grantees in their grant applications to provide a staffing plan for coordinating collaborative partnerships, but did not dictate that grantees dedicate a staff position to managing employer partnerships. However, all 10 YCC grantees that participated in visits had staff dedicated to cultivating employer partnerships.⁴ (These staff are referred to as work-based learning coordinators in this report). Early in grant implementation, work-based learning coordinators seemed critical to YCC program implementation by managing outreach to employers and recruitment of employer partners (Maxwell et al. 2017). Evidence from the final two years of implementation indicates that this position continued to be important. Staff in this role were able to invest the time needed to network and build relationships with employer partners, especially if they did not divide their time between managing employer partnerships and other responsibilities.

Responsibilities of work-based learning coordinators

Work-based learning coordinators took on various responsibilities across the grantees visited. Below are some of the responsibilities shared during visits:

- Recruiting and communicating with employer partners
- Identifying work-based learning experiences
- Providing students with career counseling
- Assessing students' work readiness and coaching students on work readiness skills
- Working with employers to evaluate student performance during work experiences
- Communicating with the workforce agency partner
- Teaching career-technical education courses
- Working with employers and teachers to develop career coursework
- Establishing partnerships with institutions of higher education
- Managing the YCC program

The work-based learning coordinators at schools for six of the 10 grantees visited were dedicated to this role full-time and were an employee of the grantee. Three of these full-time work-based learning coordinators served multiple schools, whereas the other three served a

Employer recruitment strategies

- Network with local industry groups, such as the chambers of commerce or labor unions, to meet employers and introduce employers to the YCC program.
- Work with existing partners to spread the word about the YCC program and its benefits.
- Create a "community outreach committee" composed of school staff that is responsible for reaching out to area employers.
- Invite potential partners to visit the school and meet with students to build interest in partnerships.

single school. At grantees where the work-based learning coordinators served multiple schools, the YCC grants covered multiple schools. Conversely, at grantees where work-based learning coordinators served a single school, the YCC grant covered a single school. Schools for the other four grantees had part-time work-based learning coordinators who were employed by the workforce agency partner, school, or district and split their time between developing employer partnerships and other responsibilities, such as YCC counselor, program director, or teacher (see sidebar). All of the part-time work-based learning coordinators served a single school.

⁴ Appendix B describes how grantees were selected for visits.

Work-based learning coordinators found that networking with employers and industry organizations was an effective strategy for recruiting new employer partners, but that this took substantial time and effort (see sidebar). Work-based learning coordinators at all 10 grantees visited used school staff or partner organizations with industry connections—such as career-

"Networking is essential and takes a lot of time.... It takes time to build relationships; this is key to success in building employer relationships."

—YCC work-based learning coordinator

technical education teachers, the YCC advisory board, the workforce agency partner, local chamber of commerce, or labor union—to help establish relationships with potential employer partners. Workbased learning coordinators also attended events to meet employers, such as meetings of the local chamber of commerce, industry groups, or workforce agencies, and used fliers, social media, and email blasts to inform

employers about the YCC program.

Even after connecting with an employer, it took time to establish a partnership. As one work-based learning coordinator explained, she needed to work with prospective employers to address concerns about working with young people and overcome any barriers. This effort required multiple meetings with partners, inviting them to visit the school, and slowly building up the partnership, often starting with low-level commitments such as guest-speakers or workplace tours and building to more-intensive activities, such as job shadows or internships.

Full-time work-based learning coordinators reported being well-positioned to engage in these networking and relationship-building activities and had the scheduling flexibility needed to attend events and meet with employer partners. Three of the four part-time work-based learning coordinators noted that that it was challenging to find enough time with their other responsibilities to build robust employer partnerships. Although the fourth work-based learning coordinator did not describe any challenges dividing her time between responsibilities, employer partners at this school primarily held an advisory role and did not provide internships.

Investing in a single staff member to develop industry connections came with drawbacks: staff turnover could be disruptive to partnerships and stall new recruitment. Five grantees experienced turnover in work-based learning coordinators, and three noted that this was a challenge to maintaining employer partnerships. One school overcame this challenge by overlapping two work-based learning coordinators for one year before the former coordinator retired. This overlapping provided the new coordinator time to establish relationships with existing partners and develop her own networks. Yet, overlapping two work based learning coordinators is only possible if turnover can be predicted and the school has the resources to pay two staff members. Another school with unexpected turnover faced delays in developing new work-based learning opportunities for students while the new staff person reestablished connections with existing partners and developed his own recruitment networks. At a third school, the partnership with a key employer weakened after the school's primary contact with the partner left for another organization.

2. Access to a pipeline of skilled employees motivated employers to partner with YCC programs

DOL intended YCC programs to "create a pipeline of participants who, upon program completion, enter a career pathway that aligns with specific in-demand H-1B industry sectors and/or occupations," (U.S. Department of Labor 2013).

Evidence from visits and telephone calls indicates that access to a pipeline of skilled workers was an important motivator for employers to partner with YCC programs and provide internships, job shadows, and mentors. This finding is consistent with other research showing that, in addition to philanthropic motivations, the

[YCC] is "potentially bringing in people for your company that can grow within your organization."

—YCC employer partner

benefit to a company's bottom line was an important motivator for companies to partner with high school career development and readiness programs (Bailey et al. 2000).

Employer partners with eight of the 10 grantees visited commented that helping to build their future workforce and establishing a pool of skilled employees was a key benefit of partnering with a YCC program. For example, one employer partner cited the potential for YCC programs to help fill the industry's need for "really good employees with certain kinds of technical skills, the lifeblood of any engineering company: tool and dye, [industrial] maintenance, electricians, robotics, programmers, air equipment." The work-based learning coordinator at another school observed that employers in the area are "desperate for employees who show up on time and can be trained." As one school leader stated, "employer partners really appreciate the fact that these programs can be very succinct and sustainable pipelines for future employees. . . . They [employers] feel like they are creating their own workforce."

Four schools created a direct connection from the YCC program to employment, either with a single employer partner or with multiple employer partners. In these partnerships, the employer partner(s) did the following:

- The employer partner used the relationship with the YCC program to form a pipeline of graduates who could pass the entry- level exam to enter the company.
- The employer partner targeted YCC students for its internship program with the goal of growing the future workforce and introducing more diversity into the company. After the internship, the employer partner offered to employ students part-time during college and provide tuition support in exchange for students working full-time at the company after college graduation.
- The employer partner recruited YCC students for its apprenticeship program.
- All employer partners received priority selection of job candidates and support for onboarding graduates as new employees.

Work-based learning coordinators used the benefits of creating pipelines of employees as a tool to recruit employer partners. As one YCC program manager described, when staff reached out to employers, they focused their message on the benefits to the employer in improving the future workforce and creating an employee pipeline. However, the YCC program manager also noted that the primary goal of YCC aimed to give students the networks and experience needed

to compete in the working world and not to determine a student's future career. Discussions with other YCC staff reinforced these dual goals of YCC: to provide students with broad exposure to careers along with the specific training and skills needed to fill employers' workforce needs.

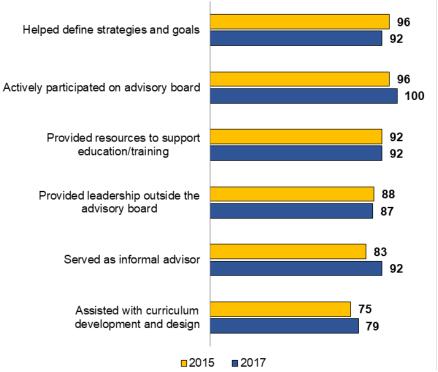
B. Employers provided advisory support and work-based learning opportunities

Early in grant implementation, employer partners shaped program strategy, participated on advisory boards, and helped design the YCC curriculum. In addition, they exposed students to the world of work by hosting field trips, delivering presentations at the school, and offering opportunities for job shadowing (Maxwell et al. 2017). Employer participation in mentoring and internships was limited early on, but as grant implementation progressed, the number of YCC students and the percentage of students in the upper grades increased, thereby increasing the demand for internships and mentoring (Geckeler et al. 2019). Employer partners helped meet this demand by providing more mentors and internship opportunities during the final two years of grant implementation.

1. Employers provided input on program planning and curriculum design through advisory boards and curriculum committees

Engaging employers in program planning and curriculum design can allow programs like YCC to connect their coursework and training to industry needs and provide students with marketable skills (Grobe et al. 2015). Based on grantee survey responses, employer participation in program planning was nearly universal when YCC grants started and remained high through 2017. In 2017, 22 of the 24 YCC grantees (91.7 percent) reported that employers helped the school described in the survey define program strategies and goals, provided in-kind or financial resources to support education and training, and served as an informal program advisor at the school (Figure II.2). In addition, 19 (79.2 percent) reported that employers assisted with the school's curriculum design. By 2017, all 24 YCC grantees reported that employers participated on the advisory board of the school described in the survey.

Figure II.2. Employer engagement in YCC program planning and support (percentage of grantees reporting that employers engaged in each service at their selected school)



Source: Grantee surveys, 2015 and 2017, Table B.1, Appendix B.

Notes: Survey respondents answered questions for one school in each of the 24 YCC grantees, although itemspecific nonresponse lowered the number of respondents in some categories. The numbers reflect the percentage who answered the question and gave a response of agreed or strongly agreed that their employer partners engaged with YCC in the described capacities.

Advisory boards and committees facilitated employer engagement in program planning and curriculum design by providing regular opportunities for individual schools and grantees to convene employers and solicit their input. Individual schools had separate advisory boards at eight of the 10 grantees visited, whereas advisory boards provided program-planning support at the grantee level at the remaining two grantees. Boards met monthly at schools for four grantees, quarterly at five grantees, and twice per year at the remaining grantee. Advisory boards discussed topics central to YCC program operations such as curricula, work experiences, and sustainability. For example, YCC program managers at one school commented that employers on the advisory board provided valuable updates on the YCC focus industry and helped recruit other employers to provide internships, field trips, mentoring, and other work experiences. At another school, YCC teachers described the advisory board as an integral way to stay connected to the industry.

At eight grantees visited, school staff specifically mentioned that employers provided input on curriculum through the advisory board or a curriculum committee. Employers advised on the training curriculum and materials or infrastructure for training, such as the machine shop or simulation labs. Employers also recommended industry-relevant books, helped schools incorporate industry terminology into the curriculum, and ensured the curriculum aligned with industry requirements. For example, one school created a curriculum committee that included the YCC career coach, college coach, and employer partners. In this committee, the employers

advised the career coach on aligning the curriculum with industry standards, and the college coach ensured the curriculum also aligned with their higher education partner's curriculum and requirements. At another school, the curriculum committee developed a course on supply chain management and divided the curriculum into sectors based on how jobs are distributed in the industry. The committee then had employees in each sector provide

"The advisory meetings have changed for the better. . . . We now ask employers how we can align our curriculum for the job positions that are available."

—YCC teacher

feedback on whether the curriculum covered the skills required for their jobs. Finally, a third school reorganized its partner advisory committee to focus discussions on topics where employer input was most valuable. The school limited participation to employer partners and focused meetings on curriculum content and work experiences.

Although employer input and feedback on curriculum seemed to benefit YCC programs, it also presented communication challenges. One grantee's workforce agency partner commented that the "cultural divide" between educators and business people made employer engagement challenging. In particular, the workforce agency partner noted that business people and educators do not always "speak the same language" and that different norms on responsiveness and the pace of change could make it difficult to establish relationships between schools and employers. Teachers at schools from another grantee struggled with the amount of feedback they received from employers; whereas, their employer partners felt that educators were, at times, intimidated by outsiders. The schools addressed this challenge by having counselors meet with teachers to help them work through employer feedback. The YCC program manager for this grantee noted that "learning to listen" was key and that communicating with employers was ultimately beneficial: "As an educator, we teach—we tell people things—but it was when we started listening and asking the employers what we could do for them is when it all turned around."

2. Employers provided more internships over time, meeting the needs of older YCC students and exposing students to career options

As students moved to higher grade levels, work-related activities typically transitioned from those in which students received information from employers, such as guest speakers or

workplace tours, to experiences in which students were an active participant, such as internships and mentoring. For example, one district implemented a work-based learning continuum, in which students began with "career awareness" activities in ninth grade, such as workplace tours or guest speakers, and culminated in 12th grade with "career training" activities, such as internships or apprenticeships (see sidebar).

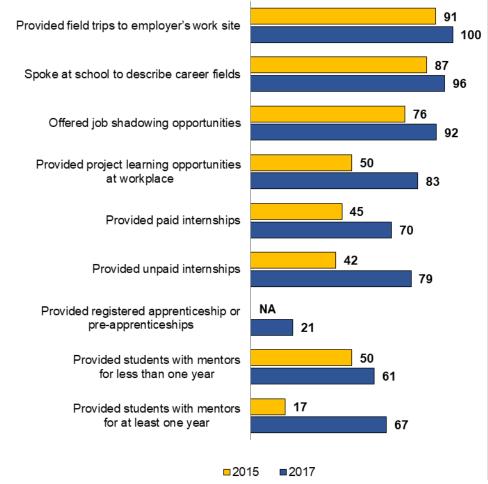
By 2017, all 24 YCC grantees reported that at least one employer partner provided workplace field trips to YCC students. A similarly high proportion of grantees reported that employer partners acted as guest speakers (96 percent) and offered job shadow opportunities (92 percent). In addition, the percentage of schools with employer partners providing these services increased from 2015 to 2017 (see Figure II.3). However, grantees saw some of the largest increases from 2015 to 2017 in the percentage of schools with employer partners providing internships. The grantee survey results, discussions during visits, and telephone calls suggest that schools were able to recruit more employers to provide internships later in the grant period.

Example of a career continuum with one employer partner

One YCC school focused on the health care industry and allowed students to progress through the "career continuum" with one employer partner, a local hospital:

- *Freshman year:* Residents and technicians speak to students in their classes about careers in the health care industry.
- Sophomore year: Students volunteer with the employer to gain exposure to the health care industry. If students complete 100 volunteer hours, they are eligible for an eight-week internship at the hospital.
- Junior year: Students are assigned a resident mentor with whom they meet monthly and join for excursions to different workplace settings.
- Senior year: Students who complete all previous steps can participate in an eightweek paid internship during which they work with physicians in the clinical and hospital settings.

Figure II.3. Employer partners' provision of work-related activities (percentage of grantees reporting that employers provided each activity at their selected school)



Source: Grantee surveys, 2015 and 2017, Table B.1, Appendix B.

Notes: Survey respondents answered questions for one school in each of the 24 YCC grantees, although itemspecific nonresponse lowered the number of respondents in some categories. The numbers reflect the percentage of respondents that gave a response and agreed or strongly agreed that their employer partners engaged with the YCC program in the described capacities. The 2015 grantee survey did not ask about registered apprenticeships or pre-apprenticeships.

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NA = not available
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At the beginning of the grant, YCC staff did not focus on establishing internships, and less than half of grantees reported that employer partners provided internship opportunities (Maxwell et al. 2017). By summer 2017, 70 percent of schools described in the grantee survey had at least one employer partner that provided paid internships and 79 percent had at least one employer partner that provided unpaid internships (Figure II.3). Staff at schools visited for nine of the 10

"I would recommend this program because it gives you a leg up in college and you gain experiences and knowledge through the program. You can explore opportunities that you might not have as a regular student."

—YCC student

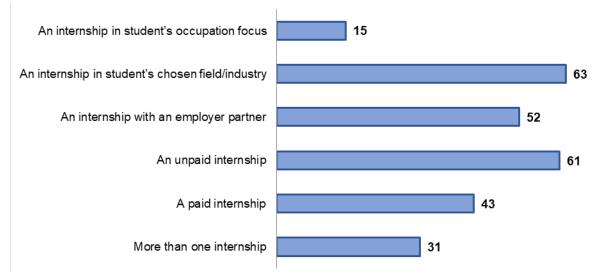
grantees reported being actively engaged in recruiting new employers to provide internships and working with existing employer partners to expand the number of internships as students moved into upper grades. At the school visited for the remaining grantee, staff recruited new employer partners for the advisory board but did not establish internships for students. School staff reported challenges with finding local employers willing to provide internships due to the school's rural location and a lack of funds to transport students long distances for internships.

Among students who participated in internships by the end of the 2017–2018 school year, 43 percent had participated in a paid internship; whereas, 61 percent had participated in an unpaid internship. Just over half of students had an internship with an employer partner, and 63 percent had an internship in their chosen field or industry. Fifteen percent had an internship in their chosen occupation (Figure II.4). Students were enrolled in YCC for an average of just over 15 months before their first internship and participated in internships for an average of 1.7 quarters, or about five months. Nearly all students—97 percent—who participated in an internship completed the internship (Appendix B.4).

"The engineering internships are really great; other than learning more and being ready for the workforce, you also benefit from using what you learn in class and you get paid. You get to experience what it's like to work in that field and see if you would like doing this in the future and doing it every day."

—YCC student

Figure II.4. Characteristics of YCC internships, spring 2018 (percentage of YCC students, among those who participated in an internship)



Source: Participant tracking system, 2018 draw, Table B.4, Appendix B.

Notes: The table includes all students enrolled in the participant tracking system between April 1, 2014 (beginning of grants), and spring 2018, regardless of length of participation in the YCC program. Some students will have participated in the YCC program for a short time; others may have participated for up to four years.

Discussions during visits provide additional detail on internship opportunities. The timing of internships varied, with some taking place during spring break (as a one-week experience), during the summer, or during the school year. Internships provided through employer partners included existing employer internship programs for which YCC students applied, as well as internships created in collaboration with staff specifically for YCC students. At one school, for example, an employer partner described working with the work-based learning coordinator to

How schools obtained employer feedback on students' work readiness

Schools with three of the 10 grantees visited asked employers to complete a feedback form on students' work readiness skills following work experiences:

- Schools with one grantee asked employers to provide feedback using a work readiness tool that covered topics such as taking initiative, workplace appearance, response to supervision, teamwork, and safety.
- One school used a DOL evaluation tool for employer feedback (Appendix C). The workbased learning coordinator used the tool to guide individual conversations with employers about each student's work experience and then talked with the student about the feedback employers provided.
- At schools with one grantee, employers provided feedback on students' performance during internships at the end of the academic year. Counselors reported that students typically scored highly on the evaluation forms.

prepare internship experiences that matched each student's career interests. Students also participated in internships that were not provided through employer partners. For example, two school districts used an existing summer jobs program to provide students internships, in addition to internships provided by employer partners.

For the students, internships provided a window into the workforce. Students interviewed during visits said that internships helped them "learn the trade" and "shadow a professional so you know what you need to do and what not to do." In addition, employer feedback after internships could help improve students' work readiness (see sidebar). The work-based learning coordinator for one grantee commented that "the experience and exposure students get in a [YCC] pathway are key and huge" and that the work experience "motivates students to do better and keeps them in school." Internships even turned into full-time jobs for students. At one school, for example, two seniors who completed internships with an

employer partner were hired into full-time jobs in the manufacturing industry after graduation.

3. Employers provided formal and informal mentoring focused on career development and work readiness

Mentoring aims to improve students' understanding of the world of work by connecting students directly to employers for coaching on work readiness skills and discussions about the education, training, and skills needed for careers in an industry. Mentoring also allows employers to get to know, and help develop, their future workforce. The YCC solicitation for grant applications specified that students should be matched with adult mentors in the selected YCC

"Mentors gave us a better sense of what workers do at their jobs and helped us narrow down our potential career paths"

-Student focus group

industry and "mentors should have frequent contact with program participants over a prolonged period of at least one year and should provide guidance in navigating their identified career pathway" (U.S. Department of Labor 2013).

YCC grantees expanded their employer mentoring programs over the course of the grant. In 2015, employers in 17 percent of schools described in the grantee survey provided students with mentors for at least one year (Maxwell et al. 2017), a number that increased to 67 percent in 2017 (Figure II.3). This growth was reflected in discussions during visits and telephone calls. During the first round of visits, schools at five of the 10 grantees had implemented mentoring services (Maxwell et al. 2017). By the time of the third visit, schools at all grantees offered mentoring services.

DOL initially required that YCC grantees assign mentors to work individually with students. Information from the first round of visits indicated that many schools did not understand this requirement and had planned to provide group mentoring (Maxwell et al. 2017). Grantees' struggles to recruit sufficient employers to meet the individual mentoring requirement led DOL to clarify this requirement and allow group mentoring to occur after initial one-on-one mentoring. Once DOL clarified the mentoring requirement, schools provided mentoring in a variety of ways by the time of the third visit:

- Schools at four of the 10 grantees visited provided group mentoring that matched an employer mentor with a group of four or five students.
- Schools at four grantees provided individual, one-on-one employer mentoring. Schools with two of these grantees addressed the challenge of not having enough employer mentors for individual mentoring by also recruiting college students as mentors.
- Schools with two grantees provided mentoring through community-based organizations instead of through employer partners.
- A school with one grantee organized mentoring events during its summer internship and leadership programs during which students spoke with employers about career options and work readiness skills such as networking, interviewing, and completing job applications.

The basic format of mentoring did not appear to vary substantially across the schools offering individual or group mentoring with employer partners. In discussions, program staff described that they matched students with mentors, both for individual and group mentoring, based on career interests, and that students communicated or met with mentors at least quarterly. Communications were often through email or phone calls, but mentors and students typically met in person quarterly at a minimum. Mentoring topics focused on work and college readiness,

"We get to learn about our mentor and they learn about us. We get to talk with them about the college experience and learn about obstacles and how they overcame them. It helps [us] get prepared for college or whatever we will do after graduation."

—YCC student

with less focus on students' personal issues. In fact, one school explicitly asked mentors to avoid personal issues when talking with students. Topics included paying for college, applying for jobs, career options, time management, interview skills, goal setting, and mentors' work experiences.

Schools at six of the 10 grantees visited provided mentors with training, although training ranged from simply providing literature on effective mentoring to in-person training on the goals of the mentoring program and advice on interacting with youth. This training and guidance

helped address a challenge two schools faced: helping mentors relate to and engage with students. One school found that mentors who were employed in jobs requiring a college education struggled to relate to students who were interested in getting a job immediately after high school. The other school found that it could be difficult for some mentors to relate to an ethnically and socioeconomically diverse student population. In addition to training mentors, four schools tried to recruit a more diverse group of mentors by gender, race, socioeconomics, and career track. One school, for example, engaged the Society for Women Engineers as an employer partner for mentoring, and another school planned to tap into a multicultural internship program within the YCC program's target industry as a way to provide students access to employer mentors with similar backgrounds.

In addition to formal mentoring, employers and YCC staff with schools for three grantees described informal mentoring that happened through work-related activities. For example, an employer partner with one school said that he tells students about his own struggles in high school and emphasizes the value of education. At another school with the same grantee, staff noted that it is valuable for students to have an adult outside of the school who can advise them and that some employers have "adopted" students, providing support and encouragement for students to pursue a career in the industry.

C. YCC grantees faced multiple challenges to meeting increased demand for mentors and work experiences

Although YCC grantees provided more students with work experiences and mentoring services over time, the percentage of YCC students receiving these services did not increase substantially. This is because YCC programs needed to add internships just to keep pace with rising YCC enrollment. Between 2015–2016 and 2017–2018, the number of students receiving internships rose from 1,843 to 4,758, but the percentage of students that received internships increased by less than four percentage points (from 14.1 to 17.5 percent) (Figure II.5). Similarly, the number of YCC students receiving mentoring services rose from 3,857 to 9,108, but the share of students with mentors increased from 30 to 34 percent.

Work experience other than internship

50

30

34

54

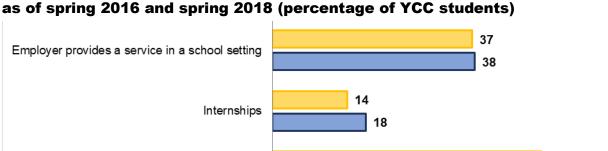


Figure II.5. Participation in work-based learning and mentoring experiences, as of spring 2016 and spring 2018 (percentage of YCC students)

Source: Participant tracking system, 2016 and 2018 draws, Table B.4, Appendix B.

Mentoring services

Notes: The figure includes all students enrolled in the participant tracking system between April 1, 2014 (beginning of grants), and spring 2016 (2016 draw) or 2018 (2018 draw), regardless of length of participation in the YCC program.

2018

2016

These data highlight what YCC staff voiced during visits: Despite their success in recruiting employer partners, it was difficult to recruit enough employers to provide most of their older students with an internship and a mentor. The share of YCC students in upper grades increased over the four years of the grant, and these students were more likely to participate in these intensive experiences (Table II.1). The overall increases in YCC enrollment coupled with a shift in enrollment to older grades meant that YCC staff needed to double or more the number of mentors and internship opportunities just to maintain the percentage of students receiving these services.

				Grade				
		Number of students	Overall percentage	9th	10th	11th	12th	13th/14th
Share of total YCC	2016	13,073	100.0	26.9	32.4	25.7	14.9	0.0
enrollment	2018	27,188	100.0	8.4	18.4	25.6	25.7	21.8
Participated in	2016	1,843	14.1	1.8	9.3	21.9	33.4	0.0
internships	2018	4,758	17.5	1.1	4.1	10.8	26.5	32.4
Received	2016	3,857	29.5	25.7	33.8	28.8	27.8	0.0
mentoring services	2018	9,108	33.5	25.8	33.3	34.3	37.0	31.6

Table II.1. Participation in internships and mentoring by grade level, as of spring 2016 and spring 2018 (percentage of YCC students)

Source: Participant tracking system, 2016 and 2018 draws, Table B.4, Appendix B.

Notes: The table includes all students enrolled in the participant tracking system between April 1, 2014 (beginning of grants), and spring 2016 or 2018, regardless of length of participation in the YCC program. Data are cumulative and include all students enrolled through spring 2016 or 2018.

In addition to finding enough employer partners, all of the schools visited reported at least one logistical or institutional challenge that limited YCC students' access to internships and mentoring. Schools also identified strategies to overcome some of these challenges (see sidebar):

Transportation barriers. Staff at schools for seven of the 10 grantees visited reported being unable to provide transportation assistance to students because of resource constraints (schools with the other three grantees did not specifically mention transportation as a challenge). In these cases, the grantees may not have included transportation in the grant budgets and, therefore, were unable to use YCC funds to transport students to job shadowing experiences, workplace tours, or internships. This limitation occurred in both urban areas where students could not afford public transportation or public transportation was not safe, and rural areas where students needed to travel long distances to employer work sites. Staff at these schools felt that access to transportation would allow them to

Strategies for providing internship opportunities

- Offer students transportation to job sites.
- · Establish an internship course or work-study time during which students can participate in an internship during the school day.
- Partner with organizations that offer summer jobs to develop industryrelevant internship opportunities.
- Address employer liability concerns by creating a hold harmless contract and providing insurance for students at the work site.

expand the number of internships available to students.

District, company and state regulatory barriers. School district policies, state and employer restrictions on the age of employees at specific job sites, and employer liability concerns made it difficult for schools to establish internships at some grantees. School staff at five of the 10 grantees visited stated that employers did not allow youth under age 18 at manufacturing sites, either because of state regulations or company policy. Similarly, two schools with a health care industry focus reported struggling to establish internships because of age restrictions and privacy regulations. However, these restrictions were not consistent, possibly because of differences in state or local regulations or employer policy. At least one school, with a focus on manufacturing, recruited and maintained a large number of employer partners that provided internships without age-related barriers, and two schools were able to establish robust, long-term partnerships with health care facilities and hospitals for job shadowing and internship opportunities. Schools addressed age restrictions in several ways, including by limiting employer involvement to school-site activities and using video conferencing for guest speakers and workplace tours. One grantee also addressed employers' liability concerns with employing students by developing a hold harmless contract with employer partners and providing insurance for all YCC students, in instances where student injuries could occur at the work site.

School district policies also presented some challenges. For example, one school struggled with meeting school district requirements for employer background checks for internships. As a solution, the school collaborated with a summer jobs program operated by the workforce agency partner. This agency had an established process for employers to complete the required background checks and fingerprinting needed to employ students. Employer partners or school staff with six grantees visited noted that students' coursework requirements also limited

students' ability to participate in mentoring or internships. At these grantees, students had difficulty taking advantage of mentoring or internship opportunities during the school day because their schedules were already full with coursework required for graduation.

• School and employer scheduling. Coordinating employer and school schedules was another common challenge that YCC staff reported for both mentoring and internships. Mentors were often available only before or after work, or during lunch. One YCC school addressed this by creating 'business breakfast' and 'lunch and learn' times during which mentors and students could meet. Another grantee combined mentoring with the regular advisory board meetings that employers were already attending. The advisory board meeting was divided into time to discuss program and curriculum topics and time for employers to meet with groups of students as mentors.

School staff at four grantees noted that scheduling was also a challenge for internships. For example, one school struggled to provide internships during the school year because of differences in employer work schedules and the students' school schedules. Eventually, the school district instituted a work-study program that allowed students to leave school early for an internship if they were in good academic standing. Another school created an internship course that allowed students to leave campus for up to two class blocks to pursue a job related to their career interests. However, few students took advantage of this opportunity because it was limited to students who did not need those class blocks to complete other required courses.

III. WORKFORCE AGENCY ENGAGEMENT IN YCC PROGRAMS

DOL required YCC grantees to include a partner from the local workforce development system in their grant application and encouraged grantees to work with workforce agencies to augment career counseling services. DOL intended workforce agencies partnerships to provide additional support for establishing employer partnerships, understanding local workforce needs, and assisting with work readiness services and identifying work experiences.

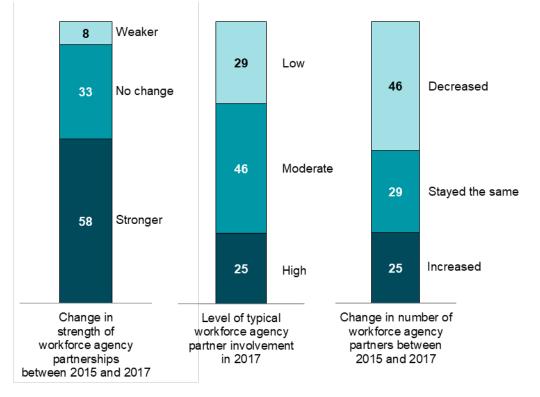
Information from the visits and the grantee survey indicates that grantees engaged workforce agencies during grant planning and early in implementation. Workforce agencies were primarily involved with program planning by providing data about local economic conditions and helping with employer recruitment. However, YCC grantees struggled to involve agencies in providing direct student services. Based on discussions during visits, workforce agencies' legislative mandate to focus on out-of-school youth was a key barrier, and just half of grantees visited reported that workforce agencies provided work readiness training or other student services at YCC schools. When workforce agencies provided student services, an employee of the agency, school district, or grantee facilitated the partnership by acting as a liaison between the YCC program and the workforce agency. This section of the report elaborates on these findings.

A. Workforce agency partnerships strengthened for most grantees, but agency involvement in YCC programs was moderate or low

Workforce agency involvement began early in grant implementation. Twenty-two of the 24 schools described by grantees in the 2015 survey had partnerships with a local WDB or AJC, with 21 schools having formal partnership agreements in place (Maxwell et al. 2017). For one of the two schools without a workforce agency partner, the grantee was a WDB, leaving just one school without a relationship with a workforce agency at the beginning of grant implementation.

Despite the early involvement of workforce agencies, grantees were still developing these partnerships one year into grant implementation (Maxwell et. al. 2017). By 2017, 58 percent of grantees reported that workforce agency partnerships at the school described in the survey had grown stronger since 2015. In addition, school connections with local AJCs appear to have increased. In 2015, 9.5 percent of schools described in the survey referred students to programs at an AJC. By 2017, that increased to 42 percent of schools. Similarly, the percentage of schools with a YCC counselor that facilitated a relationship with or identified resources at AJCs increased from 37 percent to 55 percent (Appendix B.1). Despite this growth, most grantees described the level of partner involvement in 2017 as "low" (29 percent) or "moderate" (46 percent) (Figure III.1). In addition, 46 percent of grantees reported that the number of workforce agency partners decreased between 2015 and 2017.

Figure III.1. Workforce agency involvement in YCC, 2017 (percentage of grantees reporting on their selected schools' workforce agency involvement)



Source: Grantee survey, 2017, Table B.1, Appendix B.

Notes: Survey respondents answered questions for one school in each of the 24 YCC grantees, although itemspecific nonresponse lowered the number of respondents in some categories.

1. Workforce agencies advised on grant planning and their involvement remained at an advisory level for some grantees

Among the 10 YCC grantees visited, the workforce agency partner was included in the grant planning process for six of the grantees. At another two grantees, the workforce agency initiated grant planning and recruited the school districts or schools to participate in the grant. During grant planning, workforce agency roles included leading the grant application process, providing input on program planning, advising on the industry sectors to include in the YCC program, providing a letter of support for the grant, and being included as a sub-grantee for service provision.

At four grantees, workforce agencies' involvement with schools remained in a solely advisory role after grant implementation began. At one of these four grantees, the workforce agency saw the initial grant implementation as a success, and additional involvement with YCC schools was not a priority. YCC counselors at the grantees' schools expected the local AJCs to help with identifying internships but said that the AJCs had "not been a great resource" for the YCC program because their strength is providing schools with information about summer jobs instead of identifying internships.⁵

At another of the grantees, the workforce agency partner's representative on the YCC advisory board stated that she thought engaging with the YCC program would inform the agency's own youth-facing initiatives by helping the agency gain a better understanding of youth who are interested in programs like YCC. The agency representative also saw an opportunity to align the agency's work with the YCC program, specifically through an internship it offered to high school graduates. However, by the third visit, the workforce agency's involvement was limited to participation on the YCC advisory board, and the agency was not involved in program operations.

At the remaining two grantees where workforce agency involvement was limited to an advisory role, one grantee's school was not located close to the workforce agency partner, which limited its involvement, and, at the other grantee, the workforce agency's involvement never moved beyond participation in a steering committee, despite efforts to establish a workforce agency liaison within the YCC program. School staff noted that the district did not have a working relationship with workforce agencies and workforce agencies in the area were generally disconnected from schools. The lack of an existing collaboration made it difficult to engage workforce agencies in the YCC program (see discussion of challenges below).

2. Staff liaisons helped connect workforce agency services with YCC program needs

Where workforce agencies provided student services, designated staff at the YCC school or workforce partner were responsible for maintaining communications and the relationship. For example, at one grantee, the schools' YCC counselors attended monthly AJC staff meetings, which helped YCC staff develop a relationship with the AJC and identify potential internship opportunities. At another grantee, the work-based learning coordinator was on the workforce development board and had an office at the AJC, which helped maintain a strong relationship between the YCC program and the AJC.

Maintaining a close relationship helped YCC staff and workforce agency staff understand the role the agency could play in the YCC program, including providing student services. At the grantee described above, with the work-based learning coordinator on the workforce development board, both the workforce agency partner and work-based learning coordinator expressed that the partnership was challenging at first because there was no prior working relationship between the school district and AJC. The YCC program, though, helped "the AJC look at the schools not just as an educational facilitator but as teachers of skills youth need to have in order to be successful in real life." At another grantee, the partnership between the YCC program and the AJC had a slow start because of staff turnover at the AJC. Once staffing stabilized, the work-based learning coordinator was able to connect with the AJC, and the AJC began offering work readiness services.

⁵ The Workforce Innovation and Opportunity Act (WIOA) requires that 75 percent of state and local youth funding be used for out-of-school youth. Out-of-school youth must be aged 16 to 24 and not attending any school. This restriction limited the funds that AJC's and other public workforce system agencies could spend establishing internships for YCC students, who did not qualify as out-of-school youth.

B. Workforce agencies assisted with program planning and employer recruitment, and provided work readiness training

Information from visits aligns with the grantee survey findings that workforce agency involvement varied across grantees. Workforce agencies were involved in program planning and employer recruitment for YCC schools at most grantees visited, but they provided student services at schools for just five grantees.

1. Workforce agencies advised on local economic conditions and assisted with employer recruitment

Workforce agencies participated on the advisory board and provided input on YCC program implementation at eight of the 10 grantees visited. At six grantees, the school staff reported that workforce agencies provided data on local economic conditions to help ensure the YCC programs' industry focus and curriculum were aligned with local workforce needs. For example, the WDB collaborated with an additional industry partner to produce a report on the local economic landscape for one grantee. The report provided recommendations on the highest-wage careers in the area and the type of coursework students would need to qualify for those jobs. At another grantee, the WDB confirmed that manufacturing and health care were priority industries that should be the focus of this grantee's YCC programs, and at yet another grantee, the AJC provided data for presentations to students and parents about the local labor market.

School staff from five of the 10 YCC grantees visited reported that workforce agencies helped identify potential employer partners in addition to advising on program planning. Workforce agencies are in a unique position to provide support with employer recruitment because of their connections to industry and employers; as one YCC program manager stated, the workforce agency partner "should be the number one source of industry partner connections." At one grantee where the workforce agency partner was involved with recruiting employer partners for the YCC program, staff from the agency used the agency's board of directors to connect with local employers. Staff at another grantee reported that the workforce agency collaborated with schools' work-based learning coordinators on outreach to employers or referred potential employer partners to work-based learning coordinators.

2. Workforce agencies used existing resources to provide work readiness training and internship opportunities

Although many of the YCC grantees visited reported challenges with engaging and working with the workforce agencies, the workforce agency partners did provide direct student services at five of the 10 grantees visited by the final year of grant implementation. At a school with one grantee, the local WDB was a sub-grantee and received YCC grant funds to support a WDB staff person who helped recruit students to the YCC program, provide work readiness training, and establish work-based learning experiences. In addition, the school used the workforce agency's summer jobs program to provide internship opportunities for students. The program manager at this YCC grantee noted the strong collaboration between the school and its workforce agency partner made it potentially unique because collaboration between schools and industry can be difficult.

Another grantee had challenges early on with engaging its workforce agency partner in recruiting employers, but was able to strengthen the partnership over time. The YCC program director reported being initially disappointed with the low level of workforce agency involvement, but stated that the workforce agency's engagement in YCC may have changed once the agency visited a YCC school and was able to see the connections between the YCC program and improving workforce readiness. After this visit, a representative from the workforce agency reached out to the program director about identifying work-based learning opportunities for YCC students. The workforce agency leveraged a summer jobs program it operated with the school district to establish internships for YCC students. The agency adjusted the program for YCC to provide internships aligned with students' career pathways rather than placing students in any job available. In addition, the workforce agency hired staff, using YCC grant funds, to help place students in summer jobs and work with employers to improve their understanding of the rules and requirements for hosting a student. By the fourth year of the grant, the workforce agency representative said that they had a "great relationship" with the grantee's school district and that the YCC program was a "natural alignment" with the workforce agency's work.

School districts with the remaining three grantees partnered with a local AJC and leveraged their resources to supplement work readiness training and career counseling within their YCC programs. The AJCs provided students access to career center resources, including career assessments, résumé building, and work readiness credentialing. For these school districts, the AJC was a key partner. Helping with work readiness training could also help AJCs meet their goals. For example, for one district, the local AJC was interested in helping certify YCC students as work-ready because the county for the school district could become a "work ready community" if enough residents were certified.

C. Workforce agencies' focus on out-of-school youth was a challenge for engaging with YCC programs

School staff at eight of 10 grantees visited reported challenges to engaging workforce agencies once grant implementation began. Challenges included staff turnover at the workforce agency, school system regulations (see sidebar), and workforce agencies' traditional focus on adults and out-of-school youth.

YCC staff noted during visits that the workforce system's focus on adults and out-of-school youth was a primary challenge because workforce agency partners did not engage heavily in serving youth in high school. This focus is driven by WIOA regulations that limit the funds workforce agencies can spend on in-school youth. WIOA requires WDBs to spend at least 75 percent of youth funding on outof-school youth and restricts in-school funds to lowincome students that that have one or more additional barriers to employment.⁶

This focus on out-of-school youth made it difficult for some workforce agencies to adapt their services to meet YCC program needs. For example, in one district, the workforce agency, a local AJC, reviewed each YCC student to determine if the student was eligible for in-school youth services.

School system regulations could also be a barrier to collaboration

One grantee planned for its workforce agency partner to provide counselors to help students access workforce system services. However, the grantee ran into problems with the school district because the workforce agency's staff would be working with school district students but would not have a supervisor employed by the school district. As a result, the grantee hired district staff to counsel students instead and ended its partnership with the agency.

While most students were not eligible for services, the AJC was still able to help the YCC program connect with employers and participated in mock interviews with students. At another district, YCC staff noted that the AJC focused on job seekers ages 18 and older and not the 9th and 10th graders participating in the YCC program. Because of this, YCC staff anticipated a stronger partnership with the workforce agency once students moved into older grades (this YCC program served students up to grade 14).

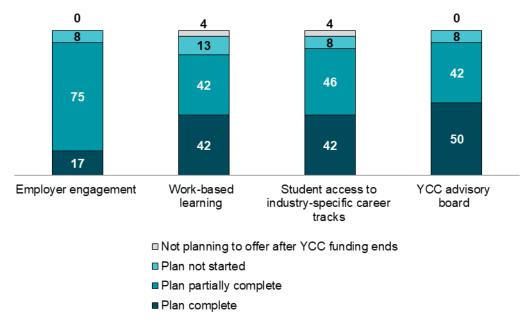
⁶ In-school youth must be ages 14–21, attending school, low income, and meet one or more additional conditions, which could include the following: basic skills deficient; English language learner; an offender; homeless, runaway, in foster care or aged out of the foster care system; pregnant or parenting; an individual with a disability; person who requires additional assistance to enter or complete an educational program or to secure and hold employment. See https://youth.workforcegps.org/-/media/Communities/youth/Files/WIOA-Youth-OWI_Fact-Sheet-long.ashx for more information.

IV. SUSTAINING EMPLOYER AND WORKFORCE AGENCY PARTNERSHIPS

A core element of the YCC initiative was sustainability after DOL funding ended. YCC grantees needed to include a sustainability plan in their grant applications. For employer and workforce agency partnerships, sustainability meant continuing the advisory board, which engaged partners in program planning and curriculum development, and continuing the YCC programs' activities in which partners were most involved, such as work readiness training, work-related activities, and supporting industry-specific career tracks.

Information from the 2017 grantee survey and 2018 visits suggests that schools had begun planning to sustain these YCC program elements after grant funding ended. All schools described in the grantee survey planned to continue employer engagement or the YCC advisory board in 2017, and 92 percent had started or completed a sustainability plan for these program components. Just one school did not plan to continue work-based learning or student access to career tracks, whereas most schools had begun sustainability planning in those areas (Figure IV.1).

Figure IV.1. Sustainability plans for partnership-related activities, 2017 (percentage of grantees reporting progress on sustainability planning at the selected school)



Source: Grantee survey, 2017, Table B.2, Appendix B.

Notes: Survey respondents answered questions for one school in each of the 24 YCC grantees, although itemspecific nonresponse lowered the number of respondents in some categories.

Beyond sustaining specific activities, another key aspect of sustainability was professional development for staff and teachers. DOL required grantees to offer professional development for teachers on career-focused curriculum and the YCC program's focus industry to support YCC program implementation both during and after the grant period. Although the type, intensity, and content of professional development varied substantially across grantees, employer partners were often involved to ensure the relevance to their industries (see sidebar for information on

employer involvement in professional development). For example, according to the 2017 grantee survey, 71 percent of schools offered teachers a site-based residency or externship, up from 26 percent in the 2015 survey. DOL intended residencies and externships to improve staff understanding of their target industries and careers so they could design industry-relevant activities and lesson plans and guide students to a career path in the industry sector.

In terms of sustaining partnerships, all grantees expected that employer partnerships would continue after the grant at schools described in the grantee survey, and 82 percent expected workforce agency partnerships to continue. Among grantees visited, schools and school districts with nine of the 10 grantees expected employer partnerships to continue beyond the end of the grant. One school considered ending the work-based learning activities and shifting from a career focus to a college preparation focus because of difficulties in establishing work experiences and transporting students to work sites. With a college focus, staff thought it would be easier to maintain YCC with existing funds. At other grantees, employers and YCC staff commented on the benefits of sustaining partnerships for both employers and students: Employers gain access to a pool of skilled labor and can help develop their future workforce while students gain exposure to careers, knowledge of different postsecondary options, and access to a network of professionals in their community.

At two of the grantees visited, the school or district and their respective workforce agencies were exploring funding options for continuing the YCC program and the partnership. At one grantee, the district received a grant to supplement the materials needed, including lab and science equipment and technology purchases, and included the workforce agency partner in the grant. At the other grantee, the workforce agency

Employer involvement in professional development

Employers offered teachers training on the YCC focus industry and hosted externships in which teachers could spend time at the employer's workplace. Staff at schools or districts with six of the YCC grantees visited described an employer role in teacher professional development. For example, one district offered funds for teachers to leave the classroom and spend two days on a job site and one day developing related lesson plans. At one school, a teacher spent time with an employer partner learning how a specific product was created, then created a series of lesson plans focusing on the scientific process used in developing the product and the related consumer needs it met. After the lesson, students took a field trip to the company to see the manufacturing process and interview company personnel.

Professional development was not limited to externships. Employers at one school visited helped organize an event with teachers and professionals in the field so that teachers could learn more about careers in the industry. This event also connected teachers with employers for summer externship opportunities. At another school, an employer partner hosted academic and career teachers for a joint workplace tour, with the goal of promoting collaboration among career and academic teachers.

partner was working to increase its funding sources with the goal of helping support the YCC program after grant funding ends. At both of these grantees, the workforce agency partner was highly involved in the YCC program and provided direct student services, including arranging work-based learning experiences and providing work readiness training. School or district staff with the other grantees did not discuss sustaining workforce agency partnerships.

Finding funds to support the YCC program was key to sustaining partnerships. School staff at five of the 10 grantees visited expressed concerns about finding funding to sustain the staff positions that were responsible for developing and maintaining employer and workforce agency partnerships (as noted in Section II). As one YCC staff member described, "the career counselor is the glue that holds the YCC team members and partners together." In the visits, staff described strategies to maintain these positions:

- Two grantees sought funding by promoting the value of the work-based learning coordinators to key stakeholders. One grantee planned to honor its work-based learning coordinator at a school board meeting to highlight the position's importance and to encourage the board to support the position in the future. To acquire state funding for the position, another grantee convened a meeting with state-level cabinet staff to discuss the impact of YCC programming on students and the benefits of the work-based learning coordinator position.
- At a third grantee, the school district redistributed career and technical education funding to allow for district-level work-based learning coordinator positions along with school-level career and technical education staff positions.
- Schools supported under three YCC grantees planned to transition the responsibilities for partnership development from dedicated work-based learning coordinators to other staff, including teachers, administrators, or counselors. Although school staff with two of these grantees reported a smooth transition, school staff with the third grantee raised concerns that existing staff would not have the time needed and that partnerships would weaken under this staffing arrangement.

V. KEY YCC PRACTICES FOR BUILDING EMPLOYER AND WORKFORCE AGENCY PARTNERSHIPS

The work experiences, mentoring, and career preparation that come from strong employer and workforce agency partnerships may improve students' success in high school, an outcome measured by the evaluation's impact study, by making school more relevant and improving student engagement. Information collected for this report uncovered how YCC staff cultivated employer and workforce agency partnerships, the role employers and workforce agencies played in YCC programs, and challenges and successes when partnering with employers and workforce agencies. YCC grantees' experiences suggest five key practices for high schools to develop and maintain partnerships with employers and workforce agencies.

- 1. Establish a dedicated partner liaison to develop and maintain employer and workforce agency partnerships. Work-based learning coordinator positions supported by the YCC grant were responsible for cultivating partnerships, especially employer partnerships. Work-based learning coordinators explained that establishing and maintaining partnerships takes time and effort. These staff must make time available to network and reach out to employers and develop regular communications to maintain the relationships. Dedicated staff helped schools organize the networking and engagement activities needed for partnerships. Maintaining the work-based learning coordinator positions after the grant funding ends was a primary concern for five of the 10 grantees visited, highlighting the value of these roles and the importance of including partner liaison positions when developing similar programs.
- 2. Regularly engage partners through advisory boards or other avenues for eliciting partner input, and by establishing clear roles for partners within the program. Advisory boards and curriculum committees provided an opportunity for YCC programs to regularly engage partners, elicit feedback, and request support for areas such as curriculum design or employer recruitment. It also was important for grantees to identify clear roles for partners within the YCC program. For employer partners, this appeared easier. There were many opportunities for employers to provide direct student services, including acting as guest speakers during class, becoming mentors, and providing internships. Grantee surveys and visits suggest that it was more challenging to identify opportunities for workforce agency partners to provide direct student services. However, grantees were able to engage workforce agencies in different ways, including program planning based on local labor market information, employer recruitment, and provision of work readiness services and career counseling.
- 3. Anticipate and problem-solve for barriers to internships and mentoring beyond recruiting enough employer partners. A number of barriers—beyond recruiting enough employer partners—prevented expanding internship and mentoring opportunities. Challenges included a lack of transportation to job sites, age restrictions at workplaces, employer liability concerns, school district regulations, and difficulty scheduling internships and mentoring around the school day and employers' work schedules. Strategies used to overcome some of these barriers included establishing hold harmless agreements to address employer liability concerns, using an existing summer jobs program to conduct employer background checks required by the school district, creating internship courses in the school

schedule to allow students to leave school for work experiences, and scheduling mentoring before the school and work day began or during lunch.

- 4. **Motivate employers with a pipeline of skilled workers.** Employer partners and YCC staff both noted that a key benefit of the YCC program for employer partners is that they can provide input on training their future workforce, thereby creating a "pipeline" of employees with the necessary skills. While also emphasizing the philanthropic aspects of working with local youth, work-based learning coordinators used the potential for this pipeline as a motivator to recruit employers to partner with YCC programs, even though the goals of the YCC initiative were broader—to provide students with career options after high school and not only to work with a specific employer.
- 5. Utilize workforce agency partners to identify local economic and labor market conditions, establish employer partnerships, and provide work readiness training and career counseling. Although YCC staff noted challenges with partnering with workforce agencies, workforce agencies' industry expertise, employer connections, and resources for career counseling and development made them key partners for some grantees. Workforce agencies provided grantees with information on local economic conditions and labor markets, which helped connect YCC programs to labor market needs. Workforce agencies also leveraged their industry networks to help with employer recruitment and provided students access to career center resources, including career assessments, résumé building, and work readiness credentialing.

REFERENCES

- Bailey, T., K. Hughes, and T. Barr. "Achieving Scale and Quality in School-to-Work Internships: Findings from Two Employer Surveys." *Educational Evaluation and Policy Analysis*, vol. 22, no. 1, spring 2000, pp. 41–64.
- Darche, S., N. Nayar, and K.R. Bracco. "Work-Based Learning in California: Opportunities and Models for Expansion." San Francisco, CA: WestEd, November 2009.
- Geckeler, Christian, Raquel González, Lea Folsom, Erin Dillon, and Nan Maxwell. "Youth CareerConnect: Evolution of Implementation Over Time." Princeton, NJ: Mathematica Policy Research, 2019.
- Greenstone, Michael, and Adam Looney. "Building America's Job Skills with Effective Workforce Programs: A Training Strategy to Raise Wages and Increase Work Opportunities." Washington, DC: Brookings Institution, November 2011. Available at <u>https://www.brookings.edu/wp-content/uploads/2016/06/</u> 11 training greenstone looney.pdf. Accessed on April 30, 2019.
- Grobe, T., N. Martin, and A. Steinberg. "Creating Pathways to Employment: The Role of Industry Partnerships in Preparing Low-Income Youth and Young Adults for Careers in High-Demand Industries." Boston, MA: Jobs for the Future, June 2015. Available at <u>https://www.jff.org/resources/creating-pathways-employment-role-youthindustry-partnerships-preparing-low-income-youth/</u>. Accessed on April 30, 2019
- Haimson, J., and J. Bellotti. "School in the Workplace: Increasing the Scale and Quality of Work-Based Learning." Princeton, NJ: Mathematica Policy Research, January 2001.
- Holzer, H.J. "Raising Job Quality and Skills for American Workers: Creating More Effective Education and Workforce Development Systems in the States." Washington, DC: Brookings Institution, November 2011. Available at <u>http://www.hamiltonproject.org/assets/legacy/</u><u>files/downloads_and_links/11_workforce_holzer_paper.pdf</u>. Accessed on April 30, 2019.
- Kemple, J.J., S.M. Poglinco, and J.C. Snipes. "Career Academies: Building Career Awareness and Work-Based Learning Activities Through Employer Partnerships." New York: MDRC, May 1999.
- Maguire, S., J. Freely, C. Clymer, M. Conway, and D. Schwartz. "Tuning in to Local Labor Markets: Findings from the Sectoral Employment Impact Study." Philadelphia, PA: Public/Private Ventures, 2010.
- Maxwell, N. and E. Dillon. "Building College and Career Pathways for High School Students: Youth CareerConnect." Princeton, NJ: Mathematica, forthcoming.
- Maxwell, N., E. Whitesell, J. Bellotti, S. Leshnick, J. Henderson-Frakes, and D. Berman. "Youth CareerConnect: Early Implementation Findings." Oakland, CA: Mathematica Policy Research, October 2017.

- U.S. Citizenship and Immigration Services. "Number of H-1B Petition Filings, FY2007–FY2017." June 30, 2017.
- U.S. Department of Labor, Employment and Training Administration. "Notice of Availability of Funds and Solicitation for Grant Applications for the *Youth CareerConnect* Program." November 21, 2013.
- U.S. Department of Labor, Trade Adjustment and Assistance Community College and Career Training Grant Program, "Deepening Employer Engagement." October 21, 2016. Available at <u>https://doleta.gov/taaccct/pdf/TAACCCT_Fact_Sheet_Employer_Engagement_10.21.2016.</u> pdf. Accessed on April 30, 2019.
- U.S. Department of Labor, Bureau of Labor Statistics. "Labor Force Statistics from the Current Population Survey: Household Annual Averages, Employment Status of the Civilian, Non-Institutional Population by Sex, Age, and Race, 2017." January 19, 2018. Available at http://www.bls.gov/cps/cpsaat03.htm. Accessed on April 30, 2019.

APPENDIX A. DESCRIPTION OF YCC GRANTS

Table A.1. Description of YCC Grants

Grantee	Location	Lead applicant organization type	Funding
Academia de Directores Médicos de Puerto Rico, Inc.	San Juan, PR	Nonprofit	\$2,842,834
Anson County Schools	Wadesboro, NC	LEA	\$2,247,373
Bradley County School District	Cleveland, TN	LEA	\$4,499,121
Buffalo Board of Education*	Buffalo, NY	LEA	\$3,898,700
Colorado City Independent School District	Colorado City, TX	LEA	\$3,482,704
East San Gabriel Valley Regional Occupational Program	West Covina, CA	LEA	\$4,499,251
Galveston Independent School District	Galveston, TX	LEA	\$3,975,000
Ivy Tech Community College of Indiana	Kokomo, IN	IHE	\$3,273,878
Jobs for the Future, Inc.*	Boston, MA	Nonprofit	\$4,867,815
Kentucky Educational Development Corporation*	Ashland, KY	Nonprofit	\$5,520,019
Laurens County School District 56*	Clinton, SC	LEA	\$6,890,232
Los Angeles Unified School District*	Los Angeles, CA	LEA	\$7,000,000
Manufacturing Renaissance*	Chicago, IL	Nonprofit	\$2,670,909
Metropolitan School District of Pike Township*	Indianapolis, IN	LEA	\$7,000,000
New York City Department of Education*	New York, NY	LEA	\$6,999,601
Pima County*	Tucson, AZ	Workforce entity	\$5,351,690
Prince George's County Economic Development Corporation	Largo, MD	Nonprofit	\$7,000,000
Putnam County Board of Education	Eatonton, GA	LEA	\$2,418,343
Rosemount Independent School District 196	Rosemount, MN	LEA	\$2,990,026
School District number 1 in the City and County of Denver	Denver, CO	LEA	\$6,999,980
St. Paul Independent School District 625	St. Paul, MN	LEA	\$3,680,658
Toledo Public Schools*	Toledo, OH	LEA	\$3,824,281
Upper Explorerland Regional Planning Commission	Postville, IA	Workforce entity	\$2,784,360
Westside Community Schools	Omaha, NE	LEA	\$2,647,212

Source: Grantee application information from the U.S. Department of Labor.

Notes: Lead application type was based on information in the YCC grantee's application. **Boldface** with an asterisk (*) indicates one of the 10 grantees we visited.

IHE = Institution of Higher Education; LEA = Local education agency

APPENDIX B. DATA COLLECTION AND ANALYSIS

This appendix provides information about the main data sources used in this report: the grantee surveys (Section A), visits and telephone interviews (Section B), and the YCC participant tracking system (Section C). Further details are in Maxwell et al. 2017.

A. Surveys of grantees

The grantee survey collected quantitative information from all 24 YCC grantees in two rounds, one fielded in summer 2015 and one in summer 2017.¹ In both years, the survey directed respondents to answer questions for only one high school implementing the YCC program. To ensure that the survey yielded information for a consistently defined set of schools, the research team worked with grantees that offered the YCC program in several schools to select the school for which questions would be answered in both years. Grantees were instructed to identify the school with the earliest program start grade (usually grade 9). If multiple schools offered the YCC program beginning in that grade, the research team asked the grantee to select the school (from that pool) with the largest YCC enrollment. We conceptualized the survey as one that would provide in-depth information on the YCC design and services with a focus on 10 topical areas (organization and administrative structure, partners, YCC features, curriculum, employer engagement, career and academic counseling, work-based learning, support services, small learning communities, and professional development) in both years. Questions on program sustainability were added as an eleventh topic area in 2017.²

The research team analyzed the data from the surveys of all 24 YCC grantees using percentage distributions to describe characteristics and services measured with categorical variables and means to describe factors measured with continuous variables. The team treated item-specific nonresponse—including invalid responses or outliers—as missing data. Tables B.1 and B.2 provide frequencies of data elements from the 2015 and 2017 surveys relevant to employer and workforce agency partnerships.

¹ Twenty-two 2015 surveys were completed between May and July, although two grantees completed the survey in August and September. Eighteen of the 2017 surveys were completed in June, with six completed in July.

² A copy of the instrument used in the 2015 survey can be found at <u>https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201501-1291-002</u>. A copy of the instrument used in the 2017 survey can be found at <u>https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201703-1291-001</u>.

Table B.1. YCC activities and services related to employer and workforceagency engagement, 2015 and 2017 (percentage of grantees reporting ontheir selected school's activities and services)

	2015	2017	Difference
Employer and Workforce Agency Partr	nerships		
Employer partnerships			
With employer partners	91.3	n.a.	n.a.
Average number of employer partners	18.8	n.a.	n.a.
Had a memorandum of understanding or letter of agreement	70.9	n.a.	n.a.
Believes partnership will continue post-grant	87.4	100.0	12.6
Employer partner involvement was:			
Low	n.a.	8.3	n.a.
Moderate	n.a.	12.5	n.a.
High	n.a	79.2	n.a.
Since 2014-15, the number of employer partners has:			
Decreased	n.a.	0.0	n.a.
Stayed the same	n.a.	8.7	n.a.
Increased	n.a	91.3	n.a.
Since 2014-15, employer partnerships have gotten:			
Weaker	n.a.	4.2	n.a.
No change	n.a.	12.5	n.a.
Stronger	n.a	83.3	n.a.
Workforce agency partnerships			
With workforce agency partners	91.3	n.a.	n.a.
Average number of workforce agency partners	1.3	n.a.	n.a.
Had a memorandum of understanding or letter of agreement	96.9	n.a.	n.a.
Believes partnership will continue post-grant	100	81.8	-18.2
Workforce agency partner involvement was:			
Low	n.a.	29.2	n.a.
Moderate	n.a.	45.8	n.a.
High	n.a	25.0	n.a.
Since 2014-15, the number of workforce agency partners has:			
Decreased	n.a.	45.8	n.a.
Stayed the same	n.a.	29.2	n.a.
Increased	n.a	25.0	n.a.
Since 2014-15, workforce agency partnerships have gotten:			
Weaker	n.a.	8.3	n.a.
No change	n.a.	33.3	n.a.
Stronger	n.a	58.3	n.a.
Employer Engagement			
Development and support (percent agreeing/strongly agreeing employer partner did the following)			
Helped define strategies and goals	95.8	91.7	-4.1
Actively participated on advisory board	95.8	100.0	4.2
Provided resources to support education/training	91.7	91.7	0.0
Provided leadership outside the advisory board	87.5	87.0	-0.5

	2015	2017	Difference
Served as informal advisor	83.3	91.7	8.4
Assisted with curriculum development and design	75.0	79.2	4.2
Served as outside grader or reviewer of classroom projects	63.2	54.6	-8.6
Workforce readiness activities (percent agreeing/strongly agreeing employer partner did the following)			
Provided field trips to employer's work site	91.3	100.0	8.7
Spoke at school to describe career fields	87.0	95.8	8.8
Offered job shadowing opportunities	76.2	91.7	15.5
Provided students with mentors for less than one year	50.0	60.9	10.9
Provided students with mentors for at least one year	16.7	66.7	50.0
Provided project learning opportunities at workplace	50.0	82.6	32.6
Provided paid internships	45.0	69.9	24.9
Provided unpaid internships	42.1	79.2	37.1
Provided registered apprenticeships or pre-apprenticeships	n.a.	20.8	n.a.
Professional development (percentage agreeing the following was offered)			
Offered site-based residencies or externships	26.1	70.8	44.7
Workforce Agency Engagement			
YCC students were offered a referral to programs at an AJC (percent responding yes)	9.5	41.7	32.2
YCC counselors facilitated a relationship with or identified resources at AJCs (percent responding yes)	36.8	54.6	17.8

Notes: Although all 24 YCC grantees responded to both the 2015 and 2017 surveys, item-specific nonresponse lowered sample size in some cells.

n.a. = information was not collected during this year.

Table B.2. Status of sustainability plans related to employer and workforceagency partnerships, 2017 (percentage of grantees reporting on theirselected school's sustainability plans)

	Plan complete	Plan partially complete	Plan not started	Not planning to offer after YCC funding ends	Don't know
Employer engagement	16.7	75.0	8.3	0.0	0.0
Work-based learning	41.7	41.7	12.5	4.2	0.0
Student access to industry- specific career tracks	41.7	45.8	8.3	4.2	0.0
Program advisory board	50.0	41.7	8.3	0.0	0.0

Notes: Although all 24 YCC grantees responded to the 2017 surveys, item-specific nonresponse lowered sample size in some cells.

B. Visits and telephone interviews

For three consecutive years, we visited or interviewed through telephone calls the 10 YCC grantees considered for participation in the randomized controlled trial component of the impact study. These grantees were selected because the team believed they met two conditions in at least one of their schools: oversubscription into the YCC program and considerable contrast with

other (non-YCC) programs. Grantees visited included three non-profit organizations, one workforce entity, and six school districts. These grantees implemented their YCC program in a single school (3 grantees), multiple schools within one school district (3 grantees) and multiple schools across multiple districts (4 grantees). For the three grantees that implemented their YCC program at a single school, that school was the focus of the visit. For the remaining seven grantees that implemented their YCC program in multiple schools, between one and four schools were included in each visit. At these grantees, the team focused on the schools with oversubscription and considerable contact with alternative programs. In all but one grantee, the team visited multiple schools in one district; for one grantee, the team visited schools located in two districts (Table B.3). Maxwell et al. (2017) provides details.

The visits and telephone interviews provided in-depth qualitative information on the planning, design, and implementation of the YCC program and key partnerships as well as in-depth information on YCC services offered, challenges encountered, solutions, and plans for sustaining the services after YCC funding ended. During in-person visits to schools, interviews were conducted with YCC coordinators/managers, staff delivering YCC services at the school, partner organization staff members, participating employers, and career and technical education staff who had knowledge of alternative programs. Telephone calls focused on YCC coordinators/managers.

- The first round of visits occurred between December 2015 and March 2016. The 10 grantees visited represented 11 districts and 17 high schools offering YCC programs. Interview data from these visits was highlighted in the initial implementation report (Maxwell et al. 2017).
- The second round of visits and telephone calls took place from February to April 2017. This data collection consisted of visits to 4 of the 10 grantees (4 districts, 6 high schools, including 2 schools not visited before) with telephone interviews with program coordinators for the other 6 grantees.
- The third round of visits occurred between December 2017 and March 2018. These visits to all 10 grantees included discussions at 11 districts and 15 high schools, including 2 schools not visited before.

To ensure consistency in data collection and a shared understanding of what had to be accomplished during the discussions, the study team prepared semi-structured protocols by topic and respondent type to guide on-site activities.³ The protocols promoted uniform data collection while ensuring sufficient flexibility to pursue open-ended discussions as needed. Each year, the research team's visitors and callers participated in training geared toward using the protocols, understanding the YCC initiative's three major program components (preparing students for both college and career, connecting students with career-track employment, and offering students academic and nonacademic supports), and identifying key respondents to be interviewed.

The research team reviewed the raw notes and materials from the visits and telephone calls and synthesized them into detailed write-ups based on a standardized template shared across the team. The write-ups grouped information according to career focus, integrated academic and

³ Protocols can be found at: available at <u>https://www.reginfo.gov/public/do/PRAICList?ref_nbr=201703-1291-001</u>.

career-focused curriculum, employer engagement, work-based learning, individualized counseling, small learning communities, professional development, context, accomplishments, challenges, successes, and sustainability. The research team's lead for the implementation study (or the research team's project director if the lead was a visitor) reviewed the write-ups for completeness, thoroughness, and accuracy. Visitors from the research team made follow-up telephone calls when verification or additional information was needed.

The common write-up format allowed for in-depth coding in qualitative data software (NVivo) by theme and sub-theme, permitting cross-site comparisons. The research team used codes to cluster findings by core topics of interest and by themes. This common process allowed the team to identify trends across grantees and schools and to consider how different services and contexts influenced the early implementation experience.

C. Participant tracking system

DOL required that all grantees use the PTS to report on program performance throughout the grant period. Grantees provided information on participants' characteristics, YCC activities and services received, and outcomes, as well as the extent and nature of staff professional development activities related to the YCC program.⁴

PTS data used in this report were drawn for two periods starting from April 2014, when grants began, through (1) the 2015–2016 school years, with the school year varying based on individual school districts or school calendars; and (2) March 2018, the latest data available when analysis began. For ease of reference, we refer to these time periods as spring 2016 and spring 2018, respectively. The spring 2018 data are cumulative and include individuals included in spring 2016 data, although they would be captured in different grades. For example, the 9th grade student in spring 2016 data is included as an 11th grader in the spring 2018 data.

The research team analyzed data from the PTS by using percentage distributions to describe characteristics and services measured with categorical variables and means to describe factors measured with continuous variables. The research team treated item-specific nonresponse—including invalid responses or outliers—as missing data. Table B.4 provides data tables created from the PTS for this report. The tables include all students in the PTS during the specified time, regardless of length of participation in the YCC program: some students had participated in the YCC program for a short time; others may have participated for about four years. A student's grade is based on the grade at enrollment and standard academic progress. For example, a student who enrolled in the YCC program in grade 10 in the 2014–2015 school year is considered a student in grade 11 in 2015–2016, and in grade 12 in 2016–2017. The all grades column of the table includes those in grades 13 or higher, even though the table does not explicitly report information for those students.

⁴ The system manual that provides information contained in the PTS can be found at <u>https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201805-1291-001</u>.

Grantee (10 grantees)	Grantee type	Local YCC program name	Level of YCC implementation	School visited (21 high schools)	High school district of school visited (11 districts)
Board of Education, Buffalo, New York	School district	Medical Careers Pathway Program	Single school	MST–Math, Science, Technology School	Buffalo Public SD
Jobs for the Future, Inc.	Non-profit organization	Massachusetts Advanced Pathways Program	Three schools across three districts	Brockton HS	Brockton SD
Kentucky Educational Development Corporation	Non-profit organization	Project ACHIEVE	Ten schools across eight districts	Pulaski County HS Southwestern HS	Pulaski County SD
Laurens County SD 56	School district	Carolina Alliance for Technology	Four schools across three districts	Clinton HS	Laurens District 56
Los Angeles USD	School district	Los Angeles USD YCC Program	Six schools within one district	Laurens HS Teacher Preparatory Academy/Technology Preparatory Academy Hawkins HS Responsible Indigenous Social Entrepreneurship Sylmar HS Sylmar Biotech Health Academy Bernstein HS STEM Academy of Hollywood Contreras Learning Center, The School of Business and Tourism Manual Arts HS, School of Medicine, Arts and Technology	Laurens District 55 Los Angeles USD
Manufacturing Renaissance	Non-profit organization	Manufacturing Careers & College Connect	Single school	Austin Polytechnical Academy	Chicago PS
Metropolitan SD of Pike Township	School district	Pike HS YCC Program	Single school	Pike HS	Metropolitan SD of Pike Township
New York City Department of Education	School district	CUNY P-TECH	17 schools within one district	Energy Tech HS MECA (Manhattan Early College School for Advertising)	New York City Department of Education
Pima County	Workforce entity	CREO (STEM Math)	12 schools across seven districts	Rio Rico HS	Santa Cruz Valley USD
Toledo Public Schools	School district	Pathways to Prosperity	Five schools within one district	Bowsher HS Scott HS Start HS Woodward HS	Toledo PS

Table B.3 Grantees, schools, and districts included in visits and interviews

Table B.4. St	udent participa	ation in work-re	lated activities
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		S	pring 201	6			S	Spring 201	8	
	Grade 9	Grade 10	Grade 11	Grade 12	All grades	Grade 9	Grade 10	Grade 11	Grade 12	All grades
Employer service provided (in a school setting including	career fair	s, career e	xploration	talks, and	mock inte	rviews)				
Percentage with a service an employer provided	25.6	39.9	45.5	39.3	37.4	40.3	29.9	35	39.8	37.9
If employer-provided service:										
Average number of quarters employer service provided	2.0	2.6	2.5	2.5	2.4	1.5	1.9	2.2	2.8	2.3
Average time in YCC before first employer service (months)	6.5	9.5	10.5	9.9	9.5	3.1	8.7	11.6	18.7	13.4
Mentoring ^a										
Percentage receiving mentoring services	25.7	33.8	28.8	27.8	29.5	25.8	33.3	34.3	37	33.5
If received:										
Average number of quarters	1.9	2.3	2.0	1.9	2.1	1.6	2.3	2.7	3.1	2.6
Average months in YCC before first service	8.2	12.5	10.8	10.5	10.8	3.9	7.9	11.6	13.2	10.8
Internships										
Percentage participating in internships	1.8	9.3	21.9	33.4	14.1	1.1	4.1	10.8	26.5	17.5
If participated in internships, percentage with:										
More than one internship	7.9	14	25.2	23.2	21.5	3.8	13.2	26.8	31.5	31.0
A paid internship	61.9	35.4	35.6	61.1	45.5	19.2	44.1	41.9	39.2	42.6
An unpaid internship	39.7	66.7	67.3	41.0	57	80.8	57.4	61.9	64.9	61.1
An internship with an employer partner	44.4	46.3	47.7	62.5	52.5	38.5	53.4	47.5	47.8	52.4
An internship in student's chosen field/industry	38.1	53.2	64	72.5	63.8	96.2	57.8	52.1	62	62.5
An internship in student's occupation focus	28.6	27	15.6	14.1	17.9	50	19.6	17.2	15.4	14.9
Percentage completed an internship	98.4	93.4	88.2	96.3	92.5	88.5	87.7	96.2	95.9	96.6
Average number of quarters participated in an internship	1.0	1.1	1.2	1.2	1.2	1.5	1.4	1.8	1.8	1.7
Average time in YCC before first internship (months)	9.6	14	12.0	12.4	12.5	6.0	11.0	13.9	18.3	15.5

	Spring 2016			Spring 2018						
	Grade 9	Grade 10	Grade 11	Grade 12	All grades	Grade 9	Grade 10	Grade 11	Grade 12	All grades
Work experience other than internship (job shadowing	, exposure	to various	aspects o	f an indust	ry, and oth	er exposu	res to the	world of wo	ork)	
Percentage receiving experience	41.4	53.8	53.3	54.4	50.4	42	48.7	52.7	58.5	53.8
If received work experience:										
Average number of quarters received work experience	1.8	2.0	1.8	1.9	1.9	1.8	2.0	2.3	2.6	2.2
Average time in YCC before first work experience (months)	4.9	7.3	7.5	7.3	6.8	3.2	6.1	7.6	8.9	7.6
Total number of participants	3,523	4,232	3,364	1,950	13,073	2,295	5,002	6,965	6,996	27,188

^aMentoring includes one-on-one, group, and/or service-based mentoring in which students are matched with adults

APPENDIX C. WORKFORCE INVESTMENT ACT YOUTH PROGRAM WORK READINESS TOOL

EMPLOYER NAME:			EMPLOYEE EV	ALUATION			
Participant Name:		Worksite:					
Participant Job Title:		Worksite Supervisor/Review					
Start Date:		Review Date #1:	Re	view Date #2:	•		
FOUNDATION SKILL	PERFORM	ANCE EXPECTATIONS	Performance Improvement Plan Needed (1)	Needs Development (2) 3 for more detaile	Proficient (3)	Exemplary (4)	
ATTENDANCE		xpectations for attendance and adhering to isor in advance in case of absence.					
PUNCTUALITY		xpectations for punctuality. Arriving on nd returning from breaks on time, and • to being late.					
WORKPLACE APPEARANCE		r for position and duties. Practicing opriate for position and duties.					
TAKING INITIATIVE	Initiating interaction wi completion of previous						
QUALITY OF WORK	improve work performa	uating own work, and utilizing feedback to ance. Striving to meet quality standards.					
COMMUNICATION SKILLS	non-verbally. Listening work environment.	communicating effectively – verbally and attentively. Using language appropriate fo					
RESPONSE TO SUPERVISION	positive attitude and us performance.	edback, and constructive criticism with sing information to improve work					
TEAMWORK		n co-workers. Working productively with Respecting diversity in race, gender, and					
PROBLEM-SOLVING/ CRITICAL-THINKING	Exercising sound reas knowledge and inform problems.	oning and analytical thinking. Using ation from job to solve workplace					
WORKPLACE CULTURE POLICY AND SAFETY		tanding of workplace culture and policy. and safety rules. Exhibiting integrity and					
SPECIFIC WORKPLACE AND CAREER SKILL	PERFOR		(1)	(2)	(3)	(4)	
LIST SKILL HERE							
(see sample skills on page 2)		oectations here. Grading scale for skill can aptable "general key" at end of page 3.					
LIST SKILL HERE (see sample skills on page 2)		pectations here. Grading scale for skill can aptable "general key" at end of page 3.					
LIST SKILL HERE (see sample skills on page 2)		oectations here. Grading scale for skill can aptable "general key" at end of page 3.					
LIST SKILL HERE (see sample skills on page 2)		pectations here. Grading scale for skill can aptable "general key" at end of page 3.					
LIST SKILL HERE (see sample skills on page 2)		pectations here. Grading scale for skill can aptable "general key" at end of page 3.					
Employers may add as many or few additional skills as they see fit based on the position.		OTAL SCORE average score = total/# of skills)	# checked X 1 Total:	# checked X 2 Total:	# checked X 3 Total:	# checked X 4 Total:	
 (1) * employee must have an employee must meet "pr (2) supervisor MUST verify (3) employee must not have *Examples: If there are 10 skill categ proficient in at least 8 of the 10 categ score of 45 (3 X15) out of a possible 	a possible 40 or be	has met minimum Employer Signatur Employee Signatur	tisfactory work pe n total score: e: re(see page 2				

Employer Initials:

TIPS FOR IMPLEMENTING WORK READINESS TOOL

- FLEXIBILTY: This work readiness tool is modifiable to best meet employer's needs. Ten foundation skills have already been listed. Employers may measure all or most of these skills and are also encouraged to add any additional workplace and career skills.
- SAMPLE SKILLS: Listed below are examples of potential additional skills.

Occupation/Technical Skills	Academic Skills	Leadership Skills	Business Skills
 Occupation-specific skills Industry-sector skills Industry-wide skills Understanding all aspects of an industry 	 Written communication Reading and reviewing Mathematics and data analysis STEM: science, technology, engineering, and mathematics Basic computer skills 	Leadership Creative thinking/innovation Project management Teaching and instructing	Customer service skills Telephone skills Planning and organizing Scheduling & coordinating Using computer applications

- PREPARATION: Employers should review tool with the youth on or prior to the first day of the work experience. Depending
 on the number of youth at a worksite and the employer's discretion, this can be done as part of an employer-led group orientation or
 individually with each young worker. At the conclusion, each youth should have a clear understanding of their job description and
 expectations, what work readiness skills they will be measured on, and how often they will be measured.
- FREQUENCY: It is recommended that employers conduct more than one evaluation. Benefits of administering bi-weekly or
 "mid-point" assessments include the ability for employers to: offer youth constructive feedback; formally recognize positive work
 performances; address small issues before they become larger ones; and formally communicate youth performance with local
 program staff to ensure added support. An additional benefit is that local areas may be able to document the work readiness
 progress if a participant who has already proven to be proficient in work readiness leaves the program prior to its end.
- **FIRST EVALUATION**: The first evaluation can also be used as a helpful diagnostic and developmental tool that is maximized when delivered within the first two or three weeks. For participants experiencing challenges and have received a "1" in any category, a performance improvement plan should outline a set of goals in the comment section. In the past, some employers have had youth first assess their own performance and use any gaps in assessments to promote positive communication.
- **GRADING SCALE:** A grading scale of foundation skills has been listed on page 3 for employer convenience. To add any additional skills, employers can copy the language in the "general key" and modify as they see fit.
- SUPPORT: Local area program staff are available to make evaluation process as simple and seamless as possible. Through
 employer orientations, worksite monitoring, and on-going communication, summer youth program staff are available to address any
 outstanding questions or concerns by the employer. They may also be available to assist with job descriptions, and provide
 additional supportive work readiness training to participants. Program staff can be reached at

Sources: Tool content and design is based on three general sources encompassing public study, private research, and practical local application.

(1) US Dept. of Labor – ETA's "Building Blocks for Competency Models" <u>http://www.careeronestop.org/CompetencyModel/pyramid_definition.aspx</u>
 (2) Employer research collaboration of The Conference Board, Partnership for 21st Century Skills, Corporate Voices, & Society for HRManagement includes online-accessible reports: "New Graduates' Workforce Readiness", "Are They Really Ready to Work?", and "The III-Prepared US Workforce".

(3) Sample tool design is based most closely on the Massachusetts Work-Based Learning Plan (<u>http://www.skillslibrary.com/wbl.htm</u>). The Seattle King County's Learning and Employability Profile, and other tools from the 2009 Summer Youth Employment Initiative under the American Recovery and Reinvestment Act were also utilized. For more info, see: "Tips on Measuring Work Readiness" http://www.workforcedevelopmentinc.org/assets/ProgramsAndServices/Youth%20Specific/Work%20Readiness%20Assessment%20Tool.pdf

ATTENDANCE

ATTENDANCE	Neede Development	Droficient	Exemplem
Perf. Improvement Plan Needed	Needs Development	Proficient Maintains 90% attendance	Exemplary 100% attendance or missed one day
Excessive absences consistently impact work performance. Additional	Below 90% attendance, but participant seeks out opportunities	and notifies supervisor ahead	with valid reason that did not occur
training is needed.	to make up missed work.	of time prior to absence.	during first two weeks.
UNCTUALITY	•	· ·	, , , , , , , , , , , , , , , , , , ,
Perf. Improvement Plan Needed	Needs Development	Proficient	Exemplary
	nconsistent in arriving to work,	Arrives to work & returns from break	
	eturning from breaks on time, and	on time with rare exception. If late,	work and returning from breaks on
Additional training is needed.	calling supervisor prior to lateness.	calls supervisor ahead of time.	time. Model for other workers.
Perf. Improvement Plan Needed	Noods Dovelopment	Proficient	Examplany
Has not yet demonstrated appropriate	Needs Development	Dresses appropriately and	Exemplary Consistent display of professional
appearance and/or personal hygiene	appropriate appearance and/or	practices hygiene for position	appearance and hygiene serves as a
for position and duties.	personal hygiene for workplace.	and duties with rare exception.	model for other workers.
AKING INITIATIVE		· · · · · · · · · · · · · · · · · · ·	
Perf. Improvement Plan Needed	Needs Development	Proficient	Exemplary
Reluctant to begin tasks without	Inconsistently begins or remains	Begins and remains on task until	Consistently begins/remains on task
significant staff intervention. Needs	on task. Needs occasional	completion with rare exception.	until completion, and initiates
frequent reminders. Additional	prompting. Often satisfied with	Can work independently. Initiates	interaction for next task. Can work
training may be needed.	bare minimum performance.	interaction for next task.	independently, and leads others.
UALITY OF WORK	Neede Development	Drefisiont	F yggenderer
Perf. Improvement Plan Needed Has not yet given best effort. Rarely	Needs Development Uneven work quality. Sometimes	Proficient Quality of work meets	Exemplary Quality of work often exceeds
evaluates work and utilizes feedback.	evaluates own work and utilizes	expectations. Evaluates own work,	expectations. Consistently gives best
Completes work inconsistently.	feedback, but inconsistent in	and utilizes employer feedback to	effort. Evaluates own work and utilizes
Additional training may be needed.	meeting quality standards.	improve performance	employer feedback.
COMMUNICATION SKILLS	Nacia Development	Drefisiont	Fremelow
Perf. Improvement Plan Needed	Needs Development	Proficient	Exemplary
Seldom speaks clearly or listens attentively. Repeatedly	Inconsistent in communicating in manner and language	Demonstrates positive oral and non-verbal communication with	Consistently demonstrates positive oral/non-verbal communication
uses inappropriate language	appropriate for workplace.	rare exception. Listens attentively	skills. Speaks clearly and listens
for the workplace. May need	Inconsistent in effort to speak	and uses language appropriate	attentively, Can effectively present
additional training and support.	clearly or listen attentively.	for workplace.	to a group if needed.
RESPONSE TO SUPERVISION			
Perf. Improvement Plan Needed	Needs Development	Proficient	Exemplary
Reluctant to accept feedback and	Inconsistent in accepting	Accepts direction and	Consistently accepts direction and
constructive criticism from supervisor. Responds with poor verbal or non-	direction, feedback, and constructive criticism from	constructive criticism with positive attitude with rare	constructive criticism with positive attitude. Uses feedback to improve
verbal communication. Additional	supervisor. Shows potential for	exception. Uses feedback to	work performance, and provides new
training may be necessary.	improvement.	improve work performance.	and useful ideas to employer.
EAMWORK			
Perf. Improvement Plan Needed	Needs Development	Proficient	Exemplary
Has not yet demonstrated	Inconsistent in promoting	Works well with co-workers, is	Consistently facilitates positive group
appropriate group behaviors.	positive group behaviors	respectful, and contributes to	dynamics. Demonstrates leadership
Improvement needed in treating	amongst coworkers, and in	group efforts with rare	that plays a significant role in success
others with respect. Rarely contributes to group efforts.	contributing to group efforts.	exception. Respects diversity	of group efforts. Promotes larger
	Chause notantial for	within the workeless	
	Shows potential for	within the workplace.	group unity.
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL T	improvement.	within the workplace.	group unity.
Additional training may be necessary.	improvement.	within the workplace. Proficient	group unity. Exemplary
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL T	improvement. HINKING		Exemplary
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL T Perf. Improvement Plan Needed	improvement. HINKING Needs Development	Proficient	Exemplary Consistently applies sound reasoning
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL T Perf. Improvement Plan Needed Makes little or no effort to use	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows	Exemplary Consistently applies sound reasoning to solve work problems. Identifier potential problems before they can
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems.	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement.	Proficient Uses sound reasoning, and job knowledge to solve	
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills.	Exemplary Consistently applies sound reasoning to solve work problems. Identifie potential problems before they ca occur.
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient	Exemplary Consistently applies sound reasoning to solve work problems. Identifie potential problems before they ca occur. Exemplary
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed Has not demonstrated understanding	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development Inconsistent in demonstrating	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient Demonstrates understanding of	Exemplary Consistently applies sound reasoning to solve work problems. Identifie potential problems before they ca occur. Exemplary Shows clear understanding of work
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed Has not demonstrated understanding of workplace policies/ethics. Has not	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient Demonstrates understanding of workplace policies. Completed	Exemplary Consistently applies sound reasoning to solve work problems. Identifie potential problems before they ca occur. Exemplary
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed Has not demonstrated understanding	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development Inconsistent in demonstrating understanding of workplace	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient Demonstrates understanding of	Exemplary Consistently applies sound reasonin to solve work problems. Identifie potential problems before they ca occur. Exemplary Shows clear understanding of work policies and safety rules. Exhibits
Additional training may be necessary. ROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed Has not demonstrated understanding of workplace policies/ethics. Has not completed applicable training on workplace .	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development Inconsistent in demonstrating understanding of workplace culture, policies, and safety	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient Demonstrates understanding of workplace policies. Completed safety training if applicable, and	Exemplary Consistently applies sound reasonin to solve work problems. Identifie potential problems before they ca occur. Exemplary Shows clear understanding of work policies and safety rules. Exhibits honesty and integrity. Has completed
Additional training may be necessary. PROBLEM-SOLVING/CRITICAL TI Perf. Improvement Plan Needed Makes little or no effort to use knowledge learned from the job to solve workplace problems. VORKPLACE CULTURE, POLICY Perf. Improvement Plan Needed Has not demonstrated understanding of workplace policies/ethics. Has not completed applicable training on workplace . BENERAL KEY	improvement. HINKING Needs Development Inconsistent in using sound reasoning to solve work problems. Shows potential for improvement. AND SAFETY Needs Development Inconsistent in demonstrating understanding of workplace culture, policies, and safety rules.	Proficient Uses sound reasoning, and job knowledge to solve workplace problems. Shows initiative in improving skills. Proficient Demonstrates understanding of workplace policies. Completed safety training if applicable, and adheres to rules. Exhibits honesty and integrity.	Exemplary Consistently applies sound reasoning to solve work problems. Identifie potential problems before they ca occur. Exemplary Shows clear understanding of work policies and safety rules. Exhibits honesty and integrity. Has completed applicable safety trainings and has led coworkers.
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This general key is adaptable for employers to copy, paste in boxes on page 1, and modify accordingly for job-specific skills.

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