A Review of the Evidence on Youth and Young Adult Workforce Development Programming

JUNE 2020

Samia Amin | Sami Kitmitto | Kyle Fagan | Candace Hester
American Institutes for Research

MAKING RESEARCH **RELEVANT**

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1000 Thomas Jefferson Street NW
Washington, DC 20007-3835
202.403.5000

www.air.org

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Introduction

San Francisco's Department of Children, Youth and Their Families (DCYF) is committed to meeting the needs of the city's youth and their families by providing inclusive, informed, and individualized care to the San Francisco community. In service of this aim, the American Institutes for Research (AIR) is providing DCYF with evaluation services to support their youth workforce development programs. This document provides a review of the prior literature—the first deliverable for these evaluation services. With this review DCYF will be able to examine any gaps in programming, or in their organizational structure which may undermine their ability to adequately serve San Francisco.

Labor Market Context: The Increasing Need for Skills

Ongoing structural changes in the economy have amplified challenges for youth engagement in employment, particularly for those already vulnerable, leading to historic youth unemployment rates during the Great recession (Rockefeller Foundation, 2013). Prevailing themes in the workforce literature emphasize a growing skills gap, particularly around "middle skills" or work that requires some training but not a 4-year degree (Carnevale, Smith, & Strohl, 2013). Underserved youth and young adults—including Black and Latino populations, individuals from low-income families, and justice-involved individuals—display training trajectories that are particularly inconsistent with the growing needs of the U.S. economy (Urban Alliance, 2014). These trends suggest that current economic inequities along lines of race and class will persist. And furthermore, that future workers will not possess the necessary training to fill the jobs needed to support a thriving U.S. economy unless education and workforce systems respond accordingly to address these "failures" (Rockefeller Foundation, 2013).

City agencies can play an important role in enhancing economic equity and in supporting a thriving US economy by ensuring that educational and career development programming meets the needs of all city youth and young adults, and bridges gaps between education and workforce institutions. This necessitates a further role for city agencies in framing the needs of city youth and young adults, and creating the best set of tools to meet those needs in an effort to improve the quality and equity of workforce and civic outcomes.

The San Francisco Department of Children, Youth and Their Families

DCYF is rooted in a first-of-its-kind municipal funding stream dedicated to children. Originating in 1991 as the Children's Amendment to the City Charter, the funding stream has developed into the Children and Families First Initiative, which was introduced as a 4% property tax funding stream and incorporates a broadened set of services for disconnected, transition-aged young adults (TAYA) aged 18 to 24 years. The amendment established a 5-year planning cycle

for spending from the Children and Youth Fund, which led to the creation of the city department.

DCYF Services

Although DCYF offers a wide range of services to its constituents, the department is guided by a commitment to ensure access to services for San Francisco's most vulnerable children, youth, TAYA, and families. In 2016, DCYF performed a Community Needs Assessment which included an equity analysis. This defined priority populations as low-income, disadvantaged minority groups, and TAYA. The specific characteristics of increased need within these priority populations include the following:

- English language learners
- Foster youth
- Lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth
- Youth with special needs
- Teen parents
- Homeless youth
- Undocumented youth
- Children of incarcerated parents
- Academically underperforming youth and youth disconnected from school
- Youth with high exposure to violence, abuse, or trauma
- Justice system–involved youth

To support all San Francisco residents, with a focus on these priority populations, DCYF aims to provide services in coordination with the following criteria, informed by the Services Allocation Plan:

- Ensure the continuity of services in areas that are making a positive difference in the lives of children, youth, and families.
- Continue to close the service gap in areas that youth and their families have identified as priorities, such as quality childcare and early education, afterschool care and enrichment, youth employment, and mental health services.
- Factor in other city, state, and federal funding to ensure an equitable distribution of funds across ages 0 to 24, and to ensure services are not duplicated.

- Improve coordination with other city departments and the San Francisco Unified School District (SFUSD) to increase supports to children, youth, and families with the greatest needs, and to leverage existing efforts.
- Pilot new services that research has shown to be effective in achieving results in priority areas.

DCYF is dedicated to a results-based accountability planning process to assess the effectiveness and equity of its activities, and to determine the allocation of resources. In 2018, DCYF provided approximately $76.1 million in direct service grants to begin the 2018–23 funding cycle. Grantees will provide program activities within the following service areas:

- Educational supports
- Enrichment leadership and skill building
- Family empowerment
- Justice services
- Mentorship
- Out-of-school time
- Youth workforce development

DCYF Youth Workforce Development Service Area

The Youth Workforce Development Service Area seeks to support a continuum of tiered career exposure and work-based learning opportunities that are developmentally appropriate and meet the needs of youth and young adults to help prepare them for adulthood. The service area consists of five strategies: Career Awareness, High School Partnerships, Youth Workforce Development, the Mayor's Youth Employment and Education Program (MYEEP), and San Francisco YouthWorks. These strategies are summarized below.

Career Awareness: The Career Awareness Strategy provides young people the opportunity to explore their career interests while developing job readiness and soft skills. Career awareness programs offer activities and experiences that expose youth to a range of careers and help them begin to understand the educational and employment steps needed to reach them. Career awareness programs target middle school students who are not yet old enough to legally work.

High School Partnerships: The High School Partnerships Strategy provides students at targeted SFUSD high schools work-based learning and career exposure opportunities that are embedded in and intentionally connected to the school day. High school partnership programs work

closely with school site staff to ensure that work-based learning opportunities align with students' school-day curricula and support the development of college and career readiness skills. The High School Partnerships Strategy targets students at Downtown, John O'Connell, Phillip and Sala Burton, and SF International high schools, as well as the June Jordan School for Equity.

Mayor's Youth Employment and Education Program: MYEEP is a citywide, collaborative youth employment program that supports the positive development of youth in Grades 9 and 10 in San Francisco who have no previous work experience. The program engages participants in work readiness training; educational support; youth leadership development activities; and meaningful, work-based learning opportunities in the nonprofit, government, and private sectors. The program aims to provide young people initial exposure to the workplace, entry-level work readiness training, and a valuable work experience that enhances their employability skills and career awareness, while supporting their overall educational attainment and personal development.

San Francisco YouthWorks: San Francisco YouthWorks is a citywide, year-round program that teaches youth in Grades 11 and 12 crucial job skills while sparking their interest in public service careers. The program provides work-based learning opportunities for participants by placing them in an internship with a career mentor at a San Francisco city government department. Additionally, the program provides training to both participants and career mentors, ongoing monitoring of placements, and support to ensure youth are developing career-related knowledge and skills.

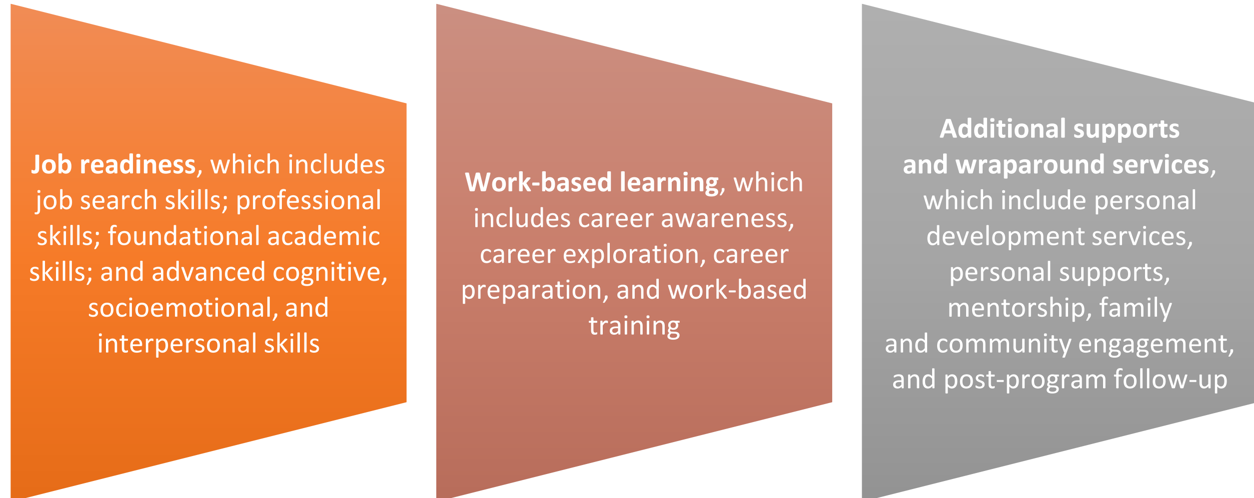
Youth Workforce Development: The Youth Workforce Development Strategy provides youth with knowledge, skills, abilities, and experiences to prepare them for work. Youth workforce development programs offer job readiness and other training, work-based learning experiences, and transition planning activities, all of which are intended to expose youth to jobs and careers, provide work experience, and help youth begin to connect their long-term goals with the educational and employment steps needed to achieve them. The Youth Workforce Development Strategy targets youth ages 14 to 17, justice-involved youth ages 14 to 24, and disconnected TAYA ages 18 to 24.

A Review of the Relevant Literature

DCYF aims to support a continuum of tiered workforce development opportunities that are developmentally appropriate and meet the needs of youth and young adults in San Francisco. To perform this work well, AIR presents an up-to-date review of the relevant literature. This

literature suggests that youth and young adult workforce development programs have three major elements, presented in Exhibit 1.

Exhibit 1. Services Continuum for Youth and Young Adult Workforce Development



In the sections that follow, we define and present the evidence for each of these elements. We conclude by discussing how this literature reinforces or offers additional recommendations for DCYF and its set of funded programs. We also present a comprehensive table detailing the set of programmatic evidence that we reviewed on youth and youth adult workforce development programs in Appendix A.[1]

Job Readiness

Given the skills gap described above, there is growing consensus that increasing job readiness is an important feature of youth-serving programs.

Understanding the Scope of Job Readiness Activities

Job readiness lies at the intersection between the education and workforce development fields, representing the overlap and transition between school and career. While definitions and conceptual models of job readiness vary, the following broad definition is central to them all: **Job readiness is the acquisition of foundational knowledge, skills, and abilities that help prepare people to succeed in the workplace**. As a concept, job readiness is distinguished from other aspects of the workforce development continuum because it focuses on foundational human capital attainment that is ideally built prior to partial (e.g., work-based learning) or full entry into the workplace. Further, job readiness skills are transferable across most jobs and careers, if not all. Under this definition, job readiness encompasses both knowledge and

[1] Appendix A also presents the methodological details for the systematic review process we used.

cognitive skills typically acquired in school, as well as personal and interpersonal skills including employability skills and soft skills.[2]

Based on our reading of the literature, job readiness training[3] includes the following four components: (a) job search skills; (b) professional skills; (c) foundational academic skills; and (d) advanced cognitive, intrapersonal, and interpersonal skills.[4]

Job Search Skills: These are the skills needed to successfully find and apply for a job. This includes knowing how and where to find information on job openings, how to complete a job application, how to prepare a resumé, and how to interview.

Professional Skills: These are the skills that enable youth and young adults to meet expectations around workplace behavior. This is sometimes referred to as "workplace culture," and these expectations have been described as "hidden" (Maxwell et al., 2017) or "unsaid" (Denver Public Schools, 2018). In this category, we include knowledge of workplace expectations around clothing and communication (both verbal and written). Individual, school-based curricula provide examples of job readiness trainings that focus on professional skills (Denver Public Schools, 2018; District of Columbia Public Schools, 2019). An evaluation of Youth CareerConnect (Maxwell et al., 2017) reported that nearly all schools taught professional skills as part of their work readiness curriculum.

Foundational Academic Skills: These are the mathematics, reading, and writing skills that are needed in the workforce. These skills are typically taught in schools during the regular school day, but programs exist to support extended learning in out of school time environments (after school or non-school based programming). In addition, foundational skills, programs serving can be developed in the context of separate programs designed to serve out-of-school youth and young adults. YouthBuild, for example, focuses on out-of-school youth between the ages of 16 and 24 and includes instruction in these skills as a key service component (Miller, Millenky, Schwartz, Goble, & Stein, 2016). Support for foundational academic skills is also an important part of the Opportunities Youth project, which serves youth between the ages of 18 and 24 who are out of school or at risk of being out of school (Koball, Dodkowitz, Schlecht, & Guildinan, 2016). Foundational academic skills are a key component of both Job Corps and YouthBuild programs where an academic credential such as a General Educational Development (GED)

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[2] In education, the importance of job readiness skills is part of the ongoing discussion around "career and college ready" standards. On the workforce side, these skills are part of discussions around 21st century skills and future-ready skills.

[3] DCYF includes financial literacy (e.g., money management) as part of job readiness training but we have moved it to a separate category based on our reading of the literature.

[4] Some definitions of "work ready" or "job ready" include occupation-specific skills (e.g., Clark & LeFebvre 2013), but we intentionally leave those out of our definition for the purposes of this review.

certificate is one of the key program goals (U.S. Department of Labor, Employment and Training Administration, 2014; Miller et al., 2016).

Advanced Cognitive, Intrapersonal, and Interpersonal Skills: This is a broad category covering skills that most youth development programs address at least in part, although using differing terminology. Labels such as "soft skills," "21st century skills," and social and emotional learning cover large and overlapping parts of this category. Advanced cognitive skills include creativity, critical thinking, decision making, and problem solving. Intrapersonal skills include self-efficacy, self-esteem, self-management, a growth mindset, planning, perseverance, resilience, initiative, and independence. Interpersonal skills include collaboration, communication, social awareness, the formation of positive relationships, conflict resolution, and cultural awareness.[5] Given the breadth of this category, there is wide variation in how programs incorporate these skills. However, all of the reviewed programs that sought to address "job readiness" covered at least one of the many skills listed here.

Program Spotlights

Differences in conceptualizations across program and entities often reflect differences in emphasis due to both the characteristics of the population being served and characteristics of the program model and scope. To illustrate some of the variation in how job readiness is conceptualized, we profile three different frameworks for job readiness.[6]

In recognition that "(d)efining, measuring, and building these skills— even naming them— can be challenging"[7] the federal Education Department, as part of its work on career and technical education, developed an **Employability Skills Framework**. The framework organizes skills into the following categories: applied knowledge, which includes applied academic skills and critical thinking; effective relationships, which includes interpersonal skills and personal qualities; and workplace skills which includes resource management, information use, communication skills, systems thinking, and technology use.

The Seattle Office of Economic Development recently commissioned a report titled **Job Readiness Skills for Youth – A Clear and Actionable Definition** (Klein, 2018) which lays out a framework for job readiness based on interviews with contacts in other cities, local providers, employers, and partners, as well as focus groups with program participants. Klein (2018) proposes a framework covering five "essential skills for job preparation": (a) time management

[5] This list includes skills commonly placed in the social and emotional learning category, which DCYF has as a component separate from job readiness training (perhaps to elevate its importance). We include it as part of job readiness training because our review found that most models/conceptions of job readiness training overlap heavily with social and emotional skills.
[6] In their review of the literature on "soft skills" Lipman et. al. (2015) examined over 60 different frameworks related to soft skills as detailed in Appendix A of their report.
[7] https://cte.ed.gov/initiatives/employability-skills-framework

and punctuality, (b) professional orientation, (c) team work ethic, (d) verbal communication, and (e) problem solving. These five skills span our categories of *professional skills* and *advanced cognitive, intrapersonal, and interpersonal skills*. Klein (2018, p. 3) explains that the report's definition of job readiness intentionally does not include career awareness, job search, or financial management skills because "these activities do little to help young people be successful in a job" (although they remain important for other reasons).

The Fellowship Initiative (TFI) is designed for young men of color. The initiative engages participants in out-of-school programming—beginning in the summer before Grade 10 and continuing through the summer after Grade 12—to "acquire the skills, knowledge, experience, networks, and other resources they need to succeed academically and professionally" (Turner & McDaniel, 2016, p. 1). The initiative employs a positive, assets-based youth development approach to name and build important intrapersonal and interpersonal skills. A framework divides developmental assets into internal and external categories. Internal assets include a commitment to learning, positive values, social competencies, and positive identity. External assets include support (family and community), empowerment, boundaries and expectations, and constructive use of time.

Insights From the Literature

Job readiness is often just one component of a youth development program and is not necessarily evaluated on its own. Nevertheless, the literature provides a number of important insights.

It is important to clarify both the scope and depth of job readiness. Klein's (2018) framework for job readiness identifies key components (the "essential skills for job preparation" discussed above), but it also includes definitions and descriptions of three tiers of job readiness.[8] Klein's (2018, p. 13) report identifies work done in Chicago through a public/private partnership with MHA Labs[9] as a model process: The city partners with an organization to develop and refine its framework, identifying both the scope of job readiness that programs need to address and the depth and connection of the various programs funded by the city to provide "a ladder of opportunities for youth of all skill-levels."

It remains unclear which advanced cognitive, intrapersonal, and interpersonal skills matter most. While there is general evidence on the importance of these skills (for reviews, see Koball et al., 2011; Lippman, Ryberg, Carney, & Moore, 2015), there is limited research on their relative importance—i.e., which skills really make a difference. One research study (Lippman et al., 2015) sought to address this gap by conducting a systematic literature review (including

[8] As a side note, the definition of job readiness intentionally does not include career awareness and financial management skills.
[9] http://mhalabs.org/

international studies) and focus groups with various stakeholders (researchers, program implementers, employers, and youth) to examine evidence for outcomes for youth ages 15 to 29 in four categories: employment, performance or promotion, wages or income, and entrepreneurial success. The study found that the five skills most likely to increase the odds of success: (a) were social skills, (b) communication skills, (c) higher order thinking, (d) self-control, and (e) positive self-concept. The study concluded by identifying the need for further research to understand why "soft skills" matter and identify the associated moderating and mediating factors.

Further attention is needed to address equity concerns, particularly with professional skills trainings. One aspect of professional skills development involves teaching youth about "workplace culture." Klein (2018, p. 24) expresses concern that in order to build a "professional vocabulary," youth are increasingly forced to learn "code-switching," which the author relates to "the need to 'act white' to be seen as a professional in the workplace." To address this, Klein (2018, p. 32) suggests that programs incorporate an element of "training for employers," including (among other things) trainings "to minimize race and class bias." This was the only study to address this concern in the youth literature we reviewed. More research is needed to understand how youth programs navigate teaching about "workplace culture" while at the same time attempting to promote "self-esteem."

"Job-ready" credentials sound useful but there is no evidence of their effectiveness. Klein (2018) identifies job-ready credentials as an area requiring further study. She cites two example programs in Los Angeles and Chicago, neither of which have demonstrated evidence of effectiveness to date. The Los Angeles Reconnections Career Academy's (LARCA) approach to job readiness is to have providers use a common curriculum, which was created through a collaboration between the city's Employment and Workforce Development Department and the Chamber of Commerce. The 8-hour curriculum culminates in a certificate, which is awarded after a participant has successfully completed a mock interview.[10] The curriculum covers job searching, professionalism, and "soft skills" and "communication" (Geckeler et al., 2017, p. 29). An evaluation of LARCA found that its approach had some drawbacks: The need for a computer to access the training hindered access, the activities were not sufficiently engaging or interactive, and the culminating mock interview was too challenging (Geckeler et al., 2017). The evaluation did not assess the effectiveness of the credential for youth outcomes (e.g., promoting employment). The city of Chicago has created a system of "digital badges" to engage youth and help address employers' reported "difficulty identifying candidates with the necessary skills for entry-level jobs" (Spaulding & Johnson, 2016, p. 1). However, there is no evidence to date that these badges improve employment outcomes. There is also a national

[10] https://www.layouthatwork.org/

credentialing program, the ACT's National Career Readiness Certificate, which can be earned by passing three WorkKeys assessments (applied mathematics, workplace documents, and graphic literacy). As Spaulding and Johnson (2016, p. 15) note, the few studies on the effectiveness of this certificate found that it had "little traction with employers" for adults or youth.

Work-Based Learning

A growing number of educational and workforce agencies and community-based organizations are leveraging work-based learning to build a strong talent pipeline and develop skills that align with employer needs. In response to Federal legislation, California has developed a state plan to increase access to Work-Based Learning through a range of collaborative activities between education and workforce agencies, community based organizations and employers. The purpose of work-based learning is to help individuals (both youth and adults) gain the knowledge, skills and experiences that are useful for entering or progressing in specific careers (Cahill, 2016).

Understanding the Scope of Work-Based Learning Activities

While there is consensus on the purposes of work-based learning, there is variation in the literature on the scope of activities it encompasses. Workforce development literature typically focuses on work-based training—hands-on activities that are conducted in the workplace and assigned by employers to develop participants' skills, knowledge, and job readiness (Sattar, 2010; Cahill, 2016). These activities can range in intensity, duration, and focus—from shorter term internships and/or work-based coursework, designed to increase exposure to the world of work and professional skills; to more intensive, on-the-job training and apprenticeships models that build career-specific skills and competencies (Cahill, 2016). Educators focus on broader definitions of work-based learning that encompass a continuum of career awareness, career exploration, career preparation, and work-experience training activities which can occur in the classroom, the workplace, or the community (Linked Learning, 2012). We use this definition of work-based learning when reviewing the evidence base.

Career Awareness and Career Exploration Programs: These are designed to help students learn about work. The primary outcome of interest is increased awareness of work opportunities and their requirements across industries and sectors.

> ***Career awareness*** efforts typically consist of a series of one-time events that seek to broaden students' understanding of career options by helping them become aware of work opportunities across a spectrum of activities. Career awareness activities tend to be organized by educators and their partners, with a focus on the types of careers available, the work that people within these careers do, and any postsecondary education needed to pursue those careers. Career awareness programming can involve

guest speakers from various employers, employer workplace tours, career fairs and presentations, industry fairs, and visits to parents at work. Career awareness programs can begin as early as elementary and middle school. High-quality career awareness programs intentionally design and sequence many experiences over the course of multiple years to familiarize youth with a variety of careers and industry sectors.

Career exploration programs create more in-depth and personalized opportunities for youth to learn about select careers, and to actively probe how they align with their interests and skills. Activities include career counseling, career planning, informational interviews, job shadowing, mentoring, worksite tours, and in-person or virtual exchanges. These activities are often conducted in Grades 9 and 10 to help shape students' decisions about high school and postsecondary education. High-quality career exploration programs provide coordinated sets of experiences that allow youth to explore and refine areas of interest and position them to make good decisions for career preparation experiences (Linked Learning, 2012).

Career Preparation and Career Training Experiences: These are designed to improve college and career readiness among youth and young adults. Both types of activities typically involve direct, organized, reciprocal engagement with industry professionals over a sustained period. They are intended to help participants develop transferrable, applied workforce skills, and to deliver benefits for industry partners. Youth-focused career preparation and work-based learning activities target students in high school or older youth and are ideally sequenced to occur after career awareness and career explorations activities. Career preparation and work-based training activities have shared goals: (a) human capital skills development and educational attainment, and (b) workforce entry and attachment. Career preparation efforts focus more on the first goal and are led by educators; work-based training focuses more heavily on the second goal, with businesses playing a leading role (Lodewick, Hazlett, James, & Schneider, 2004).

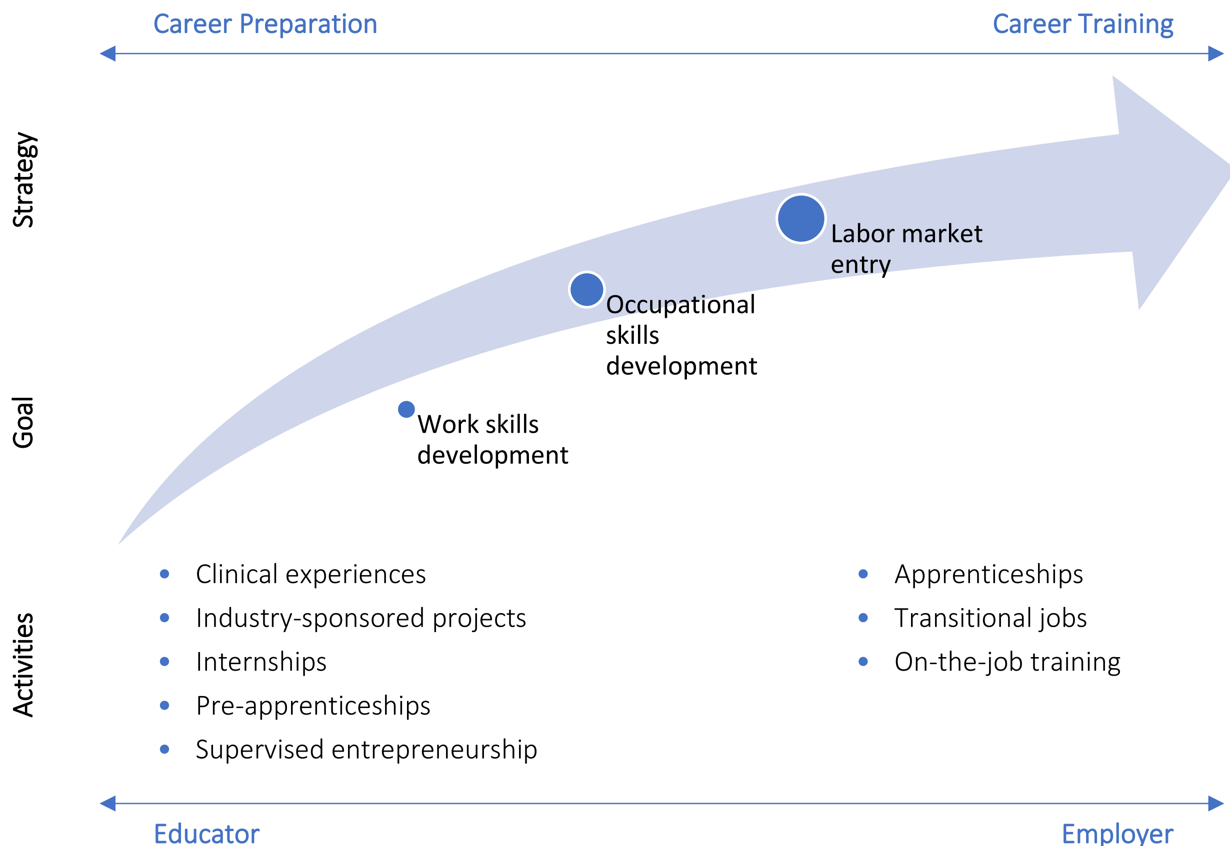
Career preparation activities include extended, direct interaction with professionals from industry and community to help students learn through work—for example, clinical experiences, industry-sponsored projects, internships, pre-apprenticeships, and supervised entrepreneurship experiences.

Career training activities occur at work sites and frequently consist of apprenticeships, transitional jobs, and on-the-job-training.

We have developed a visual (Exhibit 2) to present the continuum of goals and activities for career preparation and work-based training.

Programs that integrate work-based learning strategies vary in how they combine career awareness, career exploration, career planning, and career (work-based) training activities. They are typically nested within broader youth workforce development programs that offer a bundle of services, including academic training, supportive services, counseling, and mentorship by vested adults. The configuration of these programs also varies based on the youth populations they target: students; opportunity youth (out of school, unemployed); or youth facing particular challenges (justice-involved youth, youth with disabilities, foster care youth, etc.).

Exhibit 2. Career Preparation and Work-Based Training Goals and Activities



Program Spotlights

In this section, we highlight the features of a few Work-Based Learning programs with a strong evidence base.

Roads to Success is a school and career planning program designed to be implemented once a week, for 45 minutes, starting in Grade 7 and continuing through Grade 12. The goal is to support middle and high school programs to forge connections between students' school

experiences and their aspirations for adulthood. Consistent with the research base (Hossler, Schmit, & Vesper, 1999), Roads to Success targets students starting in middle school in an attempt to enhance their engagement in school by providing a clearer understanding of their long-term goals. It does so through an array of activities, including assessing students' interests, organizing student-led career fairs, and providing information about the education required to enter various careers. These activities build in later grades to include job-shadowing project opportunities. A randomized controlled trial (RCT) assessed the program's impacts on students' motivation and behavior outcomes in Grades 7 and 8 and found small, positive effects on students' outcomes. While students showed no increase in their reported motivation to go to school or learn about job skills, and no improvement in their study habits, the program showed small effects on students' behaviors. Exploratory analyses of additional outcomes revealed that the program may have improved students' likelihood of talking to school staff about career and school plans, their confidence in knowing how to find out about what types of jobs are best, and their confidence in knowing what is required to succeed in different careers.

Career Academies are career training programs serving students. They have three defining features: (a) they function as small learning communities within schools (schools within schools), organized by career theme; (b) the curriculum focuses on a single career, occupation, or industry and is designed to cover academic and technical content related to that career; and (c) the curriculum integrates work-based learning experiences in partnership with employers, such as summer employment, internships, and mentoring (Clearinghouse for Labor, Evaluation, and Research [CLEAR], n.d.). **Career Academies** have produced strong and sustained increases in post-high-school earnings, as measured by a well-conducted RCT. Over the 8 years following graduation, students who participated in Career Academies earned $174 per month on average, compared with students who had participated in other (non-Academy) high school options. Young men experienced especially high gains—an average of $311 more a month for participants, relative to nonparticipants (Kemple, 2008). There were, however, no statistically significant impacts on attainment rates for high school diplomas, GED, or postsecondary credentials.

Year Up is a year-long, full-time, career training program serving opportunity youth (out of school and unemployed) ages 18 to 24 in low-income, urban communities. It offers 6 months of intensive training in professional and technical skills related to the informational technology or financial operations sectors, followed by a 6-month internship at a major firm. The program provides extensive supports, including weekly stipends (Fein & Hamadyk, 2018; Roder & Elliot, 2014). It has shown strong impacts on earnings, demonstrated through a well-conducted RCT, with program participants earning substantially more than comparison group members ($1,895 more in quarterly earnings). The RCT found that the program had no impact on employment rates and mixed impacts on college enrollment (Fein & Hamadyk, 2018).

Insights From the Literature

There is a strong need for research and evidence building on the impacts of work-based learning for young adults. Of the dozens studies we identified that addressed work-based learning, the vast majority either focused on making the case for expanding work-based learning strategies; studied implementation of these approaches within specific programs, as well as lessons learned; and/or prescribed strategies for adoption and scale-up, with a special focus on employer engagement. Only a minority focused on program impacts. Insights from this body of literature indicate the importance of defining quality components of work-based learning. The literature also highlights the challenges of establishing and sustaining these programs, and the difficulties generating sufficient quantities of career training activities to cater to large numbers of program participants.

Most impact evaluations of work-based learning programs for youth have focused on intensive programs serving opportunity youth. Well-conducted RCTs have evaluated programs such as Year Up (Fein & Hamadyk, 2018); LARCA (Geckeler et al., 2017); the Center for Employment Training (Miller, Bos, Porter, Tseng, & Abe, 2005); the National Guard Youth ChalleNGe (Millenky, Bloom, Muller-Ravett, & Broadus, 2011; CLEAR, n.d.); Job Corps (Schochet, Burghardt, & McConnell, 2006); Youth Build (Miller et al., 2016); and Conservation and Youth Service Corps (Jastrzab, Masker, Blomquist, & Orr, 1996; Price, Williams, Simpson, Jastrzab, & Markovitz, 2011). Appendix A details the service components of these programs and related studies. Some high-quality, quasi-experimental studies have been conducted—for example, on programs such as Linking Innovation, Knowledge and Employment (@LIKE).

Only a few programs for opportunity youth (such as Year Up and the National Guard Youth ChalleNGe which target low-income students) show sustained improvements in educational and employment outcomes. Some of the programs we reviewed (such as Job Corps) initially seemed promising, showing gains in earnings and employment in the first 4 years, but they showed no differences between program participants and nonparticipants in years 5–9. Most of the other programs we reviewed showed mixed or short-lived results. This contrasts with the evidence on work-based learning for adults, which consistently shows that work experiences (paid or unpaid) of more than 6 months deliver high returns in terms of employment outcomes (Sattar, 2010).

Successful models serving opportunity youth offer intensive supports. Youth programs that do show strong impacts tend to be comprehensive programs with the following three features: (a) they incorporate academic and vocational training and link occupational training with work experience; (b) they provide job-search and placement assistance; and (c) they provide other supports (such as case management, GED preparation, adult basic education, childcare, and

counseling) and sometimes operate in a residential setting. These programs can be costly to implement and often require cross-sector collaboration.

There have been few rigorous studies of work-based learning strategies and programs serving students. Career pathway programs (including Career Academies and Linked Learning) are attracting increased attention and investment. However, with the exception of Career Academies, few of these models have been actively studied through rigorous impact studies. As discussed in the program spotlight section, Career Academies have yielded strong impacts on employment and educational outcomes (Kemple, 2008). The employment and educational impacts of a follow-on program that increases staff capacity to arrange more intensive career preparation and career training opportunities (Exploring Career and College Options) have yet to be studied (Visher, Altuna, & Safran, 2013). A noncausal study of Linked Learning suggests that dropout rates decrease, graduation rates increase, and more high school credits are earned among students in certified pathways, but it does not suggest substantive gains in most of the college and career outcomes studied (Guha et al., 2014). Research suggests that while promising, these approaches pose significant implementation challenges, including difficulties integrating academic and technical content, the need for administrative and logistical support to arrange career preparation and training opportunities, lack of sustained funding, and competing priorities (Warner et al., 2016; Kemple, 2008).

There are few studies on less-intensive, work-based learning approaches. For example, summer youth employment programs are a widely adopted strategy for increasing career exposure and career preparation, but there is limited research on these programs. A well-conducted RCT on One Summer Plus—a summer jobs program in Chicago for high school students—revealed fewer violent crime arrests in the 16 months following random assignment but no impacts on school attendance or academic performance (Heller, 2014). Similarly, while career awareness strategies are widely adopted, they are usually bundled with more intensive supports and there are few studies examining the impact of these strategies on their own. Insights from one of these (Roads to Success) are discussed earlier in this review [222].

Work-based learning located in schools (for example, through career pathways) comes with equity risks associated with tracking. One of the most significant risks of school-based career programming is tracking—a particularly insidious risk given the similarities between career pathways and vocational education. Vocational education, like career pathways, is designed to leverage work-based learning to enhance students' career readiness. This goal is laudable. In practice, however, vocational education programs frequently operate on fewer resources and use a less rigorous curriculum than career pathways, serving to segregate low-income and non-White students from their more privileged peers on academic tracks (Hodge & Dougherty,

2020; Oakes, 1990). As a result, tracking reinforces chronic systems of oppression that harm students as well as our society at large, despite any well-intended goals.

Like career pathways, access to work-based learning opportunities, can become vehicles for inequity. However, when district leaders reflect on implementation practices and outcome data—such as the location of pathways relative to the residence of more vulnerable student populations, the diversity of fields in which WBL opportunities are offered, and the relative rates of enrollment and graduation for its White and non-White students—they are well situated to monitor and mitigate chronic societal inequities. Moreover, when administrators and educators address their own biases, both conscious and unconscious, they create an environment that is well suited to enhance educational equity for students.

Additional Supports and Wraparound Services

The literature review surfaced several additional supports and wraparound services that programs implement in addition to, or in combination with, the core elements of job readiness and work-based learning described above. Indeed, researchers and practitioners note that as youth workforce development programs serve an increasingly diverse population of youth and young adults with varying needs, a coherent array of supports and wraparound services is vital. Although definitions of wraparound services may differ slightly, the term is commonly meant to indicate **an intensive, individualized, holistic approach to service provision** (for example, see Skemer, Sherman, Williams, & Cummings, 2017). These supports and services, though broad in their scope, can be organized into the following categories: (a) personal development, (b) personal support, (c) mentoring, (d) family and community engagement, and (e) post-program follow-up. Each is described in more detail below, followed by more general insights that apply across these categories.

Personal Development: Many job readiness and work-based learning programs provide opportunities for personal development, in addition to the academic, intrapersonal, and interpersonal skills for job readiness described earlier in this review. Like many of the skill-building activities identified under job readiness, personal development supports are aimed at enrichment and are not specific to any one career pathway or trajectory. Personal development skills include financial literacy, health education, and parenting education.

> ***Financial literacy*** supports often focus on budgeting, money management, and financial aid for college. For instance, the Latino Stars program (Drake & LaFrance, 2006) provides opportunities for youth and young adults to create different household budgets based on different income levels. In the LARCA program, participants from across multiple sites attend financial literacy workshops or complete a financial literacy certificate program (Geckeler et al., 2017). LARCA program sites either offer financial literacy and

budgeting curriculum themselves or collaborate with another organization to deliver the workshops. Some providers require LARCA participants to complete financial literacy and budgeting training prior to receiving program stipends.

Health education can provide basic information about healthy living or information specific to targeted health concerns. In the Young Adult Internship Program, participants receive healthy living curriculum focused on nutrition, exercise, drugs, and sexual health (Skemer et al., 2017). In the Argus model, participants receive support around substance abuse education, assistance navigating health insurance, and referrals to community health centers (Drake & LaFrance, 2006).

Parenting education is offered in programs that specifically focus on serving youth and young adults who are pregnant or parenting. For example, Project Opportunity specifically targets young women who are pregnant and parenting and provides a child development and parenting course (Drake & LaFrance, 2006).

Personal Support: Many job readiness and work-based learning programs offer personal support services designed to help youth and young adults address challenges and barriers that may prevent them from succeeding in the program. Personal support services commonly include logistical supports, financial supports, and mental health counseling.

Logistical supports aim to mitigate barriers youth and young adults may face while participating in a program. Most commonly, these supports address issues related to transportation, childcare, housing, and food security. For example, participants may be provided with bus or subway passes to reach program locations (Koball et al., 2016; Drake & LaFrance, 2006). The Young Adult Internship Program assesses participants' experiences with potential obstacles—such as unstable housing and family responsibilities—and their beliefs about whether those obstacles may prevent them from achieving their goals. This enables the program to provide early, individualized support as needed (Skemer et al., 2017).

Financial supports include financial payment for program participation. The U.S. Department of Education and Office of Vocational and Adult Education (2008) highlight financial incentives as a key component of effective programs. The American Youth Policy Forum (James, 1997; James & Jurich, 1999) encourages the use of monetary rewards in youth development programming to parallel the experience of working, where wages are tied to work hours.

Mental health counseling is another personal support service that programs can offer, either as part of the program or as a key referral service for participants. For instance,

YouthBuild provides counseling services along with construction-related training (008). Year Up provides opportunities for participants to see social workers and clinical psychologists to receive assistance with a wide range of issues, including post-traumatic stress disorder, depression, self-medication, and sexual abuse (190). In Justice Corps, participants attend cognitive behavioral therapy; students report that this positively influences how they interact with each other, program staff, and their communities (290).

Mentoring: Mentoring—the pairing of a program participant with a supportive, non-parental adult or older peer (MENTOR, 2015)—is frequently cited as an important component of job readiness and work-based learning programs. A meta-analysis of over 70 independent evaluations of mentoring programs (within and outside of workforce development) showed that mentoring improved a young person's behavioral, social, emotional, and academic outcomes (DeBuois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). More recently, Koball and colleagues (2016) identified a *caring adult* as a key feature of promising programs for opportunity youth to assist participants in overcoming barriers to program participation, provide guidance in setting academic and employment goals, and provide connections to others in the labor market. Mentoring is typically provided by either program or employment staff.

Program-based mentoring, the more common of the two models, occurs directly with program staff, who often provide case management and coaching support. For instance, Boston's Getting Connected program staffs two career navigators and one employment specialist to help participants clarify their goals and identify potential obstacles, and to provide direct support or referrals to additional supportive services (Koball et al., 2016). The @LIKE program provides participants with a case manager to work with students on standard administrative duties associated with the program, and it also provides a life coach to establish personal relationships and trust, and to build students' resilience and self-efficacy (Gupta, Srinivasan, Chen, Patterson, & Griffith, 2016). Moving Up program staff provide intensive career mentoring during the program and for 2 full years after the program's completion (Drake & LaFrance, 2006).

Employer-based mentoring occurs with staff at the place of employment. For instance, Bank of America's Youth Job Program provides each participant with a one-on-one mentor as well as a peer group mentor, both of whom are Bank of America employees (Drake & LaFrance, 2006). Build IT—an afterschool and summer youth-based program for middle school girls—provides opportunities for IT professionals to share their career paths, education, and interests, and to co-lead many program activities. Even with limited interactions, girls' expectations of success and their attitudes about science,

technology, engineering, and mathematics (STEM) careers were influenced when they interacted with female professionals. For example, these interactions increased the value the girls placed on STEM careers (Koch, Georges, Gorges, & Fujii, 2012).

Family and Community Engagement: Though not as common as supports related to personal development, personal support, and mentoring, many job readiness and work-based learning programs include a focus on family and community engagement.

Family engagement most often involves inviting families to participate in one or more aspects of programming. For instance, the LA Youth Opportunity Movement and the SoBRO Youth Development Center invite participants' parents to program events and on field trips (Drake & LaFrance, 2006). The Gulf Coast Trades Center, which is a residential program, pays for families to come visit participants (Drake & LaFrance, 2006).

Community engagement most often involves opportunities for youth and young adults to connect with their communities through service. In YouthBuild, participants participate in community services by constructing affordable housing, serving the communities' needs, and providing skill training to other participants (Miller et al., 2016). Justice Corps provides opportunities for participants to engage in a community benefit project lasting approximately 13 to 15 weeks (Cramer, Lynch, & Goff, 2019). Across programs, community service is used to impress upon youth and young adults that they can do something in their community to affect change (Drake & LaFrance, 2006). Importantly, recent research suggests that community-based projects aimed at social change may bolster career development for youth and young adults from marginalized communities. Rapa, Diemer, and Bañales (2018) argue that among youth and young adults, engaging in individual or collective social action to produce social change plays a significant role in fostering career expectations in adolescence and may promote the attainment of higher status occupations in adulthood.

Post-Program Follow-Up: Lastly, many programs commit to supporting youth and young adults beyond program completion. For example, Justice Corps (Cramer, Lynch, & Goff, 2019) includes an alumni phase which lasts approximately 4 to 10 weeks after program completion. During this time, program staff provide ongoing support to participants as they transition into employment through educational classes, vocational training, and other youth development programs. Urban Alliance (Theodos, Pergamit, Hanson, Edelstein, & Daniels, 2016) also provide support to alumni through ad hoc individual coaching, resource materials, networking opportunities, and connections to paid internship opportunities. @LIKE program staff (Gupta et al., 2016) are responsible for following up with program alumni at 30, 60, 90, and up to 180 days after program completion to maintain contact and provide additional support. In each of these examples,

programs leverage relationships they have built with participants to support the transference of learning from program to employment.

Program Spotlight

In this section, we highlight the features of one promising program with a comprehensive set of additional supports and wraparound services.

Headquartered in Washington, D.C., **Urban Alliance** serves youth identified as at risk through a high school internship program. The program provides training, mentoring, and work experience to high school seniors across four metropolitan areas: Washington, D.C.; Baltimore, Maryland; northern Virginia; and Chicago, Illinois. The program includes four key elements: (a) a paid internship at a nonprofit organization, corporation, or government agency; (b) soft and hard skills job training throughout the program; (c) coaching and mentoring provided by program staff and employer-based mentors; and (d) alumni services including individual coaching, networking events, and a paid internship during the summer break from college. Urban Alliance integrates multiple components of these additional supports and wraparound services within its program model. For instance, it provides both *program-based* and *employer-based mentoring*. Program coordinators track individual participant performance in various areas such as attendance, punctuality, and career planning. Participants are also paired with a job mentor, who is an employee at the participant's workplace and is responsible for ensuring the participant has appropriate work, the necessary skills, and opportunities for enrichment and networking within the workplace. In its evaluation of the program, the Urban Institute (Theodos et al., 2016) found positive and significant program impacts along several dimensions of education and employment preparation measures, particularly for male students.

Insights From the Literature

While the preceding descriptions provide an overview of additional supports and wraparound services, it is important to contextualize these as **intensive, individualized, holistic approaches to service provision**, in line with the definition provided at the beginning of this section. Additional supports and wraparound services are rarely provided on their own; by design, they are supplementary components of workforce development programs. Taken holistically, there are several insights from the literature that are important to consider.

Begin with the end in mind. Additional supports and wraparound services should be considered at the onset of program planning, not as an afterthought. For example, personal support services need to be designed to help meet participants' basic needs while they are in the program, thereby reducing the influence that logistical, financial, and mental health barriers may have on participants. The array of potential challenges participants face—in particular, youth and young adults from marginalized communities—suggests that successful programs

extend beyond traditional workforce development strategies to include a broad view of personal support services (Lodewick et al., 2004). It is important to recognize and attend to participant needs early and often.

Equity should be central when integrating additional supports and wraparound services. Researchers and practitioners note that as youth workforce development programs serve an increasingly diverse population of youth and young adults with varying needs, offering a coherent array of supports and wraparound services is vital. Further, as Rapa, Diemer, and Bañales (2018, p. 127) note, “Marginalized youth’s development occurs in contexts rife with racialized, gendered, and socioeconomic social identity threats and barriers to social mobility.” Program and employer-based staff may need additional support in order to work effectively with a diverse participant population, and issues of equity—including access, representation, and meaningful engagement—should be considered during each aspect of programming.

Leverage relationships to maximize programs’ ability to be intense, individualized, and holistic. To the extent possible, workforce development programs should consider the broader ecosystem of partners when designing and delivering additional supports and wraparound services. Programs should consider when it is appropriate to offer a support or service directly, and when to provide referrals to other organizations or agencies. For example, it is unlikely most programs will be able to offer professional mental health counseling. Whether offering support or services directly or indirectly, efforts should be made to make the process as seamless as possible for participants.

Discussion

A comprehensive review of the research and evidence is an important first step toward developing or enhancing interventions focused on improving life outcomes for youth and young adults, especially among underserved groups.

The review reveals four significant gaps in the evidence base:

- In general, workforce development programs lack rigorous studies of their impact, and there are particularly few studies of programs serving certain populations of interest to DCYF, most notably justice-involved youth and young adults.
- Most program impact studies are over 10 years old. This may limit the degree to which they can shed light on how relevant these program models are for yielding impacts today, given the changing world of work.

- Most program studies of workforce development examine impacts in the shorter term, but the research shows that short-term impacts are not always predictors of long-term gains.
- Most studies integrate multiple components but do not differentiate between the effects of different program elements., the importance of sequencing services, and/or describe the results for different populations/segments of youth

The available literature largely suggests that DCYF's funding priorities are consistent with the evidence base.

- Middle school–aged youth are best served by a combination of job readiness and career awareness and career exploration programming, focused on ensuring that participants build the foundational academic, interpersonal, and social and emotional learning skills needed to succeed in work and in life. Youth programming should include a wide array of activities centering around rigorous, high-quality academic training as well as direct programming focused on soft skills and social and emotional development in addition to providing regular access to career awareness and exposure programming. Taken together, these early experiences can enhance students' school engagement and broaden the available system of supports for vulnerable students to elevate the equity of programming for underserved youth.

- Older, high school–aged youth and individuals who are transitioning into young adulthood can benefit from more direct, career preparation and career training support, on top of continued job readiness support, including academic support and advanced cognitive, interpersonal, and social and emotional supports.. This can be delivered through a host of settings, including internships and apprenticeships, as well as through the work-based learning associated with high school career pathway programs.

- To provide services for disconnected or chronically underserved youth and young adults, effective and equitable programming must also integrate additional wraparound supports aimed at reducing barriers and promoting positive youth development approaches so that they may engage with work-based learning and training.

The review also presents five lessons for DCYF's consideration:

- A city agency like DCYF can play a critical role in fortifying partnerships between city mayors' offices, employers, community-based organizations, and secondary and postsecondary education institutions to support improved workforce outcomes for vulnerable youth and young adults. For example, employers involved with work-based learning programs have previously voiced concerns about working with youth and young

adults through school-based or community organization–based partnerships, as program participants may be less skilled than typical new hires (Hodge & Dougherty, 2020). To support employer engagement in light of such concerns, DCYF can maintain a dialogue between employers, schools, and community-based organizations about programming needs, with the goal of enhancing students' skill sets to meet employer needs.

- The involvement of a caring adult, as can be made available through mentorship programs, appears fundamental to effective workforce development program implementation. We understand that DCYF provides mentorship programming as a strategy distinct from youth workforce development, but we recommend more explicit integration between mentorship and workforce programming and/or greater support for developing mentorship skills among supervisors for work-based experiences. Both program-based and employer-based mentors can be leveraged to connect with participants, identify and address challenges early, and provide access to a broader work-based network. Integrating professionals as role models in programming can be an effective way to promote employer engagement. This may be particularly important for youth from underrepresented communities in certain career sectors, for example, women, Black, and Latino youth and young adults in STEM careers (Koch et al., 2010).
- Career pathways may provide the one of the best avenues for exposing a broad array of students to work-based learning, thereby enhancing students' educational and workforce outcomes. However, effective career pathway implementation requires a diversity of pathways and careful attention to the risks of tracking to ensure pathway graduates have a broad set of options available to them upon graduation, including both college and career. Moreover, many of the career pathway models (including Linked Learning) lack rigorous impact studies, particularly regarding students' long-term work outcomes.
- To address what Rapa, Diemer, and Bañales (2018, p. 127) describe as the "racialized, gendered, and socioeconomic social identity threats" faced by youth and young adults from marginalized communities, workforce development programs must acknowledge and interrogate societal structures that may privilege certain cultural norms and minimize others. DCYF should consider providing resources for programs to support interrogating biases that may exist within their own structures. Moreover, enhancing workforce outcomes for underserved youth and young adults may require direct intervention with employers, who may struggle with bias both in their workplace and among their staff. DCYF should consider any available avenues for encouraging employers to grapple with such concerns.

- The most vulnerable youth and young adult populations require targeted intervention supports focused on their unique needs. Some of these supports (particularly for opportunity youth) are provided through Federal programs – aligning city resources to these programs can allow DCYF to focus on unmet need. To provide this programming, it will be important for DCYF to collect ongoing and diverse data to understand unmet need, and the common barriers to program participation and completion. These data collection efforts should involve high levels of outreach to youth and young adults from families with tenuous connections to the labor market.

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Appendix A. Supporting Evidence

To support this review, we reviewed 26 programs using 35 related evaluations. Exhibit A1 presents information on the subject matter and significance of each program and its evaluation. In order to be included in the table below, the program evaluations had to meet the following criteria: (a) published after 2000; (b) limited geographically to the United States; and (c) limited to addressing workforce development for youth and young adults between the ages of 14 and 24. Although the full literature review included a broad type of article types, the table below focuses evaluations of specific programs. The table cross-references program models with key components of job readiness, work-based learning, and additional supports and wraparound services described above. Citations for each evaluation are provided following the table.

Exhibit A1. Youth and Young Adult Workforce Development Program Evidence

	Job Readiness				Work-Based Learning				Additional Supports and Wraparound Services				
	Job Search Skills	Professional Skills	Foundational Academic Skills	Advanced Cognitive, Intrapersonal, and Interpersonal Skills	Career Awareness	Career Exploration	Career Preparation	Work-Based Training	Personal Development	Personal Support	Mentorship	Family and Community Engagement	Post-Program Follow-Up
*Boston Summer Youth Employment Program[1]							•			•			
Build IT[2]				•	•	•					•		
City of Albany Summer Youth Employment Program[3]		•			•	•	•		•	•			
Washington, D.C. Summer Youth Employment Program[4]		•			•		•			•			
Job Corps[5, 6]			•	•			•			•	•	•	•

	Job Readiness				Work-Based Learning				Additional Supports and Wraparound Services				
	Job Search Skills	Professional Skills	Foundational Academic Skills	Advanced Cognitive, Intrapersonal, and Interpersonal Skills	Career Awareness	Career Exploration	Career Preparation	Work-Based Training	Personal Development	Personal Support	Mentorship	Family and Community Engagement	Post-Program Follow-Up
*Linking Innovation, Knowledge, and Employment (@LIKE)[7]		•	•	•	•	•	•			•	•		•
*Los Angeles Reconnections Career Academy (LARCA)[8]	•		•					•	•	•	•		
*National Guard Youth ChalleNGe Program[9]		•	•	•					•	•	•		
New York City Summer Youth Employment Program (SYEP)[10, 11]		•	•		•	•	•		•	•			
*New York City Justice Corps[12]		•	•	•			•	•		•		•	•
*PACE Center for Girls[13]		•	•	•						•		•	•
*Promotor Pathway[14]		•	•							•	•	•	
*Roads to Success (RTS)[15]	•	•	•	•	•	•							
Scholars at Work (SAW)[16]		•		•	•	•	•						
The Fellowship Initiative (TFI)[17]		•	•	•	•				•		•	•	
*Urban Alliance High School Internship Program[18, 19]		•		•			•		•	•	•		•

	Job Readiness				Work-Based Learning				Additional Supports and Wraparound Services				
	Job Search Skills	Professional Skills	Foundational Academic Skills	Advanced Cognitive, Intrapersonal, and Interpersonal Skills	Career Awareness	Career Exploration	Career Preparation	Work-Based Training	Personal Development	Personal Support	Mentorship	Family and Community Engagement	Post-Program Follow-Up
WorkReady Philadelphia[20]		•	•	•	•	•	•	•				•	
*Year Up[21, 22, 23, 24]		•		•			•	•		•	•		•
*Young Adult Internship Program (YAIP)[25]		•	•	•			•	•	•	•	•		•
Youth CareerConnect (YCC)[26, 27, 28, 29]	•	•	•	•	•		•			•			
*YouthBuild[30, 31]		•	•	•			•	•	•	•	•	•	•

Note: * = statistically significantly positive effects on at least one outcome; • = Program includes component

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