DESIGNING STATEWIDE

CAREER DEVELOPMENT

STRATEGIES & PROGRAMS

National Collaborative on Workforce and Disability

NCWD For Youth

Navigating the Road to Work

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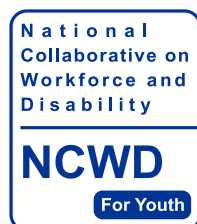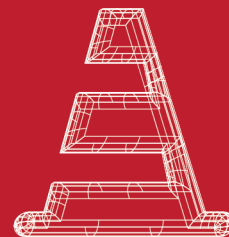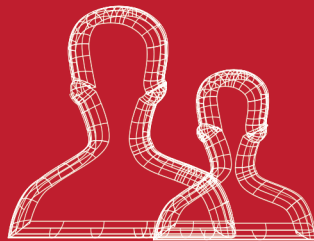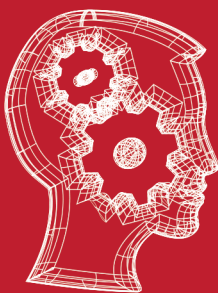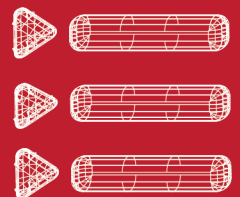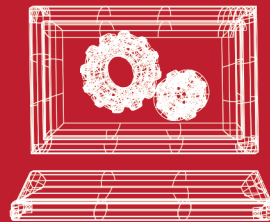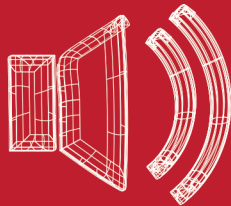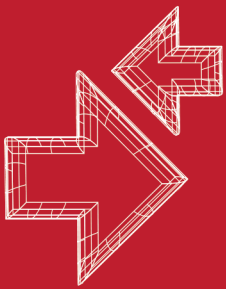
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National Collaborative on Workforce and Disability for Youth

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RATIONALE AND PURPOSE

To address the need to support the future employability of all youth, nearly all states have embraced college and career readiness as a primary goal for all high school students. It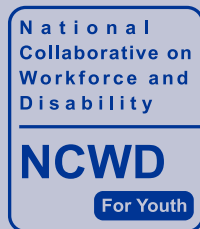 is now well-known that simply graduating from high school no longer provides youth, with or without disabilities, with the requisite workforce readiness skills needed to secure competitive employment (NGA Center on Best Practices, 2010). The demand for college-educated young adults in the U.S. is high and is projected to grow significantly, and the outlook for those with-out any postsecondary training or education is not promising. It is therefore incumbent upon states to ensure that their youth graduate from high school prepared to continue their education and obtain postsecondary credentials. In fact, the Workforce Innovation and Opportunity Act of 2014 (WIOA) emphasizes postsecondary credentialing as one of the Act's primary purposes.

Efforts that improve graduation rates and matriculation into postsecondary training, education, or competitive employment for

Economic Profile of Youth with Disabilities

Historically, outcomes for all youth with disabilities have not been commensurate with those of youth without disabilities. The situation is worse for those who receive or have received Supplemental Security Income (SSI). According to one analysis of outcome data from youth ages 19 to 23 who formerly were child SSI beneficiaries,

- they are more likely to leave high school without a high school diploma (38%) compared to all youth ages 16 to 24 (11%);
- those who graduate from high school are less likely to attend any form of postsecondary education (6.3%) compared to all youth ages 18 to 23 (41%);
- they have a lower employment rate (22%) compared to all youth ages 20 to 24 (68%); and
- a large proportion (57%) are not participating in vocational rehabilitation services or education and are not employed.

In addition there are thousands for whom successful transition programming will reduce the risk that they require benefits in the future (Rangarajan, Fraker, Honeycutt, Mamun, Martinez, O'Day, & Wittenburg. 2009).

all youth translate into tremendous economic gains. The estimated costs of America's 6.7 million out-of-school non-working youth between ages 16 and 24 collectively include a reduction in the tax base across their lifetimes of $1.56 trillion dollars and an additional $4.75 trillion in costs to tax payers due to added social services and incarceration rates (Sum & McLaughlin, 2010).

Engaging all youth in quality comprehensive career development programs and activities is a promising strategy to ensure that they become college and career ready. At the most basic level, being college and career ready means graduating from high school with the knowledge, skills, and attributes needed to successfully matriculate into and complete postsecondary training/education and secure meaningful employment (Achieve and the Education Trust, 2008). Two critical elements of quality youth career development programming are work-based learning and developmentally appropriate career development skill-building activities. Work-based learning enables youth to directly explore and experience the world of work while career development skill-building activities, as explained in Part I, enable youth to identify their career and personal interests, skills, values, and goals. The combination of these two elements helps youth recognize the relevance and utility of their academic courses and out-of-school learning opportunities. This recognition increases the likelihood that youth will become more deliberate, excited, and proactive in choosing and pursuing postsecondary training and education opportunities.

"True educational innovations are those products, processes, strategies, and approaches that improve significantly upon the status quo and reach scale" (Shelton, 2011, para 3).

The purpose of *Designing Statewide Career Development Strategies and Programs* is to support states in their efforts to improve career development opportunities for all youth, including youth with disabilities, by providing functional and pragmatic guidance states can use to implement quality comprehensive systems of career development. The central theses of this guide are that 1) in order to become career ready, all youth need to be

Economic Profile of High School Graduates

Six years post-high school, students with a high school degree and no training or education beyond high school had nearly identical career and economic profiles as high school dropouts (NGA Center on Best Practices, 2010).

provided with access to quality career development programs, and 2) career readiness drives college readiness (Solberg, Wills, Redmond, & Skaff, 2014). The guide is divided into two parts. *Part I serves as a primer to quality youth career development systems.* Specifically, Part I provides an overview of

1. the youth career development process,
2. considerations for designing quality career development programs and systems, and
3. legislative initiatives associated with youth career development.

Part II serves as an implementation guide. Implementation research tells us that successful adoption and sustainability of innovative public initiatives are enabled or hindered by the implementation strategies employed (Greenhalgh, Glenn, MacFarlane, Bate, & Kyriakidou, 2004; Klein & Sorra, 1996). Therefore, Part II identifies seven promising career development implementation strategies and provides

1. a brief discussion of the strategy and why it is important,
2. information about related challenges encountered by states that have implemented career development programming in their schools and/or problems reported in the literature,

3. information about promising practices associated with implementation of the strategy, and
4. a resource section with examples and links to existing state materials or initiatives.

The content of Part II was derived from

- research commissioned by the U.S. Department of Labor's Office of Disability Employment Policy (ODEP) undertaken by the National Collaborative on Workforce & Disability for Youth [NCWD/Youth] (Solberg, Wills, & Larson, 2013; Solberg et al., 2014) and
- best practices identified through a literature review of studies related to career development and individualized planning.

PART I: YOUTH CAREER DEVELOPMENT SYSTEMS PRIMER

The world of work has changed. The demand for college-educated young adults in the U.S. is high and is projected to grow significantly, while demand is projected to steadily decline for those who have not engaged in any postsecondary training (Symonds, Schwartz, & Ferguson, 2011). Yet, attaining postsecondary credentialing does not guarantee long-term employment. Rather, according to the most recent available data from the Bureau of Labor Statistics (2014), the average worker today stays at each of his or her jobs for 4.4 years, with the workforce's youngest employees staying less than three years. Today's youth are expected to not only change jobs but also careers several times over their lifetime.

The financial crisis of 2008 further changed the face of employment. The challenge of finding and sustaining employment today is far greater for everyone, but youth are disproportionately affected. In fact, the percentage of job loss experienced by U.S. youth between 2007 and 2009 exceeds that of all U.S. workers during the Great Depression at 24.8% and 18.7% respectively (Sum & McLaughlin, 2010). Unemployment rates for youth ages 16-24 continue to vary by race and ethnicity with African Americans (24.8%) and Latinos (16.5%) experiencing larger unemployment rates than Whites (12.2%) and Asian Americans (10.9%) (Bureau of Labor Statistics, 2014). Youth with disabilities fare worse than their non-disabled peers; the employment rates of youth with disabilities ages 16-19 are 16.6% and 31.6% for youth ages 20-24 compared to 29.9% for youth ages 16-19 without disabilities and 65.0% for ages 20-24 (Bureau of Labor Statistics, 2014). Today's youth need to develop the skills to be employed, effectively change jobs, and plan and manage multiple careers over their lifetimes. The process by which youth get to know their strengths and interests, learn how different jobs connect with those interests, and build career planning and management skills is called career development (Solberg et al., 2014).

Career Development Overview

Youth career development is a multi-year iterative, interactive, and youth-driven process. Although educators, school counselors, family members, and other concerned adults are partners in the process and play key support and facilitative roles, a critical component of quality youth development programs is that youth take an active role in decision-making and exercise greater control of the process (Larson, 2005). In the context of career development programming, youth are active participants throughout the process while assuming progressively more responsibility, control, and ownership along the way.

Engaging in career development can empower all youth, including those with disabilities, to take an active role in shaping their futures. By engaging in personalized career development activities, youth develop the skills to set and continuously hone self-identified personal and career goals. This is accomplished by first identifying then aligning their interests, skills, and values with educational and skill-building opportunities. This process sets them on the path to becoming career ready. By aligning their learning opportunities with self-defined goals youth may become more engaged and more interested in their coursework as they have a better understanding of why they are taking their courses. Finally, research has shown that increased perceived relevance and utility of courses leads to improved interest and academic performance (Hulleman & Harackiewicz, 2009).

Career development consists of three skill domains: 1) self-exploration, 2) career exploration, and 3) career planning and management. Strategies presented in this guide center on the acquisition of skills within these domains as well as work-based learning, which is a critical component of the career development process that cuts across all three domains (Solberg, Wills, & Osman, 2012). This section provides an overview of the three domains and work-based learning. Resources for each are provided at the end of the section in Tables 1 – 4.

Self-Exploration Skills: Self-exploration is a crucial first step in the career development process because it allows youth to discover who they are and what they like to do. In this stage, youth acquire specific skills through youth-driven self-exploration activities and assessments like those featured in the resources in Table 1. Self-exploration skills refer to individuals gaining the ability to identify their interests, skills, and values. Once youth are able to identify their interests, skills, and values, they can use this knowledge and what they have learned about themselves to effectively explore career options and identify personal and career goals.

Many young people have frustrating experiences in high school because they do not see the link between their coursework and their present day experiences or their goals for the future. If students have opportunities

Career Development Skills

- Self-Exploration
- Career Exploration
- Career Planning & Management

to explore and identify their specific interests, strengths, and values, and understand how their current courses can enhance their strengths and move them towards their desired future, their life goals become even more meaningful. Having meaningful goals in place promotes student engagement in their education as their high school coursework takes on new meaning and importance for them. Self-exploration is included in the local program design provisions of the newly enacted Workforce Innovation and Opportunity Act of 2014:

> *to provide an objective assessment of the academic levels, skill levels, and service needs of each participant, which assessment shall include a review of basic skills, occupational skills, prior work experience, employability, interests, aptitudes (including interests and aptitudes for nontraditional jobs), supportive service needs, and developmental needs of such participant.*

Career Exploration Skills: Developing career exploration skills consists of learning how to identify and analyze various career options in terms of what education, training, experience, and competencies are required for success. It also involves learning how to assess how well a career matches one's own interests, skills, strengths, and values. Youth often have limited exposure to the full range of possible jobs that are available. They generally know about the jobs that their parents, relatives, and people in their immediate social circle hold and may choose a similar path irrespective of whether it aligns well with their strengths or interests. Engaging in career exploration activities, however, gives youth the opportunity to learn more about the breadth of jobs that match their interests, strengths, and values. In addition, it allows them to identify personal career and life goals that align with who they are as individuals. Many youth may be able to identify careers they are interested in, but have difficulty identifying what education or skills they would need

Assessments for Youth with Disabilities

Transition school staff frequently report that many career development assessments are not accessible to their students. The following are links to career development related assessments for youth with disabilities:

- **NSTTAC** – Age Appropriate Transition Assessment Toolkit
- **University of Oklahoma** – Transition Assessment and Goal Generator
- **University of Oklahoma** – Transition Assessment for Students with Significant and Multiple Disabilities
- **PRO-ED** – Informal Assessments for Transition Planning–Second Edition
- **Career/LifeSkills Resources Inc.** – Picture Interest Career Survey (PICS), 2nd ed.

to work in that field and may not be aware of the full range of job opportunities available within a particular career (Solberg, Gresham, Phelps, & Budge, 2010). Career exploration and career awareness are also included in the youth formula program design elements under WIOA, where it is envisioned they will be used in both in and out-of-school settings.

The objective of career exploration is for youth to

- learn about the nature of careers they find interesting,
- identify the in- and out-of-school learning opportunities they should complete during secondary school years, and
- explore the postsecondary opportunities they can pursue.

There are a variety of ways to do this, which range from using Internet-based tools to research careers to participating in experiences that involve meeting employers (e.g. guest speakers, career fairs, informational interviews, career mentoring) and getting a first-hand look at workplaces and postsecondary institutions (e.g. workplace tours, college visits, job shadowing, and other work-based learning opportunities). Table 2 provides resources for developing career exploration skills.

Career Planning and Management Skills: Career planning and management involves developing employability and decision-making skills and increasing the youth's capacity to navigate within the world of work, not just in the short term but also throughout their lives. Youth often struggle in employment because they do not have the skills to effectively manage the basic day-to-day expectations of employers or the awareness that, in a rapidly changing job market, people need to adapt quickly to be successful. For this reason, career planning and management skill-building must involve developing the skills needed to maintain employability and navigate career changes throughout the lifespan, not just those needed to obtain initial employment.

Career planning and management skills include a wide range of career readiness skills such as soft skills, career-specific skills, job search skills, financial literacy skills, and youth development and leadership competencies. Soft skills are particularly important as this is an area employers have highlighted as lacking in their younger employees. Examples of key soft skill areas are communication, enthusiasm and attitude, teamwork, networking, problem solving and critical thinking, and professionalism.

Increasing financial literacy, including money management knowledge and skills, has been highlighted as an important strategy for improving outcomes for all youth, including

youth with disabilities (Buckles, Meszaros, Staten, Suiter, & Walstad, 2013). Furthermore, under WIOA, financial literacy skills development is included within the list of allowable statewide activities, specifically skills needed to

- create household budgets, initiate savings plans, and make informed financial decisions about education, retirement, home ownership, wealth building, or other savings goals;
- manage spending, credit, and debt, including credit card debt, effectively;
- increase awareness of the availability and significance of credit reports and credit scores in obtaining credit, including determining their accuracy (and how to correct inaccuracies in the reports and scores) and their effect on credit terms; and
- understand, evaluate, and compare financial products, services, and opportunities.

WIOA also stresses the importance of activities that address the particular financial literacy needs of non-English speakers, including providing support through the development and distribution of multilingual financial literacy resources.

Youth development and leadership competencies are the comprehensive array of behaviors, skills, and attitudes that youth need to meet the challenges of adolescence and

adulthood (NCWD/Youth, 2005a). These include the skills required to develop and sustain positive relationships, manage one's own health and emotional well-being, and set and pursue goals in all areas of one's life. Key youth leadership competencies include self-advocacy and conflict resolution skills. In addition, youth need to be able to both identify and use community resources not only to live independently, but also to establish support networks, participate in community life, and effect positive social change. Some of the specific competencies that youth with disabilities need to develop include awareness of, and the ability to advocate for, the accommodations they need in order to succeed in postsecondary education and employment settings.

A wide range of activities and resources, including those featured in Table 3, can be used to build career planning and management skills.

Work-Based Learning: Work-based learning refers to supervised work opportunities sponsored by an education or training organization. Access to work-based learning is an integral step in the career development process and in preparing students for college and careers. It provides practical and meaningful opportunities for youth to cultivate their skills in all three career development domains:

- *Self-exploration:* Work-based learning helps youth learn more about themselves and gain a better appreciation of their abilities and how their interests and values align with their work experience.
- *Career Exploration:* Work-based learning provides youth with the opportunity to gain knowledge of specific occupational skills and an understanding of different industries in order to make informed career choices.
- *Career Planning & Management:* Work-based learning provides youth with the opportunity to develop basic workplace skills such as teamwork, communication, problem-

Figure 1. Minnesota's Spectrum of Work-based Learning Experiences

Tours	Students take part in employer-led tours of sites which provides students with information on requirements of different jobs.
Job Shadowing	Students make brief worksite visits to spend time with individual workers to learn what their jobs entail.
Rotations	Students work in a number of different departments or for different employers to explore different occupations within an industry cluster.
Mentoring	Students are paired with "adult peers" from the workplace who provide guidance and encouragement on career-related, interdisciplinary projects.
Entrepreneurship	Students create an alternate work program, are their own boss, earn money, create a project, run their business, and earn high school credit.
Service Learning	Students participate in unpaid work, geared to the public good, integrated with school learning through projects or similar mechanisms.
Internships/ Co-Ops	Students participate in paid work experience with the employer, school coordinator, and student agreeing to follow training plan. Students take vocational and work-related classes at school.
Youth Apprenticeship	The integration of academic instruction and work-based learning. The student commits to one or two years of paid work experience in a specific trade and is registered as a youth apprentice.

Graphic used with permission from the Minnesota Department of Education.

solving, customer service and social etiquette. It also helps youth develop goal setting skills and learn what they need to do to reach those goals.

In addition, work-based learning links knowledge gained at the worksite with a planned program of study. Work experience is widely recognized to promote improved employment outcomes for disadvantaged youth (Carter, Trainor, Cakiroglu, Swedeen, & Owens, 2010; Luecking & Fabian, 2000; Test, Mazzoti, Mustian, Fowler, Kortering, & Kohler, 2009). Yet, youth with disabilities have disproportionately low access to work experience in comparison to youth without disabilities (U.S. Government Accountability Office, 2012). This is particularly troublesome given that paid employment and work experience have been identified as only one of four evidence-based predictors of success in postsecondary education, employment, and independent living for youth with disabilities (Test, Fowler, & Kohler, 2013).

Work-based learning experiences can take a variety of forms, such as being paid or unpaid, and can range in intensity as well as in scope and structure. Minnesota's Spectrum of Work-based Learning Experiences, shown in Figure 1, illustrates this well. Table 4 provides a sample of resources for designing and implementing work-based learning opportunities.

Table 1. Self-Exploration Resources

Self-Exploration Activities & Curricula

Self-exploration curricula are available on the NCWD/Youth *Individualized Learning Plans How-to Guide – Section I, Self-Exploration webpage*. These include

- sample lesson plans and other self-exploration activities that are ready to be used or adapted,
- state-based, free-use, self-exploration-related career development resources, and
- validated, open-access assessment tools for helping students engage in self-exploration.

O*Net, the Occupational Information Network is a free resource sponsored by the U.S. Department of Labor/Employment and Training Administration. The following O*NET tools are useful for self-exploration:

- O*NET Ability Profiler is a self-assessment tool that helps individuals find their strengths and the occupations that match them.
- O*NET Interest Profiler is a self-assessment tool that helps individuals discover what types of work activities they would like.
- O*NET Computerized Interest Profiler is a computer-generated version of the Interest Profiler vocational interest assessment.
- O*NET Work Importance Locator is a self-assessment tool that helps individuals pinpoint what is important to them in a job.
- O*NET Work Importance Profiler is a computer-generated version of the Work Importance Locator.
- My Next Move is a tool designed for easy use by students, youth, and others interested in finding out about different occupations, careers, and industries. It also features a section called "I'm not really sure" that is designed to help users develop and match a profile of their individual interests with different kinds of careers.

Self-Discovery – Activities and Games is a resource made available through Life Skiller, a membership site for teachers, counselors and others working with children and teenagers.

Personality & Interest Assessments

Self-exploration: Skills, Personality, Interests, Values Worksheets can be found on the Vocational Information Center website. This education directory provides links to online resources for self-exploration in the areas of self-assessment/reflection; values and interests; work environment; and skills assessment.

Personality tests (typically fee-based instruments) such as the following can be found online:

- Myers-Briggs Type Indicator is a personality indicator based on individuals' psychological preferences with respect to decision making and how they view the world and these preferences are indicators of interest, needs, values, and motivation.
- 16PF® Adolescent Personality Questionnaire is a self-report personality inventory that was specifically developed and normed for adolescents. It elicits valuable information regarding the youth's personal style, problem-solving abilities, preferred work activities, and areas where the youth is having problems.

Learning style resources are available on a variety of websites. The following are a few examples:

- [What Is Your Learning Style?](#) by Edutopia
- [Learning Style Inventory](#) available through Penn State University
- [What's Your Learning Style?](#) by Education Planner

Table 2. Career Exploration Resources

Career Exploration

Career exploration curricula are available on the [NCWD/Youth *Individualized Learning Plans How-to Guide – Section I, Career Exploration* webpage](#). These include

- sample lesson plans and other career exploration activities that are ready to be used or adapted,
- state-based, free-use career exploration resources, and
- validated, open-access tools for helping students explore careers.

The U.S. Department of Labor and other federal agencies offer a variety of free tools and information for facilitating career exploration, including the following:

- [My Next Move](#) is a tool designed for easy use by students, youth, and others interested in finding out about different occupations, careers, and industries.
- [MyFuture.com](#) is a website designed for young adults to provide the most recently available information about colleges, careers, and military service opportunities from the U.S. Departments of Commerce, Defense, Education and Labor. This website features career, college, and military content allowing users to explore many possibilities and gain insight into each option. It was developed by the Department of Defense and includes detailed information on more than 900 civilian and military career fields and nearly 7,000 accredited colleges.
- [CareerOneStop](#) provides direct links to information on a very broad range of career development topics. The [Explore Careers](#) section provides free self-assessments that link to tools for searching occupations, industries, and more.
- [Occupational Outlook Handbook (OOH)](#) is a nationally recognized source of career information, designed to provide valuable assistance to individuals making decisions

about their future work lives. It provides details about hundreds of U.S. occupations. The OOH is a product of the USDOL, Bureau of Labor Statistics (BLS) and is revised every two years. Career Outlook, the BLS Occupational Information newsletter, provides articles features various occupations.

- Occupational Employment Statistics (OES) provides employment and wage estimates for over 800 occupations. These are estimates of the number of people employed in certain occupations, and estimates of the wages paid to them. Self-employed persons are not included in the estimates. These estimates are available for the nation as a whole, for individual states, for metropolitan and nonmetropolitan areas, for certain industries, and more. The OES is a product of the USDOL, Bureau of Labor Statistics.

Career exploration inventories currently used by specific states include the following:

- ISEEK Career Cluster Interest Survey (Minnesota)
- Career Interest Survey (Community and Technical Colleges of Washington State)
- Career Cluster Interest Survey (Oklahoma Department of CTE)

Jobs Made Real: By Teens for Teens is a website with multimedia resources to help youth discover their career path.

Explore Careers is a section of the Career Exploration and Student Success Toolkit provided by ISEEK, Minnesota's career, education, and job resource. It includes multiple resources and activities for youth career exploration in the areas of: exploring careers and labor market information; informational interviewing; programs and colleges; and career research worksheet. ISEEK provides career information and exploration lesson plans with several lessons on developing career exploration competencies.

Exploring Your Options - Career Exploration Worksheets can be found on the Vocational Information Center website as part of the Career Development and Guidance resources.

Career Exploration Tools and Materials To Assist Educators, Counselors, And Students is a webpage with numerous career-exploration resources, provided by the New Jersey Department of Education.

SkillsUSA and the Work Force Ready System® provide the Skill Connect® assessments for career and technical education and are supported by industry, education, and policy leaders. The assessments are available for a fee through SkillsUSA.

The National Career Clusters® Framework, consisting of 16 Career Clusters and their Career Pathways (72 in total), can help students learn about and explore a range of occupations and the skills, knowledge, and credentials they need to pursue various careers.

Table 3. Career Planning and Management Resources

Career Planning & Management Resources

- Mapping Your Future is a national nonprofit organization that provides students and families with information and counseling related to preparing for college, exploring careers, paying for postsecondary education through financial aid and other sources, and managing money.
- Goal Setting and Decision-Making Lesson plans are part of the Educator's Toolkit on Career and Education Planning, a resources of the Florida Department of Education. This module provides lessons for teaching students goal-setting and decision-making skills they will need throughout their career.
- Chapters 3 and 4 of *Merging Two Worlds*, a transition and career planning curriculum, provide a variety of activities for teaching career planning and management skills. This curriculum was developed by Pima Special Programs, a department of the Pima County School Superintendent's Office in Tucson, Arizona.
- Career Management articles from the University of California, Berkeley's Human Resources Department website provide useful examples of topics for teaching students about managing one's career including building relationships, having career development conversations, updating a career development plan, and setting new goals.

Financial Literacy Resources

- Several financial literacy resources are featured in the NCWD/Youth Individualized Learning Plans How-to Guide – Section I, Career Planning and Management.
- Financial Literacy for Youth with Disabilities Literature Review and Issue Paper provide information on policies and practices for developing financial literacy among youth with disabilities.

- The Federal Deposit Insurance Corporation (FDIC) offers a variety of financial education and literacy resources for educators, youth, and families. FDIC's MoneySmart is a free comprehensive financial education curriculum.
- The Consumer Financial Protection Bureau provides guidance to families on how to prepare their children for making financial decisions.
- Teaching Financial Literacy to Teens is a tutorial on how to teach teenagers about money management provided by Investopedia.
- Financial Literacy for Everyone is a curriculum offered by Practical Money Skills that includes lesson plans for K-16 students to give them a deeper understanding of money management. It also includes lesson plans for students with disabilities.

Soft Skills Resources

- Soft Skills To Pay The Bills is a curriculum focused on teaching "soft" or workforce readiness skills to youth, including youth with disabilities, developed by the U.S. Department of Labor's Office of Disability Employment Policy.
- Empower Your Future Career Readiness Curriculum Guide is a free resource developed by the Commonwealth Corporation with funding from the Massachusetts Department of Youth Services. It includes lessons on various soft skills and other aspects of career readiness and planning.
- Soft Skills in the Workplace is a guide by Saddleback College for students on some of the most common soft skills that employers seek when hiring.

Disability Disclosure

- *The 411 on Disability Disclosure: A Workbook for Youth with Disabilities* helps young people make informed decisions about whether or not to disclose their disability and understand how that decision may impact their education, employment, and social lives.
- *The 411 on Disability Disclosure: A Workbook for Families, Educators, Youth Service Professionals, and Adult Allies Who Care About Youth with Disabilities* is the companion guide for adults supporting youth to learn about disclosure.
- *Cyber Disclosure for Youth with Disabilities* is a supplement to The 411 about disclosing personal information, including information about disabilities, on social media and websites.

Table 4. Work-Based Learning Resources

Work-based Learning

Work-Based Learning Manual provided by the Kentucky Department of Education offers information on the various types of work-based learning experiences and an overview of legal issues and guidelines for implementing work-based learning.

Student Internships & STEM Engagement Opportunities is a pilot web-based marketing program by Minneapolis Public Schools to provide information to its students and families about student internships and STEM engagement opportunities.

Work-Based Learning Programs is New York State's webpage for work-based learning activities. It contains information about the state's work-based learning programs and resources for work experience coordinators.

Work-based Learning Resources through Virginia's CTE Resource Center provides a variety of resources on job shadowing, mentorship, internship, service learning, clinical experience, student apprenticeship, and cooperative education.

Job Shadowing resources provided through the Wisconsin Department of Public Instruction include information on expectations, roles, and questions for students to ask.

Work-based Learning Program by the Utah State Office of Education describes the activities and components provided to students.

Work-based Learning, a webpage of the State of Washington Office of Superintendent of Public Instruction, provides various resources, including a worksite learning manual, for implementing work-based learning experiences that apply education and skills to employment situations.

Iowa's Workplace Learning Guide 2010: Learning for Life in the 21ˢᵗ Century offers general guidance for students, teacher-coordinators, school administrators, employers, businesses, communities, and others involved in a workplace learning experience.

Designing Career Development Programs & Activities to Promote College and Career Readiness

Designing career development programs and activities should begin with ensuring that all youth have access to encouraging and caring adults and family members who are excited to support them in their career development. Many adults may not be aware of the range of possible careers available or may feel concern about ensuring that youth select careers that are "realistic" for them considering past academic performance and/or disability status. To maximize opportunity, it is important that the concept of "career" focus on the full career cluster or career pathway instead of on a specific job or task that is associated with a career (National Association of State Directors of Career Technical Education, 2014). Career clusters and pathways involve a range of occupational opportunities; therefore, information about them is most effectively accessed using online career information systems. Helping youth identify two to three career clusters or pathways to explore ensures that they learn about a wide range of occupations. With further exploration, youth will be able to more effectively assess what skills they will need to develop in order to pursue various occupations. Therefore, rather than judging whether a career in sports or music is "realistic," for example, adults should encourage youth to explore the full range of occupations associated with a sports or music career and to explore two other career areas as "back-up

plans." It is also important that youth receive opportunities to explore other career areas that may be connected to the interests, strengths, and values they discovered in the self-exploration phase.

The design process must also involve establishing multiple opportunities for all youth to develop skills in self-exploration, career exploration, and career planning and management. Self-exploration and career exploration skills development can be facilitated by providing activities that enable youth to identify and examine a range of preferred and alternative career aspirations (middle school), goals (early high school), and intentions (later high school). In addition, work-based learning activities should be incorporated when they are of an age where it is legally permissible. This process should also include activities in which students specifically examine the academic courses needed to pursue postsecondary training and education and identify out-of-classroom, school-based learning, and leadership activities that will optimize their development. These efforts will enable youth to become aware of the relevance and utility of in- and out-of-school learning opportunities to helping them achieve their career goals (Eccles & Wigfield, 2002). For low performing and at-risk youth, strategies that increase the relevance and meaningfulness of their education opportunities have been found to improve their academic performance and course interest (Hulleman & Harackiewicz, 2009).

Given that career planning and management skills encompass a wide range of skills (soft skills, career-specific skills, job search skills, financial literacy skills, and youth development and leadership competencies), it is advisable to integrate opportunities to develop these skills into academic courses as well as extra-curricular offerings. For youth with disabilities, career planning and management skills building must also include opportunities to 1) become familiar with the accommodations that are most helpful for them to pursue postsecondary training or education and succeed in the workplace; 2) learn how to connect with support systems that will enable their transition to postsecondary training and education, work opportunities, and access to independent and/or supported living arrangements; and 3) learn how to manage challenges that may result from their particular disability status.

Using the *Guideposts for Success* to Design State-Level Comprehensive Career Development Systems

The *Guideposts for Success* is a national transition framework that states can use as a strategic organizational tool when designing comprehensive youth career development programs in schools and community settings. While the *Guideposts* are focused more broadly on all aspects of transition to adulthood, career development is one of five primary objectives within the framework. An advantageous feature of the *Guideposts* is its focus on all youth, including those with

disabilities and other disconnected youth. States can strengthen the results of their career development systems by using the *Guideposts*' holistic and inclusive view of youth transition needs to inform career development system design and planning. Doing so enables states to be more intentional about building a career development system that takes into consideration the full picture of young people's lives during the transition years, including issues specific to certain youth sub-groups. Using the *Guideposts* also helps states to identify opportunities to build and strengthen cross-system and cross-sector collaboration to improve youth's career development and other outcomes.

The *Guideposts* identify five interrelated domains of experiences all youth need in order to become career ready and to achieve a successful transition to adult life.

- *Guidepost 1—School-Based Preparatory Experiences* outlines the academic-related preparatory experiences that all youth need to access in order to enable optimal performance;
- *Guidepost 2—Career Preparation and Worked-Based Learning Experiences* provides the basis upon which youth form and develop career aspirations and make career related choices;
- *Guidepost 3—Youth Development and Leadership* refers to activities

and experiences that prepare youth to meet the demands of adolescence and adulthood;

- *Guidepost 4—Connecting Activities* refers to programs, services, activities, and supports that youth need to be connected to and/or familiar with to help them gain access to their post-school options; and

- *Guidepost 5—Family Involvement and Supports* outlines activities for families and other caring adults that promote youth's social, emotional, physical, academic, and occupational growth (National Collaborative on Workforce and Disability for Youth [NCWD/Youth], 2005b).

Each *Guidepost* domain outlines activities, experiences, and/or supports that all youth need access to in order to develop transition skills for success in postsecondary training and education, employment, and independent living. Each domain also outlines additional considerations for supporting youth with disabilities. For example, under the school-based preparatory experiences and career preparation *Guideposts*, youth with disabilities will need assistance with identifying the additional support and accommodations they may need to access the general curriculum and participate in work-based learning experiences. The *Guideposts* in the domain of Connecting Activities emphasize that all youth need to be connected to men-

tal and physical health services, transportation, tutoring, and financial planning and management to maximize their post-school success; in addition, youth with disabilities may also need to be connected to appropriate assistive technologies, community orientation and mobility, benefits planning, and personal assistance services. In the absence of an inclusive, holistic framework like the *Guideposts*, states run the risk of creating career development systems that only work well for some youth and thereby fail to significantly increase postsecondary completion and employment rates as intended.

Legislative Initiatives Associated with Youth Career Development

Providing all youth with career development programming—including integrating career development into K-12 educational programming—is not a new concept and has, in fact, been included in several state and federal legislative initiatives. One such state-led initiative is the use of Individualized Learning Plans (ILPs) to engage youth in career development activities. This section contains an overview of ILPs and discusses two federal legislative initiatives, WIOA and the Individuals with Disabilities Education Act (IDEA), as they relate to youth career development.

Individualized Learning Plans (ILPs): Research studies by NCWD/Youth and its partners indicate that *ILPs show promise as an effective strategy for delivering quality career development opportunities* that improve several student outcomes. Currently, 37 states and the District of Columbia require or strongly encourage schools to implement ILPs as a means of facilitating college and career readiness among youth with and without disabilities (Solberg et al., 2014). ILPs are

> *both a document and a process that students use—with support from school counselors, teachers, and parents—to define their career goals and postsecondary plans in order to inform the student's decisions about their courses and activities throughout high school (NCWD/Youth, 2013b).*

Typically, youth begin to use ILPs in middle school to guide their decisions about high school courses and to begin the college and career exploration process.

As a process, quality ILP implementation enhances youth's understanding of the relevance of school courses as well as out-of-school learning opportunities. Youth are provided access to

- self-exploration tools and activities to examine their interests, values, and skills in order to assist them to define their own career goals;
- career exploration tools and activities to examine career opportunities that are aligned with their interests, values, and skills and identify the secondary and postsecondary training and education pathways needed to enter those careers; and
- opportunities to learn what general career readiness skills they need to develop to be self-determined adults who are ready to meet the expectations and demands of prospective employers (career planning and management skills) (Solberg, Phelps, Haakenson, Durham, & Timmons, 2012).

As a document, the ILP serves as a dynamic portfolio which contains

- course-taking and postsecondary plans aligned to career goals and
- the range of college and career readiness skills that the student has developed (NCWD/Youth, 2013b).

Studies by NCWD/Youth and its partners found that students who were more engaged in ILP activities reported stronger goal-setting skills, increased motivation to attend school, and increased academic self-efficacy. These led to better academic achievement, stress and health management, and readiness to engage in career decision-making. Teachers, school counselors, and family members reported that they highly valued the ILP because they believed that it helps students become more focused learners who complete more challenging coursework to reach their self-defined career and life goals.

A high-quality ILP integrates a range of college readiness and career readiness and success processes as follows:

- By encouraging students to become more engaged and motivated in their learning, to explore and determine their career and life goals, and by providing them with the skills needed to identify and navigate postsecondary education, training, and work opportunities, the transition between school and college or work is smoother.
- The personalized and student-centered nature of ILPs offers a promising method for helping all students identify their developmental needs, engage more directly in their education planning, and own and advocate for their academic and career goals.
- Because youth—not adults—take charge of the ILP process, they are more likely to seek out learning experiences that align with their self-defined interests and goals, are better able to determine how to gain access to available resources to help with college planning, and to identify postsecondary pathways that will lead them to success (NCWD/Youth, 2010).

Implementation of a quality ILP process engages youth in an ongoing and comprehensive career development program. Further, an ILP curriculum that identifies grade-level skills could provide benchmarks for assessing whether youth are becoming career ready. Interviews with youth with disabilities found that those classified as "becoming career ready" identified one or more careers they wanted to pursue; described how these careers were aligned with their interests, values, and skills; described skills and academic courses needed to pursue those careers; and described their next steps with regard to learning opportunities they intended to pursue and the skills they needed to continue developing (Solberg, Budge, & Barlow, n.d.).

The ILP and federally mandated transition-focused Individualized Education Program (IEP) document for special education students share many features. State and district officials envision a strong link between the two (Solberg, Wills, Redmond, & Skaff, in press). An analysis of states' legislative language revealed that, of the states with ILP initiatives, 1) only New Mexico allows the IEP to serve in place of the ILP, 2) Kentucky's state legislative code specifically states that IEP transition services must be aligned with the student's individual learning plan, and 3) Rhode Island provides extensive language regarding how ILPs should support transition plans within the IEP. Engaging in quality ILPs appears to facilitate transition-focused IEP development and adds value to the transition process (Solberg, vanBruinswaardt, Chen, Hargrove & Jarukitisakul, in press). Connecticut provided additional implementation language for how ILPs align with IEPs and 504 plans (Connecticut Bureau of Special Education, 2012). Connecticut's guidance specifies that students with disabilities should participate in the ILP process along with other students with and without disabilities and work with adult advisors/mentors just as any student does. It also in-dicates that the information in the students' ILPs about their interests, goals, and career and academic plans should be used for developing students' IEP and other plans.

The Individuals with Disabilities Education Act of 2004 (IDEA): IDEA contains provisions that specifically target college and career readiness for eligible youth with disabilities. These provisions mandate that schools engage in formal planning with eligible youth and provide them with transition services that will prepare them for successful transition to postsecondary education, employment, and independent living. Program participants must have an individualized education plan (IEP) and the IEP must adopt a transition focus no later than the youth's 16th birthday (Individuals with Disabilities Education Act of 2004); however, many states begin by the youth's 14th birthday. This is achieved by including postsecondary goals and transition services in the IEP. Specifically, IEP teams, including families and in collaboration with the youth, are supposed to develop postsecondary goals based on the youth's preferences, strengths, interests, and assessments that are age and developmentally appropriate and identify the transition

services required for the youth to achieve these goals. Unlike the ILP, which is updated more frequently, the IEP is generally updated annually. This process is commonly referred to as transition planning (Solberg, Phelps, et al., 2012; Solberg, Wills, & Osman, 2012). Furthermore, the associated transition services should encompass education and community learning opportunities and should consider providing opportunities to develop life skills.

The Workforce Innovation and Opportunity Act of 2014 (WIOA): WIOA, which supersedes the Workforce Investment Act of 1998 (WIA), is bipartisan, bicameral legislation aimed at improving and streamlining America's workforce development system with the ultimate goal of significantly increasing the nation's number of employed individuals, particularly those hardest hit by the twists and turns of global competition, technological changes, economic isolation, or inadequate education opportunities (Richards, 2014; National Skills Coalition, 2014).

The WIOA introduced a number of notable changes, including

- encouraging alignment through joint planning requirements and common performance metrics of the four core programs, which include Title I Adult, Dislocated Worker, and Youth Workforce Development Activities; Title II Adult Education and

Literacy programs; Title III Wagner-Peyser Employment Service; and Title IV Rehabilitation Act programs (Richards, 2014);

- eliminating the WIA sequence of services requirement that core and intensive services be provided before an individual could access training services and merging the WIA concept of core and intensive services into a new "career services" category which should make comprehensive services more readily available (National Skills Coalition, 2014);

- emphasizing existing best practices like career pathways, sector partnerships, and credential attainment linked to in-demand occupations (National Skills Coalition, 2014);

- establishing a new "progress indicator that counts education and training participants who are making measurable skill gains toward a credential or employment" (National Skills Coalition, 2014); and

- allowing the provision of "work support activities to support retention and advancement of low-wage workers" (National Skills Coalition, 2014).

Among the important changes to the act is a strong focus on serving disconnected youth, including those with disabilities; at

least 75 percent of youth workforce invest-ment funds must be spent on serving out-of-school youth, compared to 30 percent un-der its predecessor the WIA. WIOA has also placed a new priority on work-based learn-ing, requiring that at least 20 percent of local youth formula funds be used for work-based learning experiences (i.e. they must include an academic and occupational learning component), such as summer jobs, pre-ap-prenticeship training, on-the-job training, and internships. Other allowable activities include leadership development, financial literacy education, adult mentoring, entre-preneurial skills training, and services that provide labor market and employment infor-mation about in-demand industry sectors or occupations available in the local area, such as career awareness, career counseling, and career exploration services that help youth prepare for and transition to postsecondary education and training.

WIOA also places an increased focus on in-dividualized career planning and career de-velopment. Within the WIOA context, career planning is defined within 29 U.S.C. §3102(8)(B) as providing job, education, and career counseling, as appropriate during program participation and after job placement. Career services, as defined within 29 U.S.C. §3164(c)(2), include, among others, services required for individuals to either become employed or keep the job they have such as

- career interests and skill assessments;
- the development of an individual employment plan that documents participants' 1) employment goals and the services required to achieve these goals and 2) achievement objectives and information about training services and career pathways to attain these objectives;
- group or individual counseling;
- career planning;
- short-term prevocational services, including development of learning skills, communication skills, and interviewing skills;
- work-based learning;
- financial literacy; and
- follow-up services.

Moreover, the term "career pathway" is de-fined in part under 29 U.S.C. §3102(8) as ca-reer counseling programs and activities that enable individuals to successfully pursue personalized career and education goals.

WIOA also contains a number of important provisions related to people with disabili-ties. For example, Title I contains new state plan and certification requirements intend-ed to ensure the physical and programmatic accessibility of facilities, programs, services, and technology for individuals with disabili-ties in American Job Centers. Moreover, state boards are required to assist governors with the development of strategies to support the use of career pathways for the purpose of

providing individuals, including low-skilled adults, youth, and individuals with barriers to employment (including individuals with disabilities), with workforce investment activities, education, and supportive services to enter or retain employment.

The amendments to the Rehabilitation Act under Title IV of WIOA are intended to establish high expectations for individuals with disabilities with respect to employment and to ensure that youth with disabilities receive services and supports necessary to be successful in competitive, integrated employment. The amendments also contain provisions intended to prevent youth with disabilities under the age of 24 from entering into employment at a subminimum wage under section 14(c) of the Fair Labor Standards Act. This includes having the provision of pre-employment transition services for all students with disabilities who need them, which are to be coordinated with transition services available under the Individuals with Disabilities Education Act. State vocational rehabilitation agencies are to set aside at least 15 percent of their funding to support youth with disabilities in transitioning from secondary school to postsecondary school and employment. The required pre-employment transition activities include: job exploration counseling; work-based learning experiences in as integrated a setting as possible; counseling on opportunities for postsecondary education or comprehensive transition programs at higher education in-

stitutions; workplace readiness training to develop social skills and independent living; and self-advocacy training, which may include peer mentoring. In addition, individuals must have been provided career counseling and information referrals to Federal or State and other resources that offer employment-related services and supports to assist them in attaining competitive, integrated employment.

WIOA increases the focus on personalized career and educational planning and counseling; physical, programmatic, and technological accessibility; work-based learning and comprehensive pre-employment services; and the alignment of employment, training, education, and supportive services to support employment in individualized career pathways. This move has much in common with quality ILP implementation. Because of these commonalities, the information and resources gleaned from the work previously done in the ILP arena should be useful to state and local workforce development and educational entities as they move forward in WIOA implementation. For example, the use of ePortfolios, which was found to be a promising strategy in implementing ILPs, could also serve as an effective mechanism for organizing and maintaining WIOA career and education planning documentation. This and other career development strategies identified as promising in the context of quality ILP implementation are discussed in detail in Part II of this guide.

PART II: SEVEN QUALITY CAREER DEVELOPMENT IMPLEMENTATION STRATEGIES

By gathering information from state and district officials and investigating state career development programs and activities more broadly, a number of promising strategies were identified that may help states interested in implementing quality career development programming (Solberg et al., 2013; Solberg et al., 2014). Part II of the guide discusses the following strategies:

1. engaging in cross-sector collaboration;
2. developing communication and guidance materials;
3. ensuring continual access to career development resources through the use of online information systems in both in- and out-of-school settings;
4. monitoring and accountability;
5. developing staff competencies;
6. connecting with families and family advocacy organizations; and
7. launching demonstration sites.

Common challenges and promising implementation approaches associated with each strategy are presented along with relevant resources. Much of the guidance and resources provided in Part II were gleaned from the NCWD/Youth five-year research study regarding engaging youth in career development through the use of ILPs. Quotes in italics are being used to illustrate key points and, unless otherwise noted, were drawn from comments made by state and district officials (Solberg, Wills, et al., in press; Solberg et al., 2014).

I. Cross-Sector Collaboration

Leveraging the necessary resources to implement comprehensive statewide systems of career development is very challenging without cross-sector and intra-sector collaboration. States could consider beginning with gathering a group of stakeholders who understand the relevance and importance of promoting college and career readiness skills for youth with and without disabilities as a means of promoting successful implementation. Collaboration among systems serving youth with disabilities is believed to be a key strategy to implement effective initiatives that support transition to postsecondary education and work (Wehman, 2013). Various types of collaboration and partnerships can be beneficial to building statewide career development capacity (Greenhalgh, et al., 2004). These include

- cross-sector—between state level agencies;
- cross-division—between different divisions within state departments;
- cross-district—between community level agencies including schools; and
- cross-department—between different departments within school districts and other youth serving organizations.

29 U.S.C. §3102(26)(A) of WIOA defines the terms *industry* or *sector partnership* as a workforce collaborative convened by or acting in partnership with a state or local workforce board that organizes key stakeholders in an industry cluster working group that focuses on the shared goals and human resource needs of the industry. The working group can include representatives of multiple businesses or other employers in the industry cluster, including small and medium-sized employers; one or more representatives of a recognized state labor organization or central labor council, or another labor representative, as appropriate; and one or more representatives of an institution of higher education with, or another provider of, education or training programs that support the industry cluster.

29 U.S.C. §§3102(26)(B) of WIOA also suggests that the partnerships should consider representatives from

- state or local governments;
- state or local economic development agencies;
- state boards or local boards, as appropriate;
- a state workforce agency or other entity providing employment services;
- other state or local agencies;
- business or trade associations;
- economic development organizations;
- nonprofit organizations, community-based organizations, or intermediaries;
- philanthropic organizations; and
- industry associations.

NCWD/Youth's research revealed that implementing career development programs and activities appeared to facilitate cross-sector, cross-division, and cross-department collaborations, and, in turn, these collaborative efforts appeared to facilitate career development program implementation. For example, one official reported the following:

> *Interagency collaboration is really a key to success...regionally, we had more people involved in terms of interagency collaborations: workforce, mental health, etc....There is a lot more collective understanding of the ILP and its value.*

Moreover, state officials commented on the value gained from these collaborations, including how special education staff are able

to offer expertise on secondary transition and how by working together they were able to successfully advocate for the adoption of career development policies. With respect to the impact of engaging in career development through ILPs, one state official stated the following:

> *When we go out into the field, we see with the ILP that there is more communication between and among the different adults in a school about students in a way that isn't there with the IEP.*

Interviews with special education officials revealed the following similar themes:

> *Schools are less islands unto themselves. We have more cross stakeholder conversations. We have one example when once in the past a community college had to close a satellite office because the high school did not understand there were options beyond the four-year liberal arts degree. That would be unheard of today as most schools are preparing kids differently (school choices, etc.) for after high school.*

> *We meet with [the Vocational Rehabilitation] representative twice a month and share professional development activities related to the Transition Outcome Project (on our core team) with them. We also produce factsheets together, match agreements, and invite them to our transition coordinator trainings, which are held three times a year.*

Furthermore, specifically within the special education area, collaborative efforts were believed to increase youth access to work-based learning opportunities and preparation to enter postsecondary institutions, as per the following:

> *In terms of community partnerships, there is the third party cooperative arrangement with VR to assist students with gaining unpaid and paid employment training, as well as a collaborative memorandum that facilitates access to disability documentation needed for accommodations in postsecondary education.*

States that engage a wide range of cross-sector collaborators will be better positioned to 1) increase and improve access to quality career development activities and programs, and 2) support local school and community efforts for establishing quality career development opportunities. Cross-sector collaborations could include representatives from

- departments of education,
- vocational rehabilitation agencies,
- higher education institutions (two- and four-year colleges and universities and technical education providers),
- labor and economic development agencies,
- workforce development agencies and boards,
- health and human services agencies, including those that focus on

the employment of people with disabilities,

- state-level parent advocacy groups,
- community-based youth serving organizations, and
- business and employer interests.

Cross-sector collaborative efforts that include representation from a wide range of stakeholders will expand conversations and activities to address a range of college and career readiness issues. Examples include

- working with higher education representatives to facilitate youth being able to receive access to college courses, access to massive open online courses (MOOCs), and stackable credentials that could be used as credit-recovery;
- engaging business leaders in the task force as a means of designing strategies to increase access to work-based learning opportunities and to inform curriculum development; and
- collaborating with and among state agencies to design andprovide ongoing professional development.

Key tasks for cross-sector collaboration efforts could include

- developing a statewide multi-year implementation plan;
- establishing a clear statement regarding the roles, responsibilities,

and resources to be offered from each stakeholder represented; and

- overseeing implementation fidelity in order to engage in continuous improvement.

Three additional activities to consider as part of an action plan include

- overseeing the purchase of a statewide online career information system and the design of the specifications for districts to use when they purchase a system;
- overseeing the design and implementation of the professional development activities that will be provided to district leadership, school-level educators, and other professionals across sectors; and
- supporting efforts that expand and coordinate career development opportunities that lead to postsecondary credentials.

Challenges Encountered In the Absence of Collaborative Efforts

NCWD/Youth's research suggests that a lack of collaboration can impede implementation of quality career development programming in the following ways:

- It can be difficult to leverage necessary resources for effective implementation of quality statewide career development systems.

- It impedes providing quality transition services for youth with disabilities (US Government Accountability Office, 2012).
- Lack of cross-sector support has led to revoked legislation.
- It can lead to confusion surrounding who should be in charge of implementation and who should be providing guidance.
- It hinders developing a whole-school-district approach to career development programming.

Promising Collaboration-Focused Implementation Practices

Engaging in the following collaboration-focused activities can assist states in implementing quality career development programming:

- Identify cross-sector and cross-departmental opportunities to coordinate career development implementation.
- Develop a multi-agency, multi-year plan identifying potential funding sources, common priorities, and specific departmental priorities.
- Consult with education and workforce development associations and various professional networks to identify evidence-based strategies they are using to promote self-exploration, career exploration, and career planning and management skill-building that could be incorporated into career development resource materials.
- Oversee and support the continuous improvement of the career development program content and processes.
- Establish a workgroup among collaborating agencies that focuses specifically on identifying strategies to ensure accessibility of career development programs for specific populations, such as youth with disabilities (including youth with mental health needs), court-involved youth, youth in or aging out of foster care, homeless youth, and youth who are English language learners.

Table 5. Collaboration Resources

The Career Pathways Toolkit developed for the U.S. Department of Labor includes a section on building cross-agency partnerships and role clarification and on engaging employers.

Through the Competency-Based Pathways State Partnership, Achieve provides targeted policy and implementation support to a group of states committed to advancing competency-based pathways (CBP) to college and career readiness for all students. Achieve's resources include the *State Policy Framework* designed to assist states in building a policy structure that contributes to statewide adoption and implementation of competency-based pathways.

The College and Career Navigation Initiative is an example of a collaborative effort between the Colorado Community College System, the Colorado Department of Labor and Employment, and the Colorado Department of Education's Adult Education Initiatives Office. The initiative targets 1) academically underprepared out-of-school youth and adults, 2) GED completers, 3) high-level ESL students, and 4) workforce center clients. The initiative's focus is to 1) align workforce, adult basic education, and career and technical education resources; and 2) expand the number of clients successfully entering into college and the completion of career-advancing certificates and degrees.

Interagency Collaboration And Transition is a webpage developed by the PACER Center with basic information on the why, when, who, and how of collaboration and transition.

The Connecticut College and Career Readiness Toolkit was prepared by the Educational Policy Improvement Center on behalf of the Connecticut P-20 Council for communities to help their youth become college and career ready. The toolkit includes a section on strategies to build partnerships between secondary, postsecondary, and workforce development.

Pulling Together 5 provides a section on building collaboration. Although it is not career development specific, it does provide generic information on interagency collaboration, including the definition, benefits and uses of collaboration, challenges, factors for success, and links to worksheets.

II. Communication & Guidance Materials

Development of a Career Development Implementation Guide: Creating a statewide career development implementation guide or toolkit enables leaders to inform educators, caseworkers, families, governmental entities, and the broader business community about the value and importance of providing access to career development programs and activities (Solberg, Wills, et al., 2012). Information can also be provided about specific resources and statewide initiatives available to support quality career development program and activity design efforts. Moreover, having a state level guide is extremely useful for clearly articulating the expectation that youth with disabilities are to be fully included in all career development activities, and to provide related information about doing so effectively.

The _Connecticut College and Career Readiness Toolkit_ is a precursor to developing a statewide implementation guide (Educational Policy Improvement Center, 2011). It represents a joint effort between K-12 and higher education to create better collaboration and effective service delivery across systems and to "realign existing activities" to more effectively address the wide-ranging needs of their students.

Illinois' guide, _Achieving Their Goals: Implementing an Individualized Learning Plan Process to Build Student Success_, focuses on the implementation process associated with three career development phases that are titled Exploring, Planning, and Transitioning. Grade-level expectations, programs, and activities are identified with each phase (Fox, 2014). For example, Exploring is expected to begin in the sixth grade and encompasses interest and skills assessments, career exploration, and writing activities that facilitate students' reflections on career aspirations. Planning is expected to begin in the eighth grade and adds activities related to exploring career clusters and designing their course-taking plans for high school. Transitioning is expected to begin in the tenth grade and focuses on helping students access work-based learning opportunities and identify postsecondary training and education programs.

The Minnesota Career & College Readiness Collaborative's _Age-Level Career Development Guide_ is organized by developmental stage. The guide provides activity examples for five age/grade levels: Grades K-5, Grades 6-8, Grades 9-12, college and university, and adults. It provides examples of student outcomes, activities, and learning resources that promote lifelong career development. The Minnesota Department of Education also has a _Planning for Students' Successful Transition to Postsecondary Education and Employment Toolkit_. The toolkit provides guidance and resources related to academic scheduling, exploration, career and employment-relat-

ed skills, community partnerships, college access, all forms of postsecondary training, and experiential learning opportunities.

The Colorado Department of Education has also developed an *Individual Career and Academic Plan Implementation (ICAP) Toolkit* which provides implementation and process guidance. The Colorado toolkit provides a section on the history and context of Individual Career and Academic Plans as well as key messages and talking points for presentations and written communication materials. The guidance on implementing the ICAP clearly communicates that the plan should be connected with the individualized education program (IEP) transition plan for students in special education. The toolkit includes a crosswalk that illustrates how the ICAP and IEP transition plan align.

In addition to providing access to the resources needed to design and implement quality career development programs and activities generally, a guide can also be used to provide an audience-specific explanation of why providing access to quality career development programs and activities leads to key education and labor outcomes. The Illinois Guide, for example, describes the value of engaging in career development activities for three stakeholder groups: policy makers, K-12 educators, and postsecondary educators. For policymakers, the key selling points include the promise of increased retention, the completion of courses, and the demon-

stration of the college and career readiness skills needed to enter and succeed in college. Implementing career development programs also promises to benefit K-12 educators because helping youth become aware of the relevance of their coursework increases their engagement with learning and develops stronger connections with their educators (Solberg, Wills, Redmond, & Skaff, 2014). For postsecondary settings, engaged students who become college and career ready are more likely to develop skills needed to avoid taking remedial courses and are more likely to enter college with clear academic goals (Solberg, Wills, et al., 2014).

States may also consider generating an online interactive matrix that outlines all of the career development programs and activities occurring within the state. An excellent example is the *California State Government Youth Services Matrix* which delineates each agency offering career development services, descriptions of the services provided, funding sources, and target populations receiveing services (State Youth Vision Team, 2010). While the California matrix includes only state agencies, a career development matrix could be expanded to capture the wide range of employers and community-based organizations that are involved in providing career and workforce development services.

The implementation guide should also discuss the importance of providing expanded access to quality work-based learning expe-

riences, including internships, as an integral part of any career development strategy. For example, Wisconsin's Department of Workforce Development has established a thoroughly articulated apprenticeship model to provide work-based learning to juniors and seniors in high school (State of Wisconsin Department of Workforce Development, n.d.a). Formal policy agreements with the two-year technical college system allow students to obtain college credits for these experiences (Wisconsin Technical College System, 2012).

The online version of the *ILP How-to Guide* developed by NCWD/Youth offers links to career development activities that are organized according to three phases of career development: self-exploration skills, career exploration skills, and career planning and management skills (Solberg, Wills, & Osman, 2012). The NCWD/Youth How-to Guide also

offers ideas on how to create grade-based curriculum that aligns to common core writing and mathematics standards.

In designing a guide, consideration should also be given to providing information on how to identify whether programs and activities rely on evidence-based practice. The National Technical Assistance Center on Transition (NTACT), formerly the National Secondary Transition Technical Assistance Center (NSTTAC), offers excellent resources about evidence-based practices. The NTACT evaluates the levels of evidence associated with evidence-based practice through both a rigorous design and peer reviews. Additionally, NTACT organizes life skills programs and activities according to whether they have established a level of evidence of being a "promising" practice, a "research-based" practice that has undergone some level of

rigorous evaluation, or an "evidence-based practice" (National Secondary Transition Technical Assistance Center, 2015).

Communication and Marketing Materials: To support career development implementation efforts, states should also develop communication and marketing materials tailored to specific stakeholders. Audience centric materials are necessary because what is relevant to one group may be less relevant to another. Materials should accurately describe and clearly highlight the importance of career development programming and its anticipated benefits for both youth and providers. Colorado, for example, has created both fact sheets and presentation materials to describe their Individual Career and Academic Plan (ICAP) initiative (Colorado Community College System, 2010). The Wisconsin Department of Public Instruction has a portion of its website dedicated to Academic and Career Planning (ACP). The ACP Resources section offers multimedia resources related to communication and messaging, including audience-specific documents, PowerPoint presentations, and videos. These resources showcase the student-centered nature of engaging youth in career development (academic and career planning) through ILPs. In addition, stakeholders can subscribe to the WI ACP Updates email list.

An excellent example of tailoring materials to a specific stakeholder audience is the Minneapolis Public Schools' Web-based Marketing

pilot program which provides information geared specifically to students and families about STEM engagement and student work-based learning opportunities. Communication materials for the business community should focus on helping employers become aware of the value of offering work-based learning opportunities for youth as well as provide guidance and resources to assist prospective employers. Wisconsin provides employers with a range of information related to youth apprenticeship to support their engagement in offering paid work-based apprenticeship experiences (State of Wisconsin Department of Workforce Development, n.d.a). In order to ensure that the experience focuses on developing employability skills, Wisconsin also provides an Apprenticeship Flow Chart which describes the roles and expectations for both the employer and mentor in supporting student apprentices (State of Wisconsin Department of Workforce Development, n.d.b).

Given that many of the benefits youth derive from career development are accrued through self-exploration and career exploration, it is important that the communication materials that states develop explain that providing youth with these opportunities enables them to define their own career and life goals which in turn enhances and strengthens their engagement. Furthermore, creation of a personalized development plan that links both education and work-based learning experiences should be promoted

as a key strategy to assist youth in reaching those goals.

Communication materials can also be useful in leveraging additional resources to support career development efforts. For example, they can help administrators, caseworkers, and staff from community-based organizations and government agencies that provide transition and/or college readiness services, such as the Department of Vocational Rehabilitation, become aware of how to more fully integrate career development opportunities into the services they offer.

Challenges Experienced Due to Lack of Communication and Marketing Materials

There's a little anxiety about the lack of information.

NCWD/Youth's five-year research study on ILPs revealed the following challenges associated with a lack of communication and marketing materials:

- The two most consistent challenges reported by district and school-level officials struggling to implement career development programming using ILPs involved confusion around compliance with special education transition regulations: 1) integrating required career development activities and special education transition services and 2) aligning

the career development plan and the transition-focused IEP.
- The lack of access to materials to communicate the value of career development to students, families, and educators sometimes made getting buy-in more difficult.

Biggest concerns have to do with alignment of the [ILP] and the requirements of the IEP. Teachers are still learning about the [ILP] and trying to understand how all the pieces fit together.

Promising Communication and Marketing Implementation Practices

Engaging in the following communication and marketing-related activities can assist states in implementing quality career development programming:

- Create a statewide career development implementation guide to promote understanding and buy-in from a wide variety of relevant stakeholders.
- Develop communication and marketing materials to provide local education agencies and other organizations tools to inform students, teachers, business leaders, and community-based organizations about the value and nature of career development programs.
- Develop communication and

marketing materials that offer a clear rationale for career development program and activity implementation to facilitate designing district-level policies that clearly outline how career development implementation supports and connects the various school-level innovation and improvement efforts. Such materials should 1) explain the need for developing college and career ready graduates, 2) explain the role of career readiness in driving college readiness, 3) clearly articulate the purpose and value of career development programming, and 4) contain messages tailored to the specific audience for the material.

- Provide clear, user friendly, and unambiguous messages on career development programs and activities and the relationship between individualized planning tools such as ILPs. Messaging should 1) describe how ILP career development strategies inform the IEP transition process and 2) demonstrate how student results from career development programs and activities documented within ILP ePortfolios can be transferred to the IEP transition plan.
- Develop family-friendly and culturally-relevant career development program and activity information for use by local schools, which incorporate parent advocacy group input.
- Create a logic model that shows how grade-specific career development programs and activities result in students becoming career ready and perceiving their academic courses and the pursuit of postsecondary training and education to be more relevant.
- Establish an online repository of classroom activities that use web-based career information systems and generate documentation of self-exploration, career exploration, and career planning and management skills that can be stored in the ePortfolio.

Table 6. Guidance & Communication Resources

Implementation Guides

The Rhode Island Framework for Comprehensive K-12 School Counseling Programs is an implementation guide for school counselors developed by the Rhode Island Department of Elementary and Secondary Education in collaboration with the Rhode Island School Counselor Association, Providence College, and the Rhode Island School-to-Career Program.

The Vermont PLP Process is a webpage offered by the Vermont Agency of Education containing a series of resources to help schools consider ways in which they can plan for and implement career development through ILPs.

Career Development/ILP Guidance Materials

The Connecticut College and Career Readiness Toolkit was prepared by the Educational Policy Improvement Center on behalf of the Connecticut P-20 Council for communities to help their youth become college and career ready. The toolkit provides information, data, and strategies to raise awareness about key issues influencing college and career readiness; encourage data-driven decision making; build partnerships between secondary, postsecondary, and workforce professionals; and support successful, comprehensive action planning to make measurable improvements in students' college and career success.

The Career & Technical Education section of the Colorado Community College System's website provides resources related to Career Guidance, Best Practices in career development programming, the ICAP, a Toolbox for Educators, links to other career development resources, and other resources.

Achieving Their Goals: Implementing an Individualized Learning Plan Process to Build Student Success was published by Pathways Resource Center and the Office of Community College Research and Leadership Department of Education Policy, Organization and Leadership, College of Education University of Illinois at Urbana-Champaign. The guide is intended for use by school districts to provide them with the knowledge necessary to successfully implement a high quality ILP process in schools and across districts. The guide provides the following information: 1) a framework for a high quality ILP process; 2) a model for implementing/enhancing ILP processes; and 3) tools, templates, and additional resources to support implementation/enhancement of ILPs at the school or district level.

Individual Learning Plans Program Guide by the Providence Public High Schools provides information on ILP curriculum, ILP data management, ILP support infrastructure, strategic and annual implementation plans, professional development, and family and community engagement.

Individual Learning Plan (ILP) Framework from the Rhode Island Department of Education is a guidance document shared on the department's website which described the ILP's purpose, roles and responsibilities, protocol, and components.

Planning For Students' Successful Transition To Postsecondary Education And Employment: Personal Learning Plans (120b.125) Toolkit provides resources and guidance in the following areas: academic scheduling, career exploration, 21st century skills, community partnerships, college access, all forms of postsecondary training, experiential learning opportunities, and implementation strategies and partnerships.

Guidelines for Academic and Career Plan adopted by the Virginia Board of Education provide brief guidance on the purpose, required components, format, and expected timeline for adopting the plans. The Virginia Department of Education's technical assistance document provides more detailed guidance to support districts and schools with implementation.

Guidance Materials Concerning ILP & IEP Alignment

EDP Fundamentals: Guidelines for the Use of Educational Development Plans is provided by the Michigan Department of Education. It provides information on the fundamentals of ILPs including how to align the IEP and the ILP.

The Kentucky Department of Education's resources for aligning the ILP with an IEP include the following: ILP Transition Guide for the ARC, Guided Tour of the ILP, Guided Tour of the ILP for Students Earning Alternative High School Diplomas, Correlation of Career Cruising, Transition Skills, and NASET Standards & Quality Indicators, and Kentucky Transition Service Inventory.

How the Individual Learning Plan Supports College/Career-Readiness in Kentucky contains information on aligning the IEP and the ILP.

Colorado's ICAP Implementation Toolkit includes a crosswalk of the ICAP and the IEP transition plan.

Sample Communication Materials

ILP Resources is a webpage offered by the Kentucky Department of Education that contains numerous resources including presentations and communication materials for families.

Wisconsin Department of Public Instruction provides multiple resources on its Academic & Career Planning website section.

III. Online Career Information Systems

Online career information systems (CIS) play a vital role in statewide delivery of career development programs and activities. In the NCWD/Youth five-year research project on ILPs, state and district officials as well as families, educators, and students consistently reported that the use of online CIS was essential to supporting quality career development efforts (Budge et al., 2010; Solberg, Wills, & Larson, 2013). Nonetheless, state and district officials both identified functionality and accessibility of online CIS as challenges, as was ensuring youth-serving organizations and adjudicated youth also have access to web-based career development activities, assessments, and information.

Career information system vendors are committed to designing systems that enable youth to engage in self-exploration and career exploration activities; however, systems will vary with respect to the range of self-exploration tools and the extent to which career planning and management activities are provided. In addition, most systems download assessment, labor market, and career information that originates from the U.S. Department of Labor's O*Net system. A number of commercial vendors now offer subscriptions to states, districts, and schools (e.g., Bridges, Career Cruising, CareerLocker, ConnectEdu, Kuder, Naviance, Oregon Career Information Systems).

Previously referred to as computer-assisted career guidance systems [CACGs] (Niles & Bowlsbey, 2005), the value of using online CIS is the ability to offer youth 1) unlimited access to validated self-exploration tools that assess interests, skills, and values; 2) opportunities for career exploration by accessing detailed information about various careers and education pathways that lead to those careers; and 3) access to activities and work-based learning opportunities that build the career planning and management skills needed to enter and succeed in post-secondary education and employment. Another advantage of using CIS is the ability to develop and maintain ePortfolios. An ePortfolio is an electronic portfolio in which students' educational plans and self- and career assessment results, career preferences, and career exploration activities are documented and organized. Access to ePortfolios is also typically provided to educators and families.

CIS can provide students with access to a range of tools and activities for individualized self- and career exploration that begin quite broadly for younger students and become increasingly more tailored as students enter high school. They enable students to match self-assessment results regarding aptitude, interest, and values with matching career clusters, which consist of thousands of associated professions. Students can then engage in more in-depth exploration of a career to identify a range of occupations that vary with respect to their specialized

skills and educational requirements and the pathways, both coursework and work-based learning, required to eventually transition into their career(s) of choice. CIS also provide access to labor market information, postsecondary education opportunities, financial aid information, and job search tools (e.g., locating job openings, writing cover letters and resumes). Youth and adults can use a CIS to build career planning and management skills through online activities designed to teach employability skills (e.g. soft skills), financial literacy, career and education goal setting and decision making, self-advocacy, and other relevant skills. CIS can also make it easier to connect students with the business community and identify work-based learning opportunities. Many systems include features that allow businesses to populate information that enables youth to find work-based learning opportunities that are aligned to their career interests.

In addition to benefitting youth, CIS also provide an array of resources that will enable educators, case-workers, and youth service professionals to better target and design their career development activities to achieve better transition outcomes for youth. CIS enable the design of grade- and age-specific career development programs and activities for a diverse range of youth and adults. As such, it is possible to coordinate the career development programs across sectors and organizations because each new experience is added to the individual's ePortfolio.

By reviewing the individual's ePortfolio, it is possible to use the individual's goals and assessment information to more effectively personalize and tailor his or her transition and/or employment plans.

By organizing thousands of careers into 16 Career Clusters (NASDCTE, 2014), online CIS also allow educators and families to encourage more in-depth exploration of a career to identify a range of occupations that vary with respect to the amount of specialized skills and education requirements. For example, in professional sports, athletes represent only one of a wide range of occupations that it takes to successfully manage a team. By encouraging exploration of students' stated interests in becoming professional athletes to include wider examinations of all the occupations associated with sporting teams, youth are building on their career exploration skills by identifying new occupational opportunities. From this perspective, initial career goals serve as a launching point for further career exploration and can be encouraged by asking youth to always maintain three career goals. By learning more about the nature of the career, the education pathways that can lead to that career, the labor market opportunities for employment in that career, and the specialized skills required for that career, youth will learn how to evaluate whether they are prepared or preparing for that career and, if not, what other choices and options are available to them.

Wherever the student goes, the student can log into their ePortfolio.

The portability associated with an ePortfolio can be a valuable asset to students and could also be especially useful to federally sponsored agencies in the state charged with supporting youth with disabilities, adjudicated youth, and youth in the foster care system. Portability is important because some geographic areas have a student mobility rate as high as 40 percent. Having an ePortfolio that is portable enables students to maintain access to their information post-graduation or after leaving or changing schools. This can be particularly useful for youth with disabilities, foster youth, and other disconnected youth populations as they can store information that they will need post-high school (e.g. information required to secure accommodations, and any other documents the youth feels will support them in their transition). This portability has the potential to increase continuity of service delivery across schools and between youth and adult workforce development service agencies and enable information transfer to federal and state agencies charged with supporting youth (e.g. ISP, IEP) because youth would be able to share their previous career development activities with these entities. This could increase the likelihood that continued personalized and youth-centered support services can be designed to support them.

States may also consider whether their current or future CIS offers secure methods for students to connect with other service agencies and work-based learning providers, including employers. For example, secure data-sharing features could enable vocational rehabilitation and other agencies to identify transition-age youth with disabilities. This would ensure that these agencies are aware of youth prior to their leaving high school or at key times as they transition through postsecondary training and education.

It would also be beneficial if, at a minimum, the CIS were linked to the school and Department of Education information systems. Linking school and state education information systems with their CIS would facilitate evaluating the impact of career development programming on high school performance, postsecondary outcomes, and the targeted range of college and career readiness indicators for students in general and for student populations most in need of enhanced college and career readiness programming (Sol-

berg et al., 2014; Solberg et al., 2013). Linking the CIS to the state's special education data management system could facilitate sharing of transition information, such as assessment results and postsecondary goals, and monitoring consistency between students' ILPs and their IEPs. Linking to workforce development related information systems should also be considered because doing so would facilitate the individual's career planning and management over their life span and allow state education and workforce entities to better understand their collective impact over time.

Online CIS that are accessible can provide significant value to educators responsible for youth with disabilities. Educators reported that ePortfolios support IEP development by enabling the transfer of information about the youth's career goals, postsecondary plans, and other career planning and management goals into the students' transition-focused IEP (Solberg, Wills, et al., in press). This also ensures that discussion about transition begins with the stated intentions and interests of the youth as per IDEA mandates. CIS are "user-friendly… and a perfect vehicle for students to achieve and receive transition assessments so that when they exit high school they know what areas to pursue in terms of a career" (Solberg, Wills, et al., in press).

Challenges to CIS Access

A number of challenges to statewide access and use of CIS were identified through the NCWD/Youth study:

- Educators lack the knowledge and skills required to use online CIS.
- Online career information resources are not universally accessible (e.g., for students from various vulnerable populations, including students with significant disabilities and non-English speaking populations).

Selecting an Online Career Information System for Your State, District, or Organization

When reviewing online systems, convene three to four vendors to each provide a half-day simulation to diverse teams of educators, parents, youth, and other key stakeholders. Collect and use feedback from the teams to shape the required and preferred system specifications and features. For states offering a single system to all schools, the specifications and features can be used to create a request for proposals. Alternatively, in states that prefer districts to enter into separate vendor contracts, the feedback on specifications and features can be used to design state standards that districts should use when selecting a vendor. It is also important to include members from the state information technology sector due to the importance of ensuring the system is robust enough at the performance level to handle the number of concurrent users expected to access the system on a given day.

- Some state and district officials raised the issue of the degree to which assessments and career development related activities were non-accessible for youth with significant disabilities.
- Many states do not purchase a vendor license to provide a single online career information system for all of their students, which hinders ePortfolio portability (e.g., when districts purchase their own subscription with a given vendor, the ePortfolio may not be accessible to students if they move out of district or after unless the school or college they attend also subscribes to the same vendor or the student purchases an individual subscription).
- Some districts or schools are using one or more of the existing vendors but not to the system's full potential.
- Each CIS is proprietary, and therefore a state, organization, or personal subscription will be needed to gain access to the ePortfolio. An alternative is to transfer key information that is housed in a proprietary portfolio into a free access ePortfolio system (e.g., LinkedIn).

CIS Implementation Strategies

Engaging in the following activities can assist states in effectively leveraging CIS to support career development programming:

- Consider supporting a statewide web-based CIS that offers an ePortfolio for residents of all ages to provide lifelong access to career development resources (e.g., self-exploration, career exploration, job search, resumes, career goals, etc.) (Solberg, Wills, & Larson, 2013). This will require changes in funding priorities and budgeting for system maintenance.
- Ensure that CIS design specifications conform to the World Wide Web Consortium's Web Content Accessibility Guidelines and those established by Section 508 of the Rehabilitation Act to enable all youth to access career development tools and activities. In addition, ensure that the CIS specifications also conform to the three principles of universal design for learning: 1) multiple means of representation; 2) multiple means of action and expression; and 3) multiple means of engagement.
- Involve multiple state agencies in developing and implementing design specifications for web-based career information systems to ensure that a state contract meets the interests of different sectors and departments. If individual districts must pay for the system, provide them with a set of functional requirements they can use in bidding contracts (Solberg, Wills, & Larson, 2013).

- Establish quality expectations for these systems by ensuring that web-based vendors: 1) provide a range of valid and accessible interests, skills, and values assessments; 2) focus on helping students develop self-exploration, career exploration, and career planning and management skills rather than on making career choices; 3) make student ePortfolios accessible to students when they change schools or after they graduate; and 4) make timely updates to career information that reflect changes in the labor market (Solberg, Wills, & Larson, 2013).
- Consider integrating a web-based career planning process with an in-person facilitated discovery process for students with significant disabilities.

Table 7. CIS Resources

Standards
The W3C Web Content Accessibility Guidelines (WCAG) are international standards for making web content more accessible to people with disabilities.
Section 508 Standards Guide contains the standards for accessible technology.
The National Center on Universal Design for Learning (UDL) provides guidelines and a framework to help educators and counselors reduce barriers and optimize levels of support for all learners.
ACRP Career Information and Services Comparison Tool offers guidelines for helping states identify features that should be included in online career information systems.
General Information
State Career Information Delivery Systems (CIDS) by Encouragement Services, Inc. describes what career information systems are, their components, how they function, and what value they add to the career development process.
Commercial Vendors
Bridges | Career Cruising | CareerLocker | Discover – ACT, Inc. | *into*Careers (consortium of 20 states) | Kuder | My Dream Explorer | Naviance | TypeFocus Careers | Wisconsin Careers

IV. Monitoring & Accountability

In the current era of accountability and using evidence-based practices, it is critical to establish an accountability system that enables the state to verify whether and how engaging in quality career development activities provides a return on investment (ROI). ROI measures include the degree to which quality career development programs and activities contribute to improving college and career readiness, employability, and earnings.

More than being able to evaluate impact, accountability systems are needed to track implementation fidelity. ROI measures are only relevant if they are indeed measuring innovative programming that was implemented as intended (Greenhalgh et al., 2004). For career development programs and activities, one indicator of implementation fidelity is whether all students are actually included in career development efforts. Monitoring implementation fidelity will also provide beneficial information regarding which schools, and therefore which students, are actually receiving career development programming and have ePortfolios. This is particularly important for students with disabilities, as too often, nationally popular school reform efforts do not include these students (Morningstar, Bassett, Kochhar-Bryant, Cashman, & Wehmeyer, 2012). Finally, ROI measures also contribute to successful implementation and sustained use of new initiatives.

Implementation is only as good as the monitoring.

Online CIS can help facilitate the data gathering needed for this type of accountability system and allow for tracking the fidelity with which education and community agencies are implementing their career development programs and activities. They can play a tremendous role in designing an accountability system to evaluate the impact on student outcomes by

- establishing a dashboard for school and districts to identify which students have completed district-prescribed career development activities;
- providing school and district personnel with access to personalized and aggregate reports that compare student engagement in career development activities and performance with concurrent and future academic outcomes;
- providing reports that disaggregate data in ways to ensure that students from diverse racial/ethnic groups, those with lower income levels, students with disabilities, English-language learners, and other at-risk groups are being provided equal opportunities and access; and

- developing a quality assurance process that includes encouraging students/youth to update their accounts regularly, ensuring that they maintain only one account, and gathering user feedback to ensure the CIS continues to be useful and relevant (Solberg, Wills, & Larson, 2013).

Furthermore, by linking this information with school information systems, it is possible to evaluate whether youth who receive quality career development programming demonstrate positive career readiness skills. In particular, this evaluation could demonstrate improvements in a range of college and career readiness indicators. In addition to tracking which career development activities were conducted, states should consider ways to link the ePortfolio data to their longitudinal data system so that future ROI evaluations can directly assess employment outcomes and earnings. Monitoring and accountability also add more value to using online CIS.

Challenges Encountered Related to Monitoring and Accountability

NCWD/Youth's research study on ILPs revealed the following monitoring and accountability-related challenges:

- In most states, data and accountability systems have not been established to evaluate the impact of career development on educational,

postsecondary matriculation, and employment outcomes, making it difficult to assess whether career development programs are contributing to stronger academic and post-school outcomes.
- State and district officials provided strong anecdotal evidence that engaging youth in career development was having a range of positive effects, but they noted that without an accountability system, they were unable to provide empirical evidence and hard data to support their personal experiences, and were therefore generally skeptical and reserved in making claims about the effectiveness of new initiatives.
- Similar concerns were raised with regard to monitoring implementation fidelity.

There are so many implementation sites, so some buildings have gone full steam ahead with career-building activities in required or elective courses, and some are trying to figure out how to implement the [ILP], so they probably haven't gotten to that point. We're all over the place...

Monitoring and Accountability Implementation Strategies

Engaging in the following activities can assist states in efforts to effectively evaluate and monitor career development programming:

- Develop a logic model for career development implementation that identifies activities and measurable outcomes that will serve as indicators of whether students are becoming college and career ready.
- Establish an accountability system that measures whether and how engaging in career development activities support college and career readiness goals and measures educational, postsecondary matriculation, and employment outcomes.
- Transfer ePortfolio data into states' longitudinal data systems using web-based career information systems in order to generate return on investment impact analyses data on postsecondary matriculation/success and employment/wage earnings.
- Identify indicators for the expected immediate, short, and long-term outcomes of career development programs and activities. The National Career Development Guidelines (NCDG) Framework (U.S. Department of Education, 2004) is one useful resource for determining indicators of the skills that students should

be developing in each of the three career development skill domains. See Table 8 for example indicators adapted from the NCDG Framework.

- Establish a monitoring process to track the fidelity of career development implementation as well as provide disaggregated data in order to assess the impact on the sub-groups of students using the categories in the Elementary and Secondary Education Act (ESEA). Include in the monitoring process the methods to assess the potential influence of career development systems on federally-mandated performance indicators of major programs such as ESEA, including the Race to the Top system change demonstrations, IDEA, the Career and Technical Education Act (CTE), and WIOA.
- Develop the accountability system in a way that enables one to determine whether individuals from different backgrounds (i.e. race/ethnicity, income level, English Language proficiency, disability status) are receiving equal access to services and becoming career ready at the same pace as their peers.
- Develop methods to allow vendors to link to student information systems for select purposes. This allows vendors to more effectively manage student accounts, create dashboards

Table 8. Example Career Development Skill Indicators

Outcomes		Example Career Development Skill Indicators Based upon the National Career Development Guidelines Framework *(U.S. Department of Education, 2004)*
Self-Exploration Skills	Immediate	Demonstrates ability to identify abilities, strengths, skills, and talents (NCDG, PS1.K2) by integrating results from an interest, values, and skills inventory, respectively.
Self-Exploration Skills	Short-term	Demonstrates ability to identify positive social skills (PS2.K3) that will support employability.
Self-Exploration Skills	Long-term	Demonstrates ability to identify skills and personal traits needed to manage one's career (e.g., resiliency, self-efficacy, ability to identify trends and changes, and flexibility). (NCDG CM1.K4)
Career Exploration Skills	Immediate	Demonstrates ability to identify occupations that one might consider without regard to own gender, race, culture, or ability. (NCDG CM3.K5)
Career Exploration Skills	Short-term	Demonstrates ability to use different types of career information resources (i.e., occupational, educational, economic, and employment) to support career planning. (NCDG CM3.A2)
Career Exploration Skills	Long-term	Demonstrates ability to develop a career plan to meet own career goals. (NCDG CM1.A2)
Career Planning and Management Skills	Immediate	Demonstrates ability to identify short-term and long-term career goals (e.g., education, employment, and lifestyle goals).(NCDG CM1.K3)
Career Planning and Management Skills	Short-term	Demonstrates ability to identify types of ongoing learning experiences available (e.g., two- and four-year colleges, technical schools, apprenticeships, the military online courses, and on-the-job training. (NCDG ED2.K5)
Career Planning and Management Skills	Long-term	Demonstrates the following job-seeking skills: the ability to write a resume and cover letter, complete a job application, interview for a job, and find and pursue employment leads. (NCDG CM4.A2)

that track engagement in career development activities among individual students, and generate reports showing how this engagement is related to various student outcomes.

- Encourage CIS vendors to provide data dashboards that enable organizations to identify what career development activities will be completed and provide the ability to track the extent to which youth have completed these activities in the expected timeframe. It is possible for different levels of data to be provided to different stakeholders (e.g. members of the cross-sector task force can look at how well each sector is performing while chief state school officers can track their middle and high school performance).
- Ensure that, if not using a single state CIS, all systems in use in the state can download ePortfolio data to a single source to create cost-efficient accountability systems.

Table 9. Monitoring and Accountability Resources

Kentucky's Unbridled Learning Accountability Model describes the state's school performance measures and processes for monitoring and supporting performance. Kentucky's Career Information Usage Report provides data on how often students and parents access the career information system. Program Review Resources provide information and guidance for implementing program reviews including resources for program review training.

Georgia's Statewide Longitudinal Data System (SLDS) is designed to help districts, schools, and teachers make informed, data-driven decisions to improve student learning. It provides districts, schools, and teachers with access to historical data, including assessments, attendance, enrollment, courses, and grades.

Georgia also has an initiative to develop and build a data system to be known as "GA Awards", which will support cross-agency analyses and provide seamless data access to all users throughout the pre-K, K-12, and college experience for students, parents, teachers, administrators, and researchers.

South Dakota Comprehensive School Counseling Program Model includes a section on assessment and a section on accountability. *Assessment* includes School Counselor Competencies Assessment, School Counseling Program Assessment, Use of Time Assessment, SD School-Wide Assessments. *Accountability* includes Data Analysis, School Data Profile Analysis, Use of Time Analysis Assessment, Program Results Sharing Results, Evaluation and Improvement, School Counselor Competencies Assessment.

Rhode Island uses a system of school classifications as part of its statewide school accountability system.

Partnership for Assessment of Readiness for College and Careers (PARCC) is a group of 26 states working to develop a set of assessments to measure college and career readiness.

The Learn More Indiana Online Student Survey provides information about the degree to which Indiana students in grades 3-12 make sound choices in areas that help students succeed in a rigorous curriculum and continue their education after high school.

V. Staff Competency Development

Most educators and caseworkers—even those representing school counseling, special education, and career and technical education—lack adequate pre-service training in the design and implementation of career development programs and activities. Consequently, states should give serious consideration to providing professional development on career development. Kentucky, for example, works closely with its career information system vendor to provide statewide access to both in-person and online professional development including workshops, webinars, and resource dissemination (Kentucky Department of Education, 2012).

In interviews conducted by NCWD/Youth, state and local staff stated the following:

> *In order to ensure youth are exposed to quality career development opportunities there is a need to have staff within the schools who are knowledgeable of the evidence-based research related to providing these opportunities.*

Professional development regarding the nature and value of career development can also serve as an important means for gaining buy-in among educators. It was clear from focus groups conducted with families and students that the quality of their experience was dependent on whether the educator believed that career development was a valuable use of time.

Thus, to ensure successful implementation of quality career development systems, states should consider professional development offerings that 1) focus on developing staff competencies in the areas of self-exploration, career exploration, and career planning and management skills; 2)

expose staff to evidence-based career development practices and research; and 3) clearly explain the benefits of student engagement in career development opportunities.

States may want to consider providing more extensive professional development to individuals within the districts, schools, youth-serving organizations, and agencies that will be responsible for designing and overseeing the implementation of the career development programs and activities. Within secondary education, this would involve the school district team of teachers and representatives from school counseling, special education, and career and technical education. It could also include the district-level family engagement officer who will need to work with parents, families, and guardians to assist with and reinforce the career development activities. The professional development for this team might involve working together to design grade-level career development performance indicators in order to generate a curriculum that has a scope and sequence that is aligned to both career development and common core standards. Professional development for postsecondary education

professionals could engage a team of leaders in student services and interested faculty.

While originally designed for schools and districts, NCWD/Youth's *ILP How-to Guide* offers a model for designing these types of professional development efforts. In addition to providing a common set of definitions for the three career development skill domains, the Guide offers links to a range of activities for youth that can be completed in different settings, and provides a model for designing a comprehensive plan for engaging in career development. Listed under their ICAP resources, Colorado has developed an extensive range of resources and examples of curriculum and career development programs and activities for K-12 educators (Colorado Community College System, 2010).

Leaders within education and youth-serving organizations and agencies can also benefit from learning how career development programs and activities can support their efforts. Without leadership buy-in, it may be difficult for educators and caseworkers to receive the time needed for planning and implementing career development. One challenge often

cited by education leaders is that the emphasis on developing career readiness is just one of many initiatives, often unfunded, that they are being demanded to address. Alternatively, state and local officials that have successfully implemented career development programs and activities report that education and career planning helps educators and youth understand the relevance of these varied initiatives (testing, literacy, numeracy, STEM) in helping them achieve both within school and in postsecondary settings. Orienting education and agency leaders to the value of career development programs and activities should address these perceived challenges directly.

Kentucky, for example, offers hands-on professional development activities that are specifically tailored to district and school leaders to enable participants to experience how career development programs and activities can facilitate and enhance their state's college and career readiness initiative. They also address how career development activities can ensure that students' course plans are commensurate with postsecondary program entry requirements and how the activities will support stronger connections between teachers and students (Kentucky Department of Education, 2012). Colorado has posted a range of audience-specific communication materials on the value of career development tailored to the needs of different constituents, including leaders (Colorado Community College System, 2010).

There is also a need for professional development on career development for those who work with youth in non-school settings, including youth workforce development service providers. While these professionals may be well versed in strategies to develop youth's employability skills and job development practices, they may benefit from training in comprehensive career development strategies and how they complement employment services. Training in the concept of career development as three skill domains—self-exploration, career exploration, and career planning and management—can help these professionals examine whether and how their organizations are currently engaging youth in career development.

Challenges to Developing Staff Competencies

NCWD/Youth's research study on ILPs revealed the following challenges associated with professional development:

- While state officials reported that ILP professional development opportunities were available, all recognized the need for more resources.
- There are not enough staff with the skills to design and implement career development programs.
- There are not enough staff who are knowledgeable of evidence-based career development research and practices.

- There is a lack of buy-in from school and organization leadership, as well as from educators responsible for providing career development programming.
- There is a lack of knowledge of and appreciation for how self-exploration and career exploration activities can inform the transition process for students with disabilities.
- Considerable confusion exists around how to align transition requirements under IDEA with state legislated career development requirements.
- The ratio of students to school staff is increasing.

Implementation Strategies for Developing Staff Competencies

Engaging in the following activities can assist states in efforts to build staff capacity to provide career development programming through professional development:

- Provide audience-specific professional development opportunities (e.g., for school implementation teams, external stakeholders and community agencies, and state-level officials).
- Develop in-service training modules for use by districts, schools, and professional associations (e.g. general education, career and technical education, special education teachers, counselors)

focused on 1) using career development activities in advisory periods; 2) strategies to be a successful advisor/advocate across multiple years; 3) engaging family members; and 4) strategies to incorporate career development materials into course work.
- Collaborate with workforce development agencies and their professional organizations, state employer associations, and postsecondary workforce development specialists to 1) identify competencies needed by some staff members in each school to support career development work; and 2) develop training modules and professional development opportunities for such staff.
- Ensure districts and schools can access career development materials through cost effective dissemination strategies, such as webinars, teleconferences, and online resource directories.
- Develop grade-by-grade benchmarks to document competencies students should acquire, including grade-level learning goals and objectives with a built-in accountability system that can track and demonstrate the impact of career development programs and activities on a range of important academic and post-high school indicators.

- Create user-friendly career development how-to guides, including guides on how to make career development inclusive and accessible for vulnerable populations (e.g. students with significant disabilities, non-readers, non-English speaking users, out-of-school youth).

Table 10. Professional Development Resources

South Carolina provides Resources for Counselors & Guidance Professionals to support their career development instruction and guidance efforts, including Business Connections Handbook, Career Cluster Tools for Counselors, Career Fair Tools, MicroCareerBursts, Personal Pathways to Success Tools for Counselors, Work-Based Learning, Additional Resources for Career Exploration and Preparation

Kentucky Training Sessions & Webinar Schedule is a joint venture with the state's CIS vendor.

Georgia's Audience-Specific Data Systems Training Resources include:

Administrators

SLDS District-School Dashboard Train-the-Trainer Guide | SLDS District School Dashboard User Guide | Best Practices for Administrators

Teachers

SLDS Teacher Dashboard Train-the-Trainer Guide | SLDS Teacher Dashboard User Guide | Best Practices for Teachers

Data/Student Information System (SIS) Coordinators

Best Practices for Data/SIS Coordinators | Creating Additional Roles in SLDS | Profile Manager

The College and Career Navigation Initiative, funded by the Colorado Department of Labor and Employment, is coordinated across two sectors, community college and labor, and the strategies include offering direct career development and professional development services to adult education providers in community colleges and staff in one-stop job centers.

VI. Connecting with Families & Family Advocacy Organizations

A recurring concern highlighted by state and local officials as well as educators and families was that despite career development programming providing an important opportunity for school staff to engage families, schools can and should be doing more to increase family participation and involvement. Family engagement in career development has been identified as a key driver for optimizing youth development (NCWD/Youth, 2014b). Furthermore, engaging families in education, transition, and career development is also encouraged through legislation such as the No Child Left Behind Act (NCLB), IDEA, and the Rehabilitation Act. In addition, involving families in the design and implementation of youth workforce development programs is specifically mentioned in WIOA. Promoting meaningful family engagement and enthusiasm about the career development process should therefore be a very important consideration in the design and implementation of career development programming and activities.

It is critical that all youth have the support of caring adults with high aspirations to assist them in engaging in career exploration and in accessing learning opportunities that will help them to develop the skills needed to support their successful transition from school to postsecondary education and work (NCWD/Youth, 2005b; NCWD/Youth,

2012). This is especially true for youth with disabilities and other disconnected youth who often face additional challenges in the transition process.

Improving family engagement in the career development process raises their awareness of their children's goals and how these goals are formed. This in turn may enable families to be more effective in supporting their children's career and life goals, in identifying career planning and management skills their children need to successfully prepare for the world of work, and in evaluating post-high school training and education options. Families of disadvantaged youth may be in need of further career development themselves. Learning about the career development process may also enhance their ability to access employment, education, and higher earnings.

Research that highlights the benefits of family-professional partnerships in education and transition is also plentiful. In fact, focus group participants from the NCWD/Youth research indicated that families

- found the career development experience to be valuable,
- reported feeling a stronger positive regard for the school, and
- reported developing stronger relationships with their children as a result of the career development process (Budge et al., 2010).

"And I mean there's just parents that say, …'I'm proud of my son now', or 'I didn't know that he was capable of this', or, 'Gosh, that's the first time that my daughter told me that she wanted to do this.'"

Families and staff from family advocacy organizations can be important resources for implementing career development programs and activities. These organizations may be uniquely positioned to assist with parent engagement in the career development process (Solberg, Wills, & Larson, 2013). Reasons for doing so include the following

- In a time of dwindling resources, increasing families' knowledge about their children's strengths, interests, and needs can help professionals, such as teachers, social workers, and mentors, to streamline their assessment process.
- Families can help professionals by 1) accessing personal networks for job opportunities, 2) building work readiness skills in the home, and/or 3) assisting their child in exploring employment supports (e.g. Vocational Rehabilitation, community providers of supported employment and independent living, and the local American Jobs Center).

- Families can play a significant role in monitoring and evaluation by providing supplemental information for program impact assessments (Twenty-Sixth Institute on Rehabilitation Issues, 2000).

To promote the engagement of families of youth with disabilities, states should consider connecting with family advocacy organizations, such as the Council for Exceptional Children (CEC), TASH, the Collaboration to Promote Self-Determination (CPSD), the National Parent Teacher Association, the Association to Benefit Children, and others. The state-based Parent Training and Information Centers (PTI) for parents of children with disabilities, such as the PACER Center and SPAN, funded through the Office of Special Education Programs at the U.S. Department of Education, are also useful. Contact information for state PTIs can be found at the Center for Parent Information and Resources. The engagement of families and advocacy organizations is facilitated when professional staff are trained to encourage their participation, provided with tools to ensure effective communication, and are made aware of the fundamentals of family-centered involvement such that the family participation is a central tenet of the program rather than accepted at the convenience of the program (Twenty-Sixth Institute on Rehabilitation Issues, 2000). There will likely be a need for training to increase families' and family advocacy organizations' awareness of

the career development process to facilitate their partnership in supporting youth in the college and career readiness process and in assisting youth in choosing and building a bright future. This is especially important because families and staff from family advocacy organizations may be unfamiliar with the range of possible careers or may feel concern about ensuring that youth select careers that are "realistic" for them considering past academic performance or disability status. Increasing awareness can be achieved through a variety of mechanisms, including

- professional development;
- public forums;
- orientation programs;
- online resources including printed materials in accessible format or video productions, also in accessible format (NCWD/Youth, 2012); and
- resources that can help families support youth's postsecondary goals, such as 1) online career information systems to access youth's e-portfolio, 2) syllabus outlining grade-level ILP student activities, 3) college information, and 4) financial resources.

Key areas to consider addressing for increasing awareness are

- career development concepts, including the concept of youth identifying a career cluster or career pathway they want to pursue rather than a single occupation within a cluster or pathway (National Association of State Directors of Career Technical Education, 2014);
- the general necessity for youth to obtain a high school diploma, requiring additional coursework, to address labor market demand for higher skills and ultimately obtain a self-sustaining career;
- the impact of family support in helping youth make important informed decisions about their future (i.e., can contribute a great deal to their children's post-high school success); and
- guidance on more career development-related activities families could do with their children.

For families of youth with disabilities in particular, it will be important to assure that they set high expectations for the youth's future employment, advocate for opportunities for youth to identify their strengths and interests and explore career options, and understand the impact of employment opportunities on any public benefits youth may receive, such as Social Security and Medicaid benefits.

Finally, it is important to note that agency administrators play a pivotal role in developing and supporting meaningful partnerships with families. Agency administrators should show overt commitment to and advocate for family involvement and provide staff with

the necessary tools and resources to meaningfully engage families.

Challenges in Connecting with Families and Family Advocacy Organizations

Challenges related to engaging family and family advocacy organizations identified in the NCWD/Youth ILP research included the following:

- Family engagement is limited to annual teacher-parent conferences.
- Families sometimes have a lack of "real-time" connection to their child's career development progress.
- Opportunities are lacking for families to discuss the career development process with school personnel.
- There is a lack of materials to distribute to families and family advocacy organizations.
- Sometimes family mobility can be an issue.
- Some families may lack a consistent connection to the Internet.

Strategies for Connecting with Families and Family Advocacy Organizations

The following activities can assist states in better engaging family and family organizations to support career development programming:

- Develop, in consultation with parent advocacy groups, family-friendly and culturally relevant information about the purpose of career development and its processes for use by local schools.
- Tailor communication materials to parent advocacy groups that support families of children and adults with disabilities. Many of the resources that have been developed for working with transition-aged youth apply to all families.
- Ensure that communication materials describe how schools can more effectively engage families in career development activities, including using the ePortfolio to coordinate annual student-led parent-teacher conferences and exit interviews as students graduate from middle and high school.
- Encourage career information system vendors to create ways for families to review and comment on their children's career development activities, even to the point of providing families with their own accounts to engage in parallel career development experiences.
- Supplement career development activities in ways that engage families directly in completing parallel activities and having conversations with their children about their emerging career and life goals.
- Use ePortfolios to facilitate annual student-led parent-teacher conferences to share students' career

goals, course-taking plans, postsecondary training and education goals, and explain how they plan to continue developing the college and career readiness skills.

- Consult with local special educators and family advocacy organizations to identify and address potential barriers that may impede some students' successful participation in career development programs and activities (e.g. inaccessible or inappropriate assessment instruments to determine eligibility to participate, capacity to access materials required to develop ePortfolios, or ability to access work-based learning opportunities).
- Consider including district-level family engagement officers to work with parents, families, and guardians to assist with and reinforce the career development activities.

Table 11. Resources on Engaging Families and Family Advocacy Organizations

South Carolina's Resources for Parents is intended to connect families to information and resources to involve them in their children's college and career planning process, including the Parent Tool Kit for College and Career, eIGP, Work-Based Learning, MicroCareerBursts, Tools for Career Exploration and Preparation, and Career Clusters.

Kentucky developed an extensive Parent Toolkit to help K-12 educators more effectively engage families in career development.

Understanding the New Vision for Career Development: The Role of Family is a family-focused career development brief by NCWD/Youth (authored by the PACER Center) to support family engagement in career development.

Families and College and Career Readiness: What Schools Can Do to Engage Families in the Individualized Learning Plan (ILP) Process is an Info Brief by NCWD/Youth that describes actions that schools can take to improve family engagement in the ILP process based on feedback from families of youth with and without disabilities.

The Institute for Educational Leadership (IEL) hosts the Family and Community Engagement (FCE) Network, a national peer learning and action network that brings together parents, teachers, school and district leaders, and other family-focused practitioners. The FCE Network involves individuals interested in improving systemic family and community engagement and learning

more about evidence-based, high impact strategies. A number of important resources developed by members and partners of the network include the following:

- *Seeing is Believing: Promising Practices for How School Districts Promote Family Engagement*. Harvard Family Research Project. 2009.
- *Taking Leadership, Innovating Change: Profiles in Family, School and Community Engagement*. Harvard Family Research Project. 2010.
- *How to Develop a Logic Model for Districtwide Family Engagement Strategies*. Harvard Family Research Project. 2009.
- Tools for Latino Family Outreach: Supporting Student Success in the Middle-grades and Beyond. Postsecondary Access for Latino Middle-grade Students (PALMS).
- Charleston County School District: Parent University Programs.

The Center for Parent Information and Resources provides a map to assist individuals in finding their local Parent Training and Information Center.

VII. Launching Demonstration Sites

The benefits of launching demonstration sites prior to scaled implementation of innovative initiatives are numerous. Demonstration sites provide states with an opportunity to showcase and promote the value of quality career development programs and activities and create awareness among future users. They also provide an excellent opportunity for a "real world" testing ground to tease out and address implementation issues including the usability and user friendliness of career development activities and assessments, and to confirm or modify utility of user guides and statements of benefits. Demonstration sites are also valuable for initial evaluation and assessment of both the implementation process and effectiveness of career development programs and activities. For example, participating in the demonstration that was sponsored as part of the NCWD/Youth research study on ILPs enabled educators to discover that their career development curricula was not sufficiently accessible for students with significant disabilities.

"We have a huge 18–21 program … including the most significantly impacted students … I have nine teachers this summer working on more specific curriculum around CTE classes, but due to funding woes I'm having a tough time coming up with materials, so teachers are relying a lot on older materials."

Qualitative assessment can promote the effectiveness of quality career development programs. By soliciting qualitative feedback from demonstration site participants regarding their likes and dislikes as well as perceived challenges and benefits, features can be improved before scaling the initiative statewide. Evaluation data can also inform implementation efforts at future sites and be used to communicate the benefits and successes to other districts and states. There is some evidence that demonstration sites lead other organizations to adopt new innovative practices (Greenhalgh et al., 2004).

In Massachusetts, the Department of Elementary and Secondary Education implemented recommendations from the Integrating College and Career Readiness Task Force to provide competitive grants to districts wanting to serve as demonstration sites (Massachusetts Department of Elementary and Secondary Education, 2012). The goal of the demonstration sites were to "incent active and swift adoption" of the career development practices at the local level (Massachusetts Department of Elementary and Secondary Education, 2012, p.21).

One consideration in designing demonstration challenge grants is to encourage programs and activities that integrate both the career development skill domains (i.e., self-exploration, career exploration, and career planning and management) and the *Guideposts for Success*. The *Guideposts for*

Success can be used at the state level in both the implementation design and evaluation phases, providing a strategic organizational framework for a coordinated transition system for all youth, including those with disabilities. For youth with disabilities, strong consideration should be given to funding those schools and organizations that explicitly describe ways in which they will provide access to accessible career development programming including ePortfolios, work-based learning opportunities, and connecting activities. Connecting activities in this context refer to youth and their families initiating contact and developing relationships with programs, services, activities, and supports the youth may need to help them gain access to chosen post-school options when they exit the K-12 system. For example, for youth with disabilities intent on matriculating into a postsecondary training or education program, this may involve connecting with disability services staff from the institutions that the youth is interested in attending or with other adult disability support service providers such as Independent Living Centers and beginning the application process to facilitate a smoother transition to postsecondary employment and/or independent living.

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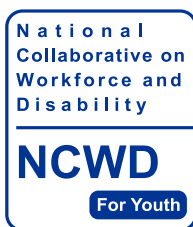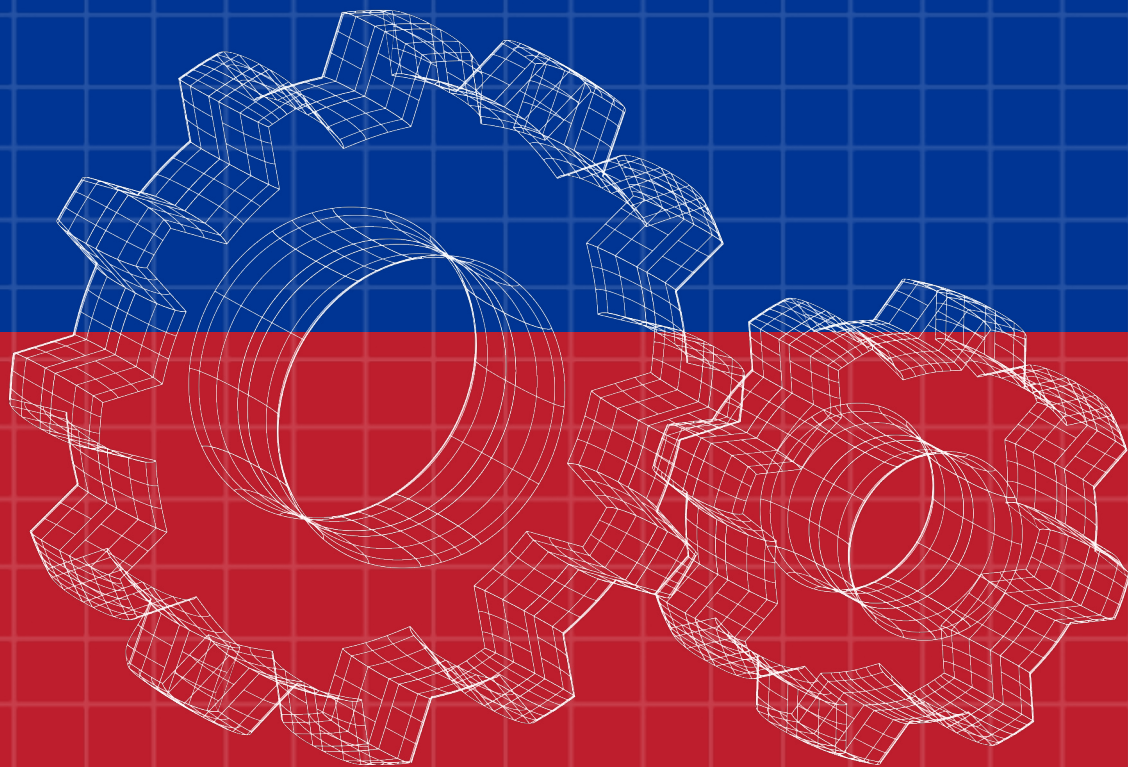
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Workforce Innovation and Opportunity Act (WIOA) of 2014, 29 U.S.C. §§ 3101–3164.

National Collaborative on Workforce and Disability

NCWD For Youth

Navigating the Road to Work