issue brief

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Employment Programs for Transition-Age Youth with Disabilities that Feature Vocational Rehabilitation Services and Supports: A Literature Review

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The Workforce Innovation and Opportunity Act of 2014 requires that state vocational rehabilitation agencies change the way they work with transition-age youth regarding resource allocation, service provision, and outcome tracking. This issue brief summarizes findings from a search of the peer reviewed and grey literatures for employment-focused transition programs that featured vocational rehabilitation services. Our search found just seven programs across the studies meeting the criteria for inclusion. All seven programs focused on a well-defined population of youth and had varied service models, but all featured interagency collaboration. However, few had rigorous evidence regarding their effectiveness at improving key outcomes. To help agencies decide what programs to pursue, planners may want to incorporate rigorous impact evaluations into current and future transition program designs.

introduction

In July 2014, the Workforce Innovation and Opportunity Act (WIOA) was signed into law. Among its many provisions, WIOA requires that each state vocational rehabilitation agency (SVRA) spend at least 15 percent of its allotment on pre-employment services for transition-age youth who are or are likely eligible for vocational rehabilitation (VR) services and to track education and employment outcomes of youth after they leave these services. SVRAs seem especially well positioned to provide employment services and supports to transition-age youth with disabilities. SVRAs, which are funded primary by the federal government but administered by the states, help people with disabilities who want to work achieve their employment goals.

Given WIOA's transition-age youth requirements, funding transition programs—programs that help youth obtain competitive employment or postsecondary education as they move from adolescence to adulthood—might enable SVRAs to meet WIOA requirements and improve the eventual adult outcomes of youth with disabilities. Evidence from quasi-experimental studies suggests that VR might improve the employment outcomes (in aggregate) of people with disabilities who receive its services (Dean et al. 1999, 2014; Nazarov 2013), but it is unclear what information is available on the effectiveness of existing or new VR programs that target transition-age youth.

We sought to understand the effectiveness of VR programs targeted to youth. To do so, we reviewed articles published from 2011 to early 2015 in the peer-reviewed and grey literatures that describe VR-supported transition programs. The study had two objectives: (1) qualitatively assess what types of employment programs have been offered to transition-age youth with disabilities, identifying key themes across programs; and (2) determine the extent to which identified programs were effective at influencing employment or employment-related outcomes relative to a control or comparison group. Summarizing the programs and identifying key themes enables practitioners and policymakers to focus on program factors that might best promote positive program outcomes. Understanding the effectiveness of employment programs targeting transition-age youth with disabilities can help policymakers, rehabilitation counselors, and other stakeholders improve outcomes for that population. When evidence supports a program as being effective, counselors and teachers might be more likely to adopt it and policymakers might be more likely to provide additional program funding.

Our search identified just seven programs that provided employment services and supports—including VR services and supports—to transition-age youth with disabilities. Although the programs differed substantively, all featured interagency collaboration, often with a high school or postsecondary institution. However, very few of the programs' effectiveness was rigorously evaluated.

themes and evidence

We identified several themes related to the seven programs regarding the target and study populations, program features, and partnering organizations (Table 1) along with the focal outcomes, evaluation efforts, and program effectiveness (Table 2).

Each program targeted a well-defined population. Although all the programs targeted transition-age youth with disabilities, the programs often focused on specific subpopulations defined by age, disability type, geography, or other characteristics. The majority of the programs were designed to intervene while the youth were in high school, although a few such as Skills for Independence, Transition, and Employment (SITE) were designed for those who had completed high school. Hence, most program participants were of high school age at program enrollment. Three programs (Dual Enrollment with Individualized Supports [DEIS], Project SEARCH, and SITE) specifically targeted youth with intellectual disabilities. Project SEARCH also served youth with developmental disabilities such as autism spectrum disorder. Most programs were conducted within a state, although Communicating Interagency Relationships and Collaborative Linkages for Exceptional Students (CIRCLES) was in two states, Working at Gaining Employment Skills (WAGES) was in one to three states, and Project SEARCH had more than 200 domestic programs.

Program characteristics varied. The programs had a range of characteristics, although some characteristics were present in multiple programs. Many of the programs provided opportunities for youth to obtain work experience before high school graduation, but the programs differed in regard to how those opportunities were offered. For example, some programs relied on VR to facilitate work experience opportunities, whereas Project SEARCH attached participants to a participating employer for a year as an alternative to typical high school instruction. Some programs innovated within the classroom, such as by introducing novel classroom curricula that teach job-related skills (WAGES) or offering students the opportunity to take university courses (DEIS and SITE). CIRCLES participants were activity involved in creating the goals listed in their individualized education programs, and most other programs featured some type of person-centered planning. Some programs provided other services and supports such as job placement assistance and, in the case of Project SEARCH, independent living skills development. A range of individuals provided these services and supports such as teachers, VR counselors, job coaches, university instructors, and employers. CIRCLES and Maryland Seamless Transition Collaborative (MSTC) provided program services and supports to participants' families.

All programs had multiple partnering organizations. Among the various characteristics that the seven programs shared, perhaps the most striking was the consistent presence of interagency collaboration. None of the programs exclusively involved VR agencies or the receipt of VR services and supports, and the levels of VR involvement varied substantively across programs. In fact, few (if any) of the programs were led by an SVRA, and, in some cases, VR resources accounted for just a small fraction of the overall program. For instance, the only mention of VR in the article about the WAGE program was that VR counselors facilitated some of the program's

instructional activities. Because the programs targeted transition-age youth with disabilities and the beginning of transition is often associated with high school, most of the programs were oriented toward high school students and required buy-in from local or state high school administrators and program delivery at local high schools. Consequently, a high school, school district, or state board of education typically served as the program collaborator or program organizer. Postsecondary institutions also provided services for some of these programs. For example, SITE program participants took university courses, and the Model Transition Program (MTP) had strong collaboration from universities and other postsecondary institutions. Apart from SVRAs and schools, several other community agencies and organizations participated in these programs. The core of Project SEARCH, for instance, requires program participants to work for local employers for a year; thus, participating employers had a substantial role in the program.

Programs focused on several employment-related outcomes. Although all programs were employment-focused, they identified different primary outcomes. Most programs identified employment as a key outcome, although WAGES focused on improving job skills and expectations. Postsecondary enrollment was an outcome for the CIRCLES and MSTC programs. Two programs (MSTC and MTP) considered having an open VR case an important outcome (and SITE enrolled all program participants in VR). CIRCLES and MTP identified independent living and greater independence, respectively, as long-term program outcomes, and Project SEARCH provided independent living skills. Improved social skills and other behavioral outcomes were also mentioned as possible outcome for CIRCLES, SITE, and WAGES. MSTC listed systemic transition collaboration as a long-term outcome of interest.

Limited evaluation efforts and program effects. The articles contained limited evidence of program effects on employment or employment-related outcomes. Several of the articles did not present program impacts and instead either described the program intervention, documented program implementation, or presented case studies of program participants' experiences. However, some articles did contain descriptive, quasi-experimental, or experimental evidence.

- The MSTC article (Luecking and Luecking 2015), one MTP article (Brewer et al. 2011), and one Project SEARCH article (Müller and VanGilder 2014) described in-process and end-of-intervention period outcomes, although not relative to a control or comparison group.
- An evaluation of MTP used quasi-experimental evidence to assess program impacts. Using a matched comparison group design, Wehman et al. (2014) found positive postsecondary enrollment outcomes one year after MTP exit.
- Of the three programs that used random assignment to assign volunteers to a treatment or control group (CIRCLES, the Project SEARCH site serving youth with autism spectrum disorder, and WAGES), two do not yet have reported program impacts, and the third (WAGES) had positive reported impacts on vocational outcomes expectations, occupational skills, and social skills at the end of the intervention period.

conclusions

WIOA has intensified SVRAs' focus on improving services to and outcomes for transition-age youth. To help practitioners and policymakers survey the landscape of transition programs that SVRAs can adopt, our study searched the peer-reviewed and grey literatures for employment-focused programs that targeted transition-age youth with disabilities and involved VR agencies. Among the studies found, we identified key themes and highlighted evidence on program effectiveness. From this, we draw three main findings:

1. A limited number of peer-reviewed or grey literature articles focus on employment programs for transition-age youth with a VR agency component—we found just 13 studies describing 7 unique programs.
2. Program effects on employment and employment-related outcomes are limited, although the information reported suggested that some programs might be experiencing the desired impacts.
3. Each program described in the articles featured interagency collaboration. None of the programs exclusively involved VR services or supports, and some programs featured minimal VR resources.

The lack of articles and evidence we found does not suggest that SVRAs are not currently implementing innovative ideas to improve employment outcomes for transition-age youth. Instead, our findings suggest that various stakeholder groups might not know how effective many existing programs are because accessible, rigorous impact evaluation evidence for the programs either does not exist or is not accessible.

This lack of information on program effectiveness might complicate decisions for SVRAs as they seek to adopt effective transition programs and meet WIOA requirements. For the programs presented here that have ongoing evaluations, future evaluation findings might provide additional evidence on program effectiveness, particularly if those evaluations track long-term employment and educational outcomes. Further, future program organizers might want to incorporate the components needed for a rigorous evaluation into the program design to ensure that program impacts can eventually be measured. Both of these activities would facilitate an expansion of the evidence base over time, providing policymakers with the information they need to inform current practice and future innovation.

appendix: methods

We searched across three types of sources to identify articles published from 2011 to early 2015 that met our study inclusion criteria. First, we queried Scopus, a bibliographic database, searching for peer-reviewed articles describing programs that were employment focused, targeted transition-age youth with disabilities, and involved VR in some way. Learning from several test searches, we refined the initial database search terms to better detect potentially relevant articles. Second, we queried a grey literature database, the Social Science Research Network (SSRN), to find articles that were not peer-reviewed but might contain information that was relevant to our study objectives. Although the SSRN database contains many unpublished studies, it is not comprehensive. In general, the grey literature "may include, but are not limited to the following types of materials: reports (pre-prints, preliminary progress and advanced reports, technical reports, statistical reports, memoranda, state-of-the art reports, market research reports, etc.), theses, conference proceedings, technical specifications and standards, non-commercial translations, bibliographies, technical and commercial documentation, and official documents not published commercially (primarily government reports and documents)" (Alberani et al. 1990). Third, we searched the websites of 13 policy research firms and 6 federal agency websites to identify potentially relevant demonstrations and pilot studies that those organizations conducted or reviewed.

Although the search included multiple types of sources, two sources of potential information were not included: SVRA materials and websites other than those described above. Because SVRA reports and websites contain detailed information on SVRA activities and programs, we are reviewing them in a separate study. And although other websites might have useful information such as unpublished papers, if the information was not indexed in the SSRN database or the websites of the policy research firms and federal agencies we examined, then our search did not identify them.

For each article we found during the search, we performed a multistep review to assess those relevant to the study. First, a reviewer screened the titles and abstracts of each article; if these indicated that the article was about an employment-focused program targeted at transition-age youth with disabilities, then the reviewer obtained the article's full text and determined whether the article contained any references to VR. Potentially relevant articles had to explicitly mention that VR was somehow involved with the program, but no other specific threshold of VR involvement was required for inclusion in the study. A second reviewer read the full texts of articles with seemingly relevant programs and ultimately decided whether the article was relevant to the study.

The database and website search yielded 757 potentially relevant articles, of which 38 received a full text review. Thirteen of the discovered articles were ultimately identified as being relevant to the study, but some of these articles discussed the same program. Together, the 13 articles described seven unique programs.

table 1. program target and study populations, program features, and partnering organizations

Program Name/ Citation	Target and Study Populations	Program Features	Partnering Organizations
Communicating Interagency Relationships and Collaborative Linkages for Exceptional Students (CIRCLES) Povenmire-Kirk et al. (2015)	High school students with disabilities in 48 schools across 15 counties/districts in North and South Carolina. The schools were evenly divided into treatment and control groups.	Three coordinated teams delivered services: (1) Community-level team addressed policy issues and did not work directly with students; (2) School-level teams provided interagency services to students and their families; and (3) the individualized education program (IEP) team formalized transition and education goals in IEP.	School districts and various other partner organizations, such as VR, public health and social service departments, advocacy groups, and other service providers
Dual Enrollment with Individualized Supports (DEIS) Project Yamamoto et al. (2014)	Students with intellectual disabilities at eight Hawaii public high schools. Twenty-seven students participated in the program during its first three years.	The participants received educational coaches who helped the participants engage in opportunities at local community colleges. The program also featured interagency collaboration and person-centered planning.	Hawaii public high schools, Hawaii's VR agency, and other community agencies
Maryland Seamless Transition Collaborative (MSTC) Luecking and Luecking (2015)	High school students with disabilities in 11 Maryland counties/ school districts from 2007–2012. The program's target sample size was 400 students.	MSTC participants were connected to VR services, paid employment, and a community rehabilitation provider one to three years before exiting high school. In addition, the program enabled students to lead their IEP development, encouraged family participation, made health and social links, and provided benefits management support.	Maryland's VR agency, Maryland State Department of Education, Maryland Department of Disabilities, TransCen, Maryland Developmental Disabilities Administration, Maryland Department of Health and Mental Hygiene, families, and the Governor's Interagency Transition Council
Model Transition Program (MTP) Brewer et al. (2011); Karpur et al. (2014	New York State high school students with disabilities. Sixty MTP sites operated from fall 2007 through fall 2009.	The program enabled VR, MTP, and school staff to develop and refine transition curriculums; fostered interagency collaboration for VR services; and developed internship and work experience sites.	New York State high schools; New York's SVRA; and other partners such as businesses, colleges, and other postsecondary institutions
Project SEARCH Müller and VanGilder (2014); O'Day (2009); Wehman et al. (2013, 2014); Wittig et al. (2014)	Transition-age youth with intellectual and developmental disabilities. More than 200 Project SEARCH sites were located throughout the United States.	Project SEARCH provided work experience to participants, including one full year working for an employer instead of attending classes in a conventional school setting. The program also provided employment training, independent living skills, job placement assistance, and VR services and supports.	Public schools, local employers, and SVRAs

table 1. cont.

Program Name/ Citation	Target and Study Populations	Program Features	Partnering Organizations
Skills for Independence, Transition, and Employment (SITE) Rogan et al. (2014)	Youth ages 18-21 with intellectual disabilities who completed four years of high school and received a certificate of completion (but not a diploma). Twelve students were enrolled in the eighth year of program.	Program participants were dually enrolled at Indianapolis Public Schools (IUP) and Indiana University-Purdue University Indianapolis (IUPUI), where they took university courses and were introduced to campus life and activities. Courses and activities were tailored to the individual. Course instructors provided feedback on participant performance. All participants were enrolled in VR and assigned a job developer/coach.	IUP, IUPUI, and Indiana's SVRA
Working at Gaining Employment Skills (WAGES) Murray and Doren (2013)	High school students with disabilities in 18 classrooms across three high schools in the northwest United States. Included 122 treatment and 100 control group members.	WAGES was a classroom curriculum that taught job-related social skills using common activities in work settings. Services were delivered for 3-4 days per week for 4.5 months.	School special education staff, teachers, VR counselors, and other school staff

table 2. program focal outcomes, evaluation efforts, and program effects

Program Name/Citation	Focal Outcomes	Evaluation Efforts and Program Effects
Communicating Interagency Relationships and Collaborative Linkages for Exceptional Students (CIRCLES) Povenmire-Kirk et al. (2015)	In-school outcomes included better academic outcomes, better behavioral outcomes, and greater satisfaction. Post-school outcomes included higher employment rates, higher postsecondary education rates, and greater independent living rates.	Article examined focus groups describing the first year of implementation. Assignment to the treatment group was random, so a rigorous impact evaluation might eventually be possible.
Dual Enrollment with Individual-ized Supports (DEIS) Project Yamamoto et al. (2014)	The program sought to improve employment outcomes.	The article provided qualitative data describing the implementation process and key lessons.
Maryland Seamless Transition Collaborative (MSTC) Luecking and Luecking (2015)	Key outcomes at high school exit were an open VR case, links to postsecondary education, paid and inclusive employment, and links to community rehabilitation provider. Longer-term outcomes were ongoing paid and inclusive employment and systemic transition collaboration.	The article for this descriptive study reported employment, program participation, and postsecondary participation outcomes at high school exit for some program participants.
Model Transition Program (MTP) Brewer et al. (2011); Karpur (2014)	Short-term outcomes included more work experiences, opened VR cases, and services provided. Intermediate and long-term outcomes included more successful VR closures and greater levels of employment and independence.	Karpur's (2014) descriptive study examined correlation between the intermediate outcomes and participation level in MTP and found that greater participation was linked to better intermediate outcomes. A matched comparison group impact evaluation (Brewer et al. 2011) found positive postsecondary enrollment outcomes one year after program exit.
Project SEARCH Müller and VanGilder (2014); O'Day (2009); Wehman et al. (2013, 2014); Wittig et al. (2014)	The primary outcome was successful school-to-work transition (that is, paid competitive employment at high school exit).	Wehman et al. (2013, 2014) described an ongoing randomized controlled trial for a single Project SEARCH site serving participants with autism spectrum disorders. Müller and VanGilder (2014) conducted a descriptive study examining job readiness among 10 program participants and, in a pre-post comparison, found that the intervention improved job readiness. Wittig et al. (2014) described an implementation case study for rural areas. O'Day's (2009) work was an issue brief describing Project SEARCH.
Skills for Independence, Transition, and Employment (SITE) Rogan et al. (2014)	Participants were encouraged to develop qualities such as confidence, self-reliance, effective time and budget management, the desire to pursue meaningful activities, and stronger social connections.	The article described the program in detail.
Working at Gaining Employment Skills (WAGES) Murray and Doren (2013)	The outcomes of interest were improved vocational outcome expectations, social skills, and occupational skills.	The article featured results from a randomized controlled trial. Just after the intervention period, researchers noted positive impacts on vocational outcomes expectations, occupational skills, and social skills. Findings from a fidelity analysis were also included in the article.

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