



Vermont's Linking Learning to Careers Demonstration

Final Implementation Evaluation Report

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Executive Summary

The Vermont Division of Vocational Rehabilitation (DVR) received a grant from the U.S. Department of Education, Rehabilitation Services Administration to conduct a demonstration project for students with disabilities that involved evidence-based work-based learning experiences (WBLEs). The resulting project, Linking Learning to Careers (LLC), consists of services designed to improve the college and career readiness of high school students with disabilities by enhancing and customizing the education and employment services that DVR usually offers to students. LLC aims to provide a more individualized and targeted approach to helping students gain confidence and strategically plan for their futures. This implementation report describes the DVR's experience implementing LLC and presents findings on LLC participants' service use within the first 18 months of their enrollment in the program. The report also summarizes findings on participants' satisfaction with selected LLC service components, differences in service use across DVR district offices, and lessons learned from the implementation.

Vermont DVR used a randomized design to implement LLC for eligible participants in each of its 12 vocational rehabilitation (VR) district offices with the support of TransCen, its technical assistance provider. Building on the foundation of usual youth transition services offered by the DVR, LLC includes the following service components:

- 1. WBLEs.** WBLEs are a central component to LLC. The DVR's goal is to provide all LLC participants with three WBLEs during their involvement in the program, including one job shadow experience, one unpaid internship or volunteer experience, and one employer-paid WBLE in a competitive integrated environment.
- 2. Assistive technology (AT) services.** Dedicated AT specialists provide LLC participants with AT information sessions, consultations, and product demonstrations. Participants receiving product demonstrations can receive AT equipment loans or purchases.
- 3. Postsecondary education services.** LLC offers several enhanced postsecondary education services, such as campus tours, specialized academic programs, and multiple opportunities for dual-enrollment courses, in addition to what students usually receive. LLC offers these services primarily in collaboration with the Community College of Vermont (CCV) system, a partner for LLC.
- 4. Transportation services.** LLC offers funds to support participants' transportation needs related to education or work opportunities. Transportation funds aim to be flexible and can cover the costs of public transportation and taxis, as well as a wide range of personal expenses such as gas, reimbursed mileage, repair costs, and driver's permit or license fees.
- 5. Dedicated LLC staff.** LLC uses a team-based approach in each district office to support participants' transition goals and improve their employment and postsecondary education outcomes. LLC added a half-time career consultant position in each office to coordinate the provision of services with an existing transition counselor and youth employment specialist (YES), forming a youth team. Each LLC youth team customizes service delivery for participants and coordinates with local partners, such as secondary schools, CCV, and employers.

Key findings

Mathematica's implementation study generated a number of key findings:

- LLC achieved its goal of enrolling 800 students across 12 district offices. However, LLC staff encountered challenges marketing LLC and encouraging students to enroll. Several staff said LLC

implementation might have benefited from having a dedicated marketing and enrollment specialist to coordinate recruitment and enrollment. To address this challenge, some district offices partner with their existing business account managers to support recruitment efforts.

- The students who enrolled in LLC had similar characteristics across the treatment (LLC participant) and control groups. At the time of enrollment, students were more frequently in 11th grade, male, white, and reported having learning disabilities and attention-deficit hyperactivity disorder. About half were eligible for free or reduced-price lunch.
- Key LLC staff (transition counselors, career consultants, and youth employment specialists) were equally involved in engaging LLC participants.
- Most LLC participants engaged in at least one WBLE during their first 18 months in the program. About an equal number of participants had unpaid WBLEs and competitive integrated employment experiences, and few engaged in job shadow experiences. Although LLC participants were satisfied with WBLEs, participating in three WBLEs during high school might be an ambitious goal within the first 18 months of LLC enrollment.
- About one in five participants used LLC's postsecondary education, AT, or transportation services. Those who used AT or transportation services used them two or three times.
- In addition to WBLEs, a substantial proportion of LLC participants received other pre-employment transition services, with job exploration counseling and counseling on postsecondary education opportunities being the most frequently used services.
- Most LLC participants (93 percent) applied for DVR services and had an open VR case (as opposed to receiving services as a student without applying) and many received direct services offered by the DVR and purchased services beyond those directly offered by LLC, such as career and training services.
- LLC service uptake varied across DVR district offices, with staff turnover hindering service delivery consistency in many district offices. Services also differed by participants' characteristics: participants who were older, who had previous employment experience, or who enrolled earlier in the demonstration were more likely to use WBLE and selected postsecondary education services than other participants.
- In some district offices, LLC staff had strong relationships with their local schools, CCV representatives, and other community partners, but in other district offices, the team struggled to establish collaborations as intended. Those staff with weaker local connections focused on strengthening these partnerships throughout the evaluation period.

Conclusion

Enrollment into LLC ceased in January 2019 and the DVR will continue implementing LLC services to participants through August 2021. The essential services received by LLC participants during the first 18 months included (1) a dedicated staff (the career consultant) with a small caseload who (2) worked with a team of others addressing transition needs related to (3) pre-employment transition services and (4) WBLEs. Should the LLC program affect students' employment and education outcomes, it will likely be due to these model components. However, because students assigned to the control group also had access to the latter three of these four essential services, the impact evaluation must assess whether LLC participants received these components at higher rates than usual service participants.

Acronyms

AT	assistive technology
ADHD	attention-deficit hyperactivity disorder
CCV	Community College of Vermont
CIE	competitive integrated employment
CWS	Creative Workforce Solutions
DVR	Department of Vocational Rehabilitation
ICC	Introduction to College and Careers
IEP	individualized education program
IPE	individualized plan for employment
LLC	Linking Learning to Careers
RAPTER®	Random Assignment, Participant Tracking, Enrollment and Reporting
RSA	Rehabilitation Services Administration
TA	technical assistance
VR	vocational rehabilitation
VABIR	Vermont Association of Business Industry and Rehabilitation
WBLE	work-based learning experience
WIOA	Workforce Innovation and Opportunity Act
YES	youth employment specialist

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I. Introduction and Background

The U.S. Department of Education’s Rehabilitation Services Administration (RSA) awarded grants to state vocational rehabilitation (VR) agencies in 2016 to identify, implement, and evaluate evidence-based models for work-based learning experiences (WBLEs) in integrated settings for students with disabilities. VR agencies in five states received RSA awards: California, Maine, Maryland, Massachusetts, and Vermont. Mathematica is the independent evaluator for Vermont’s demonstration program, Linking Learning to Careers (LLC). In this report, we present findings on Vermont’s experience in implementing LLC. We also describe LLC participants’ use of services and WBLE outcomes within the first 18 months of their enrollment in the program.

This chapter provides background information on youth with disabilities and the challenges they face. It highlights the role of the Workforce Innovation and Opportunity Act (WIOA) and VR agencies in addressing these challenges and then gives an overview of LLC, the implementation environment, and the evaluation questions guiding this report.

A. Transition-age youth with disabilities

Transition-age youth (those ages 14 to 24) with disabilities face multiple barriers as they transition from high school to adulthood. These youth have poorer outcomes during and after high school, including lower employment, earnings, and postsecondary school enrollment than their peers without disabilities (Bureau of Labor Statistics 2018; Cobb et al. 2013; Newman et al. 2011). In addition, many youth with disabilities enroll in public welfare and disability programs to receive cash and other benefits, and a substantial proportion continue to receive disability benefits into adulthood (Davies et al. 2009; Loprest and Wittenburg 2007). Research evidence suggests that youth with disabilities can improve their transition outcomes through coordinated education, training, and WBLEs, particularly during high school (Fraker et al. 2014; Hemmeter et al. 2015).

B. WIOA and VR services for transition-age youth

State VR agencies are uniquely situated to help youth with disabilities obtain WBLEs and other services to improve their long-term employment and postsecondary education outcomes.

WIOA and VR pre-employment transition services. The state VR program is the largest publicly funded program designed to provide services for individuals with disabilities interested in preparing for and engaging in competitive employment. Historically, VR eligibility required an individual to have a physical or mental impairment that constituted or resulted in a substantial impediment to employment. Eligible VR clients sign a mutually agreed-upon individualized plan for employment (IPE) that specifies the services the VR agency will offer to the individual. These services may include, but are not limited to, rehabilitation counseling, assistive technology (AT), job accommodations, job search and placement assistance, education and training, and other services and support needed to achieve an employment goal.

However, the roles of VR agencies in serving youth and students with disabilities have changed because of WIOA (P.L. 113-128). WIOA legislation, enacted in July 2014, consolidates and strengthens job training programs. Before WIOA, federal regulations limited VR agencies to serving students who were eligible for VR services. Under current legislation, VR agencies must allocate at least 15 percent of their federal matching grant funds to provide pre-employment transition services to students with disabilities (RSA 2020). More specifically, WIOA allows agencies to provide these services to students who have not

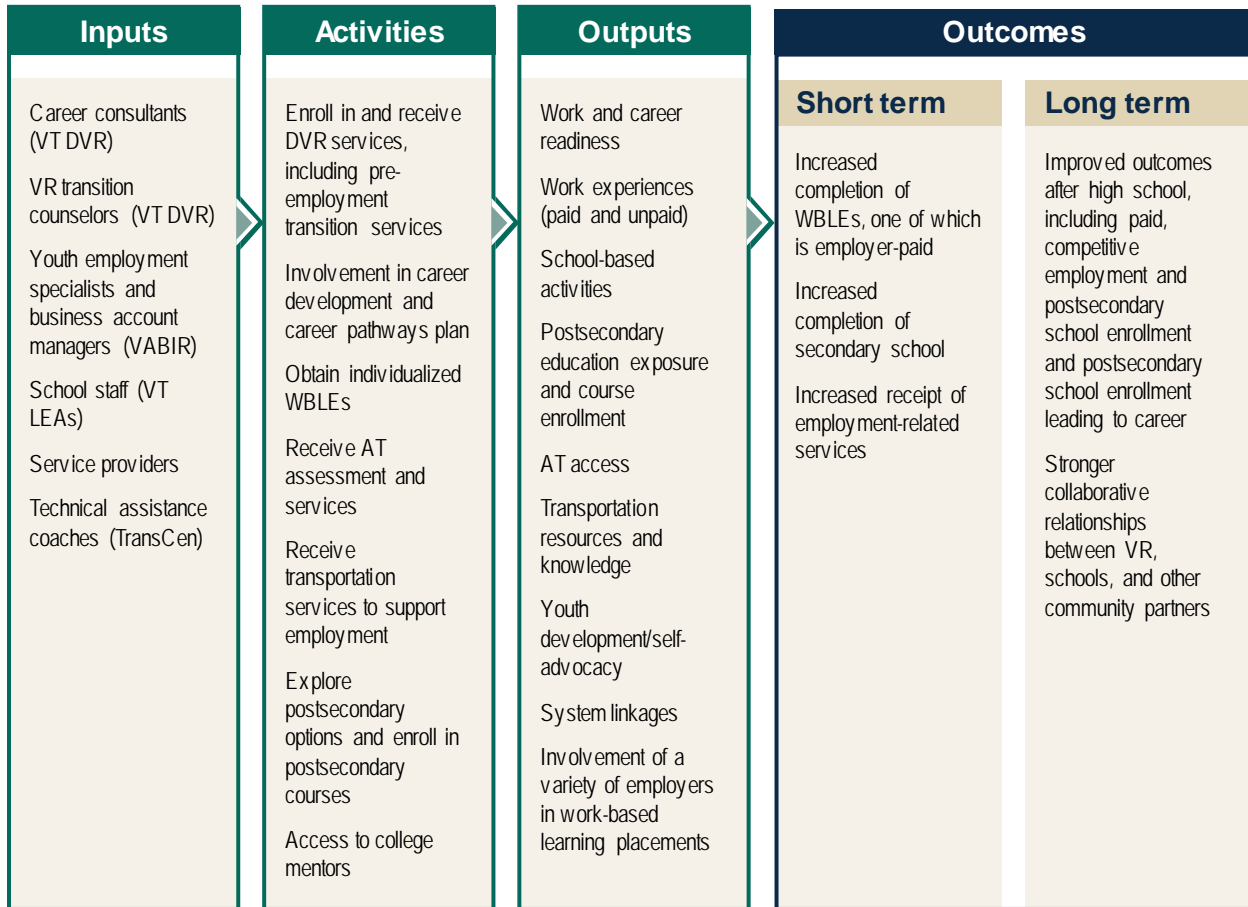
yet applied for VR but are potentially eligible for VR services. Pre-employment transition services include WBLEs and four other required services: job exploration counseling, transition or postsecondary education counseling, workplace readiness training, and self-advocacy instruction. In many cases, VR agencies collaborate with secondary schools and community rehabilitation providers in offering these transition services.

WIOA and VR have expanded opportunities for youth. WIOA legislation has affected the composition of those receiving services from VR agencies. The proportion of youth and young adults ages 24 or younger participating in VR grew from 35 percent in the years before WIOA to 51 percent in 2018 (RSA 2020). That proportion is even larger when factoring in students with disabilities receiving pre-employment transition services after WIOA's passage.

C. Vermont's LLC demonstration to improve youth outcomes focused on WBLEs

Vermont's state Division of Vocational Rehabilitation (DVR) agency is the lead agency for LLC, a five-year statewide initiative to improve the college and career readiness of high school students with disabilities. Eligible students were randomly selected to receive usual VR transition services, locally known as core services, or LLC's services, locally known as enhanced services, which include additional components to further promote participants' successful transition to adulthood. In this report, we use the term *LLC participant* to identify students randomly assigned into the treatment group and thus offered LLC services. Usual service participants were those randomly assigned into the control group and had access to a rich set of supports from the DVR. LLC builds on the DVR's usual services to offer high school participants unpaid and paid WBLEs in integrated environments. LLC also provides college exploration opportunities, guidance, coursework, dedicated AT support, and additional transportation funding to support participation. As highlighted in Figure I.1, these LLC activities aim to assist LLC participants in achieving positive transition outcomes, including employment and postsecondary education enrollment. By providing youth with WBLEs, the program also seeks to increase participants' self-confidence and motivation to achieve career goals. To facilitate WBLE opportunities and service delivery, the DVR funds transition counselors, career consultants, and youth employment specialists (YESs) with exclusive LLC participant caseloads in each of its 12 district offices. DVR intended to assign a career consultant and an LLC YES in each office to support only LLC participants. In a few cases, YES staff served both LLC and usual participants because of staffing shortages. LLC staff also reach out to businesses and employers to build strong community relationships with potential employers. LLC offers all services in a team-based environment, with several professionals working with each participant. LLC began enrollment into the pilot program in May 2017, and began random assignment in July 2017. It will continue to provide services to participants through the end of its grant with RSA (September 2021); thus, in this report we refer to the program in present tense.

Figure I.1. LLC logic model



CCV = Community College of Vermont; LEA = local education agency; VABIR = Vermont Association of Business Industry and Rehabilitation.

D. LLC implementation environment

The DVR implements LLC throughout Vermont across all 12 of its district offices, which encompass urban and rural communities. Vermont has a relatively small and homogenous population compared to other states. Here, we summarize and compare Vermont's demographic and economic characteristics to the nation as a whole (Table I.1).

Transition-age youth with disabilities in Vermont compared to the nation. The percentage of transition-age youth (ages 14 to 18) in Vermont (6 percent) is similar to the percentage in the nation overall (7 percent), based on data from 2017 and 2018. However, the percentage of youth with disabilities is higher in Vermont than nationally (9 versus 6 percent), and the racial and ethnic identity of youth differs substantially. Youth identifying as White alone represent 91 percent of those in Vermont compared with 68 percent for the nation. Few youth self-identify as Black alone (less than 1 percent) or Hispanic (2 percent) in Vermont.

Economic and educational characteristics in Vermont compared to the nation. Most Vermont youth ages 14 to 18 are enrolled in school (94 percent), which is identical to the national rate. In 2017–2018, 24 percent of Vermont youth were employed, which is substantially greater than the 16 percent of youth

nationally. The median family income for Vermont youth (\$54,740) was less than the national average (\$64,413); however, the poverty rates (20.4 percent) for the two groups were similar.

Table I.1. Vermont and national demographic and economic characteristics, 2017 and 2018

	Vermont	Nation (all records)
Unweighted sample size	12,776	6,404,579
Population	624,978	326,443,309
Unemployment rate	3.9%	5.1%
Age distribution		
Ages 0–13	14.0%	17.4%
Ages 14–18	5.8%	6.5%
Ages 19–24	8.9%	8.0%
Ages 25–34	12.2%	13.8%
Ages 35–64	39.8%	38.5%
Ages 65 and older	19.3%	15.8%
Among population ages 14–18		
Race, White alone	91.4%	67.7%
Race, Black alone	0.6%	14.2%
Race, other	8.0%	18.1%
Hispanic ethnicity	2.3%	23.8%
Has disability	9.0%	6.2%
In school	93.7%	93.8%
Employed	23.6%	16.2%
Neither employed nor in school	4.8%	3.7%
Family income (median)	\$54,740	\$64,413
Poverty rate	20.4%	20.4%

Sources: 2017 and 2018 American Community Survey.

Note: Estimates are population-weighted estimates using American Community Survey population weights.

E. LLC implementation evaluation

The RSA and DVR are keenly interested in whether and how LLC will achieve its goals and how participants fared due to their LLC involvement. To respond to the LLC program sponsors’ information needs, Vermont DVR awarded a subcontract to Mathematica in March 2017 to conduct implementation (formative) and impact (summative) evaluations for LLC. This report on the implementation evaluation of LLC focuses on LLC’s implementation to address the following questions:

1. What are the main components of the LLC intervention?
2. What training and technical assistance (TA) supports do LLC staff receive?
3. What are the characteristics of LLC treatment and control group participants?
4. What are the service and work experiences of LLC treatment group participants?
5. What factors supported or challenged LLC implementation?

6. How did LLC staff improve the collaborative relationships between the DVR, schools, the Community College of Vermont (CCV), and other community partners?
7. What are the lessons learned from implementation?

We defined these questions in the LLC evaluation design report (Honeycutt et al. 2017). We used a variety of administrative, survey, and interview data to evaluate LLC. Appendix A provides details on our data sources, time frames for data collection, analytic approach, and longer-term descriptive findings.

F. Report organization

The remainder of the report is organized as follows. Chapter II provides background on LLC's organizational structure, VR district offices involved in the intervention, the LLC services, other VR services available to participants, and how LLC services differed from usual services. We also highlight key LLC partners and TA providers. In Chapter III, we present LLC's approach to outreach, recruitment, and enrollment of students for the program. In Chapter IV, we report on participants' engagement and participation in LLC services, particularly WBLEs. Chapter V summarizes other VR services LLC participants received as part of their involvement in the program. In Chapter VI, we identify differences in LLC implementation by select participant characteristics and VR district offices. We describe lessons learned about the LLC implementation and key takeaways and implications for the impact evaluation in the final two chapters.

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II. LLC Organizational Structure and Services

LLC's organizational structure and services build on the DVR's usual services and use similar professional staff. This chapter describes how LLC management, staff, and service delivery differ from the DVR's usual structure and services. We also discuss other pre-employment transition and VR services that LLC and usual service participants can receive. Finally, we identify several partner agencies that contribute to the DVR's efforts to improve youth outcomes.

A. LLC management and staff

The DVR implements LLC throughout Vermont in each of its 12 district offices. LLC's directors and regional managers provide leadership, guidance, and TA to LLC staff in each district office.

LLC directors. LLC's director and assistant director provide administrative oversight, collect data, and monitor LLC to ensure partners implement program components as planned. LLC directors also provide a wide range of TA support, including LLC resource guides (which describe staff roles and responsibilities), professional development events, quarterly case reviews, and annual statewide transition meetings. LLC's directors arrange an annual statewide meeting to promote discussion and learning across all key LLC and youth transition partners, including, representatives from the DVR, CCV, career consultants, transition counselors, and YESs from district office teams.

DVR regional managers. Each DVR regional manager oversees two district offices in each region. Regional managers supervise VR staff and monitor the day-to-day operations of both usual VR and LLC services. Most regional managers meet regularly with their LLC staff and quarterly with state LLC directors. The regional managers conduct case reviews and provide ongoing TA to LLC staff to ensure the quality of LLC services and adherence to the LLC model. Also, the DVR's statewide director for transition services is responsible for directing youth services and establishing procedures for VR and pre-employment transition services.

LLC staff compared with usual service staff. LLC staff roles differ from the roles of staff who provide usual services in several ways. In each DVR district office, LLC primary team members include a transition counselor, a career consultant, and a YES. Each LLC team receives support from business account managers and AT specialists. By contrast, usual service teams do not include a career consultant or AT specialist. LLC teams meet weekly to discuss LLC caseloads, which are relatively small. The average caseload is 34 participants in each district office, ranging from 17 to 48. One VR manager said that the smaller LLC caseloads enable counselors to engage participants better and "do a deeper dive than we can [with usual service participants]." By comparison, a sole transition counselor manages usual service caseloads ranging from 100 to 170 clients. We provide a high-level comparison of these staff roles in Table II.1; a detailed description follows.

Key features of LLC

- LLC directors oversee LLC operations, and VR regional managers direct day-to-day operations in each district office.
- Relative to usual services, LLC employs a team-based approach, includes two additional staff roles, and features smaller caseloads.
- LLC created a new LLC YES position to ensure service delivery to its participants.
- LLC provides enhanced and customized services that extend beyond usual services for students.
- Both LLC and usual service participants are eligible for other pre-employment transition and VR services.
- Team meetings, case reviews, and fidelity checklists support the implementation.

- **Transition counselor.** The transition counselor is at the center of case management coordination for usual service participants and generally does not work with adult caseloads. Transition counselors provide career exploration supports, work closely with special educators at schools, assess participants' vocational needs, and align participants' goals with training and employment opportunities. Transition counselors also offer soft skills training and preparatory supports, such as resume writing, mock interviews, or help reviewing postsecondary education options. For LLC participants, the transition counselor also strategizes with a career consultant and YES to provide LLC services and help participants identify opportunities and achieve their goals. For usual and LLC participants, the transition counselor is the "holder of the case."
- **Career consultant.** The career consultant is exclusive to LLC and primarily responsible for LLC implementation. Career consultants provide case management and oversee only LLC participant cases. Career consultants meet with participants in schools, discuss participants' post-high school plans, develop participants' LLC plans, help with employment, and coordinate LLC services in collaboration with other LLC staff. In most district offices, the career consultant works half-time for LLC and half-time as a regular VR counselor with an adult caseload. Career consultants also serve as adult VR counselors to their LLC participants who graduate from high school and age out of youth services. In contrast, those receiving usual services who graduate from high school move from a transition counselor to a different adult VR counselor.
- **YES.** The DVR contracts with the Vermont Association of Business Industry and Rehabilitation (VABIR) to employ YES staff. The primary role for YES staff is to coordinate WBLEs for participants. Due to YES staffing shortages during LLC's initial roll-out, the DVR employs two types of YES staff: (1) regular YES staff, who support usual service participants within a district office; and (2) LLC YES staff, who work exclusively with LLC participants within a district office.¹ Regular YESs and LLC YESs use progressive employment strategies. Progressive employment takes a more individualized approach to job development, usually starting with basic WBLEs and moving into more advanced paid types of WBLEs.
- **Business account manager.** The DVR also contracts with VABIR to employ business account managers. Business account managers help YES staff connect with employers in the community to arrange employment and WBLEs for youth and adults. These staff reach out to businesses for job seekers and establish career exploration activities. Business account managers support both LLC and usual service caseloads; however, they do not meet individually with participants or hold a VR caseload.
- **Assistive technology (AT) specialists.** LLC employs two dedicated AT specialists who support participants' workplace or educational AT needs.² AT specialists work exclusively with LLC participants and serve the full LLC caseload, with one AT specialist assigned to northern district offices and the other assigned to southern district offices. The expectation is that career consultants refer LLC participants to the AT specialists (prioritizing higher-need participants) and that the AT specialists will eventually meet with every LLC participant referred. Dedicated AT specialists do not exist for usual service participants.

¹ A few YES staff served both LLC and usual service participants because of staffing shortages. Once LLC YES staff were assigned to each district office, the regular YES staff supported usual service participants only.

² One of the two AT specialists resigned in early 2020, and the position had not been filled as of the writing of this report.

Table II.1. LLC and usual service staff members

Team member	Responsibilities	LLC services	Usual services
Transition counselor	Manages DVR cases, serves as a primary point of contact with the school, and provides usual services.	✓	✓
Career consultant	Works intensively with LLC participants to develop their personalized career pathway plans, partners with colleges and universities to arrange college exploration and dual-enrollment opportunities, collaborates with transition counselors and YESs on organizing work-based learning activities, and refers participants for AT services.	✓	
YES	Helps participants explore work options, provides training in work-related skills (such as resume writing and interviewing), and arranges work-based learning experiences. LLC YES staff work exclusively with LLC participants, and regular YES staff generally work with usual service participants.	✓	✓
Business account manager	Conducts outreach to the business community to promote workplace or real work opportunities for participants. Business account managers work closely with YESs and other VR and LLC staff to connect participants' school experiences to real-life work activities and future career opportunities. They do not have a participant caseload.	✓	✓
AT specialist	Helps LLC participants with AT needs. Provides consultation, assessment, on-the-job evaluation, delivery of AT equipment, and follow-up services.	✓	

AT = assistive technology; DVR Division of Rehabilitation Services; LLC = Linking Learning to Careers; VR = vocational rehabilitation; YES = youth employment specialist.

B. Description of LLC services

LLC services are a supplement to the DVR’s usual services for students and youth with disabilities. LLC offers participants additional dedicated staff, services, and support to address their transition goals and improve their employment and postsecondary education outcomes. In this section, we describe LLC services and how they differ from usual services.

Planning services. LLC staff use optional planning tools developed specifically for the program, including the LLC Career Pathway Plan, to gather participants’ short- and long-term career goals around their transition post-high school. LLC service strategies to address short-term goals can include improving pre-employment skills, writing cover letters and resumes, and interview skills. Services to address long-term goals can consist of career exploration activities or counseling about life after high school and resource information on mental health and financial aid. Staff who provide usual services also rely on planning tools; however, the LLC Career Pathway Plan is a tool that is specific to LLC’s goals and objectives.

WBLEs. Work-based learning is a central component of LLC. The LLC goal is to provide each participant with three WBLEs during their involvement in the program, including one job shadow experience, one unpaid internship or volunteer experience, and one employer-paid WBLE in a competitive integrated environment (Table II.2). Participants are not required to complete each type of WBLEs in any particular sequence. Participants use WBLEs to develop important soft skills, expand their

professional networks, and assess their own capacity for and interest in a given career. For LLC participants, YESs meet with participants and use assessment tools, such as the [O*NET Interest Profiler](#), to align participants’ interests with job opportunities.

The DVR provides WBLEs to usual service participants in a different manner. Participants receiving usual services are eligible to receive WBLEs as part of pre-employment transition services and use online assessment tools such as O*NET; however, completion of the three specific types of WBLEs is not a goal for usual service participants. Also, regular YES staff coordinate WBLEs and do not have the support of a career consultant or AT specialist.

Table II.2. The types of WBLEs offered under LLC

WBLE type	Description
Job shadows	Job shadows, usually no longer than one day, enable participants to observe a professional in his or her work environment to learn about the daily tasks and skills required to do the job.
Unpaid WBLEs	LLC participants can receive unpaid jobs or internships to learn about an occupation that aligns with participants’ interests. Unpaid placements are similar to paid employee work, but within a limited time period. Some LLC participants receive a training offset payment from the DVR for their unpaid WBLEs.
Paid WBLEs	Paid WBLEs occur in competitive, integrated employment environments. The employer pays these WBLEs at or above minimum wage. ^a

^a The DVR provided a training offset payment for some participants with unpaid WBLEs. As a result, earnings data show that some employment positions had total hourly earnings that were less than minimum wage.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

AT services. LLC provides a series of AT services (Table II.3). To access these services, career consultants refer LLC participants to AT specialists, as needed. AT services typically begin with general information sessions involving participants, teachers, and family members to better understand the areas in which participants might benefit from AT. After consulting with participants and assessing their school or workplace needs, the AT specialists demonstrate products to help participants make informed choices. The LLC program then loans or purchases the products for the participant, and the specialists provide ongoing follow-up support to monitor the participant’s progress. AT specialists can loan products or devices for 30 days.

VR staff cannot provide any AT support to usual service participants unless they are within six months of high school graduation and have an identified need. In Vermont, usual service participants can seek AT supports from their high school or in partnership with the four regional offices of the Vermont Assistive Technology Program (VATP). AT staff from these offices consult with participants and their families and provide guidance and short-term equipment loans, and they demonstrate how to use devices. However, due to funding policy, the VATP cannot purchase equipment or devices for participants. High schools provide AT only for specific educational purposes, and the equipment remains with the school, not the individual, upon graduation.

Table II.3. AT services offered through LLC

WBLE type	Description
Information session	AT specialists conduct general information sessions for individuals or groups of participants on how AT might be useful.
Consultation	AT specialists consult with participants, counselors, teachers, special education paraprofessionals, and family members on specific AT options based on the participants' needs and goals for work or postsecondary education.
On-the-job evaluation and workplace assessment	AT specialists conduct on-site work evaluations to assess participants' needs and identify technology or equipment that can help them work more independently.
Product demonstration	Specialists demonstrate AT products and allow participants to test them. During demonstrations, participants can compare products and inquire about different AT options.
Loan	Participants can borrow AT products for up to 30 days at no cost to obtain first-hand experience and to decide on the appropriateness of the AT before a purchase.
Purchase	Using LLC funds, AT specialists can buy AT products for participants after an assessment and successful demonstration.
Follow-up	AT specialists provide follow-up services such as check-ins and referrals for additional AT evaluations.

AT = assistive technology; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Postsecondary education services. Postsecondary education services refer to any specialized post-high school education or training, such as two- or four-year colleges and vocational, business, or technical schools. LLC offers several enhanced postsecondary education services for participants and what they could receive through usual services for students. These services, described later, include campus tours, specialized academic programs, and multiple opportunities for dual-enrollment courses. Postsecondary education services are offered primarily in collaboration with the CCV system, a primary LLC partner with 12 campuses across the state closely aligned with Vermont's 12 district offices. CCV staff work with participants to better understand the linkages between their academics and career objectives.

- **Campus tours and information sessions.** LLC participants interested in postsecondary education at CCV can join information sessions and college tours and receive counseling to learn about courses and accessibility issues addressed by the Americans with Disabilities Act. Usual service participants can also join information sessions and college tours and receive application assistance and tutoring at CCV; however, LLC staff coordinate these activities for LLC participants as part of LLC service delivery.
- **Introduction to College and Careers .** LLC participants can enroll in Introduction to College and Careers (ICC), a free, noncredit course intended to orient participants to college and prepare them for postsecondary education. ICC helps participants develop individualized plans and identify future career goals. It includes content on self-advocacy and time management. Usual service participants can also enroll in ICC; however, LLC participants who enroll receive a supplemental, one-week, four-hour pre-course module on self-advocacy. This supplement teaches participants about how the provisions of the Americans with Disabilities Act apply to high school versus college and the nuances of navigating adult service systems.
- **Dual enrollment.** In Vermont, all high school juniors and seniors are eligible for the state's dual enrollment education program. Dual enrollment enables participants to take college-level courses that support their goals and interests. Courses must meet educational criteria for both high school and

college. Participating institutions include four-year colleges and universities, two-year community colleges, a culinary institute, and a technical college. Students receiving usual services can receive vouchers to cover the tuition for two courses worth up to four credits each at participating institutions. LLC raised this number to four courses for its participants, including noncredit college preparation courses. In most district offices, the career consultant refers the LLC participant to the primary CCV coordinator, who then collaborates with 1 of 12 CCV representatives around the state to provide dual enrollment services to the participant. Career consultants and transition counselors assess each participant's readiness for college coursework and provide counseling and guidance.

- **LLC contracted course.** LLC partnered with CCV to provide a college course exclusively for LLC participants, focusing on exploring careers, working in professional environments, and setting employment goals. This field-based course, titled Exploratory Workplace Experience, consists of 15 class hours covering work in professional settings and 80 hours in a WBLE. CCV does not offer this course outside of LLC.

Transportation services. LLC offers funds to support participants' transportation needs related to education or work opportunities. LLC transportation funds are available in addition to the transportation support provided to usual service participants. Transportation funds are intended to be flexible and can cover the costs of public transportation options and taxis, as well as a wide range of personal expenses, such as gas, reimbursed mileage, vehicle maintenance, and driver's permit or license fees. Usual service participants do not have access to LLC transportation funds, but those with a VR case can obtain support for transportation services through case services funds or coordination with schools.

C. Pre-employment transition services and services for VR clients

LLC and usual service participants can receive other VR services: pre-employment transition services and services for VR clients.

Pre-employment transition services. Students with disabilities, including those with an individualized education program (IEP), 504 plan, or documented disability, are eligible for pre-employment transition services. Such services assist students with disabilities in advocating for themselves, gaining employment experience, and preparing for life after high school. Four primary pre-employment transition services are available to LLC participants through the DVR (Table II.4). (A fifth required service, WBLEs, is listed above as a specific LLC service.) These services are developmental activities and provided in school settings, except for individualized services and WBLEs, which occur in the field. Pre-employment transition services can occur before a participant's VR application and can continue after VR has opened a case. Pre-employment transition services are the same for LLC and usual service participants; however, pre-employment transition services for LLC participants are embedded within the LLC framework and provided by the LLC team. Students do not have to be VR clients to receive these services. Also, students who are current VR clients can receive pre-employment transition services.

Services for VR clients. Participants with open VR cases (meaning they have applied to and are eligible for VR) can also receive a range of VR services. LLC and usual service participants eligible for VR can receive additional career and training services, as determined by the IPE. IPEs outline the steps and strategies counselors and participants agree to pursue specific to competitive employment or postsecondary outcomes. VR also provides participants who receive Supplemental Security Income or Social Security Disability Insurance with financial education counseling, as needed, to inform them of how work and earnings might affect their benefits.

Table II.4. Pre-employment transition services, other than WBLEs

Service	Description
Job exploration counseling	Counseling about occupations and industries; information and assessments to assist participants with setting career goals
Counseling on postsecondary education opportunities	Guidance on postsecondary education and training opportunities; information and advising on college, trade, and technical schools; assistance with applications and financial aid
Workplace readiness training	Job seeking guidance and soft skills training needed for work; assistance with resumes and interview skills; training in how to interact with employers and coworkers
Instruction in self-advocacy	Training on how to plan and pursue future goals and assert for one's own interests.; might include training on individual rights, disability disclosure, self-determination, and how to request accommodations

WBLE = work-based learning experience.

D. DVR partnerships

In addition to its primary partners, the DVR collaborates with several agencies and organizations to provide LLC and usual services.

Secondary schools. Secondary schools are essential partners for the DVR. School special educators, guidance counselors, and administrators play a crucial role in establishing and maintaining students' IEP and 504 plans and can arrange meetings with parents and DVR staff. School staff can offer an accurate assessment of students' capabilities for planning WBLEs and provide the space to deliver many LLC and pre-employment transition services. Also, DVR staff relied on school contacts to assist with identifying eligible students for LLC. Many schools provide transportation and pre-employment transition services, which can complement DVR services.

Disability and mental health agencies. The DVR partners with private nonprofit agencies designated by Vermont to provide mental health and disability services. Designated agencies are in each state region and offer counseling and social service supports for participants with developmental disabilities, mental health conditions, or other emotional or behavioral disabilities. DVR staff collaborate with the Vermont Family Network, supporting and promoting inclusion for children with special needs. The DVR also partners with the Vermont Center for Independent Living (CIL), an agency that helps people with disabilities live more independently in their communities. The Vermont CIL provides self-advocacy training services to DVR participants.

Career and technical education system. In addition to partnering with the CCV, DVR staff collaborate with Vermont's Career and Technical Education service system, which provides programs for high school students and adult learners. DVR staff partner with this system to help participants identify and pursue education and training in various occupations, including health care, manufacturing, and cosmetology.

Partnerships to implement WBLEs. In addition to VABIR, which employs YESs and business account managers, the DVR partners with several organizations to identify and coordinate WBLEs, including Creative Workforce Solutions (CWS), the Vermont Department of Labor (DOL), and local employers. VR staff meet and network with CWS, an organization that connects employers with qualified workers. CWS also coordinates WBLEs for its customers. Business account managers are members of CWS and attend its monthly meetings. Through CWS, employment professionals meet and network to exchange

information about employers' needs, share potential job leads, solve problems, and discuss related topics about employment, including opportunities that align with specific participants. The Vermont DOL also helps facilitate WBLEs.

E. LLC training and TA partners

The DVR also partnered with TransCen, a national training and TA provider, to support LLC implementation as the lead TA provider for LLC. TransCen is a nonprofit organization that aims to improve employment outcomes for people with disabilities. TransCen has a 10-year history of working with Vermont's DVR, including providing TA for Vermont's Youth Transition Demonstration pilot project and the DVR's staffing and capacity-building efforts related to youth employment services. To support LLC implementation, two TransCen team members provided several training and monitoring activities, as described below.

Fidelity checklist and implementation monitoring. To monitor the LLC program, TransCen staff and LLC directors developed a fidelity checklist to track implementation progress. TransCen staff used the checklist to monitor how staff implemented key service elements for each LLC program component. Career consultants completed the checklist, scoring the LLC components' implementation status as either not implemented, partially implemented, or implemented. TransCen staff used the checklist to identify ongoing successes and TA and training needs in each VR district office. LLC staff originally submitted the checklist to TransCen every month for review, but the frequency changed to every quarter in the later stages of the project. TransCen staff met with the LLC staff in each district office to review the checklist, track progress toward key milestones, and troubleshoot challenges.

Early on, LLC staff reported confusion about roles, procedures, and the nature of their services. The most critical TA needs at the start of the program was understanding the LLC model. One TransCen team member said, "The TA has been really focused on scaling up. And by that, I mean, understanding what the service model is, how to implement it with fidelity, and what each staff partner's role is, in terms of implementation."

Periodic site visits and monthly monitoring calls.

TransCen staff conducted site visits to each VR district office to monitor and assist LLC's implementation with training information on the LLC components, along with staff roles and responsibilities. During the first two years, site visits occurred twice per year, with a half-day visit to each office. During these visits, TransCen staff reviewed the fidelity checklist and discussed the characteristics of local implementation. After the first two years, TransCen staff worked with LLC directors to identify three or four sites that would receive targeted in-person visits based on the individual assistance needed. In particular, during these later meetings, TransCen staff helped LLC staff build collaborative relationships with school staff.

"Early on, we were a nice sounding board for [LLC staff]. I think there was some frustration like any new initiative. Our role was figuring out the fidelity checklist and helping the LLC leadership determine how to clarify LLC procedures and strengthen staff roles."

-TransCen staff

TransCen staff also participated in or hosted calls and meetings with individual district office teams and all-state activities. TransCen staff held monthly calls with LLC staff for TA monitoring, which enabled teams to continue conversations of successes and challenges identified at the biannual site visits or address other targeted TA issues.

The DVR invited TransCen to attend the all team implementation meetings hosted by the DVR. These meetings began on a monthly schedule and shifted to once per quarter as teams became more comfortable with their implementation roles and responsibilities. These meetings focused on LLC enrollment, LLC service components, role clarification, and the fidelity checklist in the first year. In the second year, the topics shifted to group problem-solving to address issues that arose.

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III. LLC Outreach, Recruitment, and Enrollment

Program outreach and meeting enrollment goals posed numerous challenges to LLC staff. This section describes how the LLC program conducted outreach and recruitment during implementation, the processes by which LLC staff enrolled students, special enrollment considerations, and the enrollment process results.

A. LLC outreach and recruitment

Each DVR district office reached out to educate and inform potentially eligible students about the LLC demonstration, emphasizing students with an existing relationship with the DVR. LLC’s career consultants used multiple strategies and outreach events to market and promote LLC, and, in some district offices, partnered with business account managers to support recruitment efforts.

Outreach procedures. LLC outreach and recruitment activities took significant staff time during the first year of implementation. To generate a pool of eligible participants, LLC reached out and recruited using the following strategies.

First, transition counselors from each DVR district office provided contact information on eligible participants to the career consultants to lead outreach efforts. Eligible participants included all sophomore and junior high school students receiving pre-employment transition services (and therefore had either an IEP or a 504 plan) or who had an open VR case. These students, therefore, already had some interaction with DVR services before enrollment. Career consultants sent an initial outreach mailing to the eligible students in their catchment areas to inform students about LLC, describe the program, and invite them to contact the transition counselor or career consultant for more information. The outreach mailing did not promise or guarantee access to LLC services before the random assignment process. After the outreach mailing, LLC staff conducted follow-up recruitment by phone and through informational meetings. LLC staff repeated this outreach and recruitment process of mailing a batch of invitations to eligible participants the next school year (over the summer of 2018) when a new cohort of sophomores became eligible.

Outreach and recruitment challenges. Staff in most DVR district offices found outreach and recruitment to be much more complicated than anticipated. Before launching LLC outreach, many LLC staff did not think the efforts would be challenging. Most assumed that families and eligible students would be eager to participate because of the quality of services offered to both usual and LLC participants. This assumption was not unfounded, as transition counselors typically hold large caseloads of more than 100 students. The LLC model essentially offered a lottery for students to access LLC services in addition to usual services. In particular, LLC staff discovered that outreach invitation mailings and initial follow-ups did not produce enough student interest or response. Career consultants realized they would have to be more persistent and creative in their outreach than initially anticipated. They embarked on what one of the regional managers described as a “multipronged approach,” which included

Key findings

- LLC achieved its goal of enrolling 800 students.
- Enrollees were randomly assigned to LLC and usual services as intended.
- Staff encountered challenges marketing LLC and encouraging students to enroll.
- At enrollment, LLC and usual service participants more frequently were male, white, and enrolled in 11th grade; reported having learning disabilities and attention-deficit hyperactivity disorder; and were not VR clients. About half were eligible for free or reduced-price lunch.

additional mailings, phone calls (even cold calls), emails, informational events, and in-person school meetings with students.

In addition, LLC expanded the pool of students to those who were potentially eligible for DVR services (that is, those with an IEP or 504 plan) but had not yet received any services from the DVR. To reach this student population and expand the recruitment pool, career consultants collaborated with secondary school staff who referred additional students for LLC. Although some district office staff had existing relationships with schools or could identify a strong local champion to help them with this effort, some district office teams did not have sufficient ties with school staff to generate additional referrals. Other district offices lacked on-the-ground support from the school to identify students and arrange meetings.

Marketing and promotion challenges. Another unforeseen difficulty was that the career consultants—trained in counseling and service delivery—were primarily responsible for recruitment and struggled with the marketing aspect, especially trying to describe random assignment. For example, some staff were concerned that participants not randomly assigned to receive LLC services were losing out on those services’ extra benefits, despite having access to usual VR services. In interviews with the career consultants, many believed that they were “pestering” or “begging” students to participate, especially toward later recruitment periods. Eventually, one area enlisted its business account manager to help with the sales aspect of the process. The business account manager noted that “both offices weren’t doing very well on how many people they needed to sign up, and that makes perfect sense because [those two career consultants] are utter geniuses but they are not recruiters or salespeople by any means—it just does not fit their personalities.” Due to their training background, the business account manager noted the career consultants provided information about both usual and LLC services to be transparent. Still, the information overwhelmed families and set them up for disappointment if assigned to receive usual services. The business account manager’s approach was to simplify the initial information to a few key points and frame either assignment as an excellent opportunity to receive supports. Staff in various positions and levels mentioned that a better option might have been for specialized recruitment personnel other than the career consultants to recruit and enroll participants.

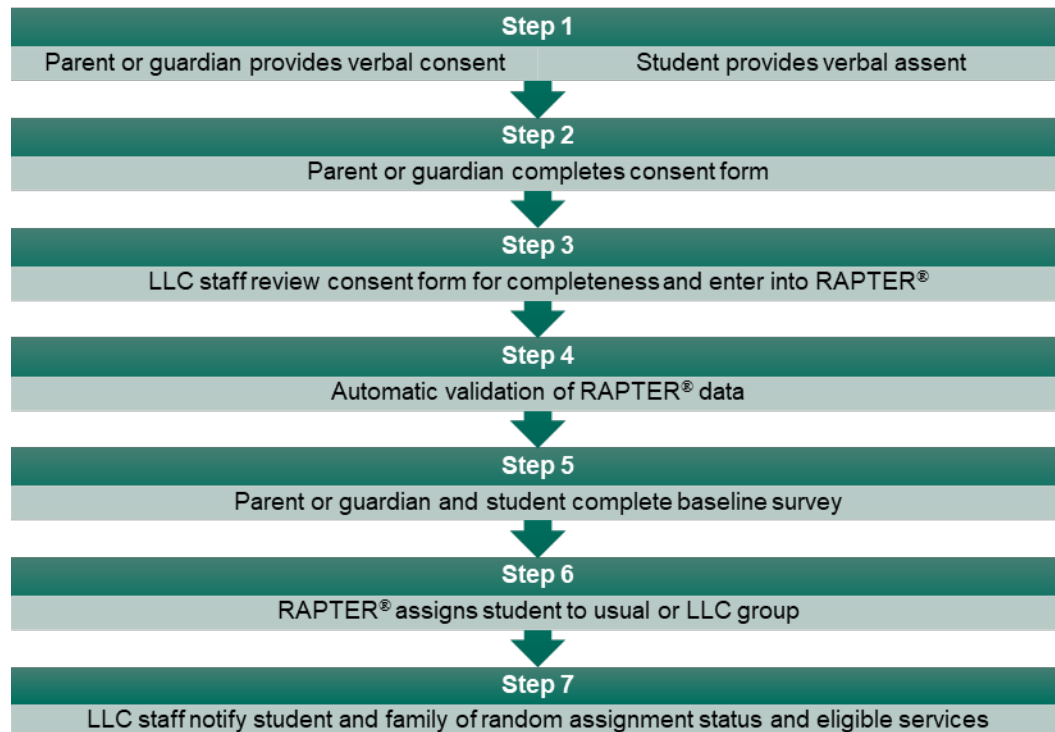
B. Enrollment and random assignment process

After completing outreach and recruitment, LLC staff conducted random assignment procedures to place eligible participants who consented to participate into one of two groups: treatment (LLC services) or control (usual services). The LLC demonstration began with a three-month pilot implementation phase in April 2017. During the pilot phase, the program enrolled 29 participants to test LLC service delivery procedures. Figure III.1 and the discussion that follows describe the enrollment and random assignment process in greater detail. The technical appendix contains additional details about the data systems and sources used during the enrollment process.

Students’ assent and parents’ consent. To begin the LLC enrollment process, the career consultant arranged an in-person meeting with the students and, in most cases, their parent or guardian. Students younger than 18 (99 percent of enrollees) at the time of enrollment also needed a parent or guardian to enroll with them to provide legal consent to participate in the study. LLC also required the students’ assent, a critical step in conducting ethical research with minors and respecting individuals’ choices when they did not have legal autonomy. During the meeting, the career consultant offered information about LLC verbally and in the form of handouts, such as copies of the consent forms and a document that provided answers to frequently asked questions. When a student (and parent or guardian, if applicable) had no further questions, the career consultant requested verbal permission or consent. The legal adult

completed and signed a hard-copy consent form. LLC required students and their families to provide consent to enroll and receive LLC services. Those who did not enroll could continue to access the DVR’s usual services for students. Also, students who did not assent could reconsider later in the enrollment period if they and their family changed their minds about enrollment.

Figure III.1. LLC enrollment and random assignment process



LLC = Linking Learning to Careers; RAPTER = Random Assignment, Participant Tracking, Enrollment, and Reporting.

Random assignment. When the parent or guardian and student consented and assented, the career consultant reviewed the consent form for completeness and entered the information into the Random Assignment, Participant Tracking, Enrollment, and Reporting (RAPTER®) system, Mathematica’s web-based management information system. The RAPTER validation process prevented the career consultants from progressing if they skipped critical pieces of information, such as the student’s name or date of birth. The consent form captured necessary demographic details on both the student and enrolling parent or guardian (if applicable), such as name, date of birth, contact information, and the parent or guardian’s relationship. After the career consultant entered the data, RAPTER automatically checked to ensure it had not already captured the student’s information, a mechanism to prevent reenrollments (occurring, for example, if a family was disappointed with or had forgotten an earlier assignment to usual services). This step included a manual check to ensure the enrolling family did not have other enrolled members, outlined in more detail later.

After the automatic and manual checks in RAPTER ensured the family had not previously enrolled, the career consultant asked the parent or guardian and participant to provide supplemental information through the computer-based, self-administered baseline survey. The survey was brief (5 minutes for

parents, 10 minutes for students) and collected data on students' characteristics, including demographics, employment experiences, goals, and expectations, which were essential benchmarks for the evaluation.

After career consultants successfully submitted the baseline survey, they would navigate back to RAPTER and the system instantly assigned students to participate in either the LLC or usual service group. Mathematica built an algorithm in RAPTER to stratify random assignment by DVR office. Staff could not access the algorithm string to ensure they could not predict or influence individual random assignment outcomes. After random assignment, the career consultant notified participants and families verbally about their placement into the LLC or usual service group and outlined the services they were eligible to receive. For participants assigned to usual services, the career consultant informed the transition counselor and established a connection between the participant and the transition counselor if that connection had not already been made.

C. Special enrollment considerations

LLC altered its random assignment guidelines for siblings and exceptional cases identified by LLC staff. This section describes these special enrollment considerations.

Sibling enrollments. LLC staff assigned any families with multiple eligible participants in a single household (including siblings, step-siblings, half-siblings, or other non-relative students) to the same intervention group. This process minimized the potential for contamination, in which participants from one group receive the services intended for participants in the other. LLC staff used the validation check built into the RAPTER to monitor sibling enrollment. First, the career consultant asked the participant and family if other eligible participants lived in the same household. If so, the career consultant entered the sibling's information and confirmed if the sibling had already enrolled. If already enrolled, RAPTER automatically assigned the new participant to the same group and designated that participant as a nonresearch case. Otherwise, the enrollment would proceed as typical. RAPTER flagged 25 participants as having an eligible sibling enrolled in the evaluation or the pilot.

Wild card enrollments. Unbiased random assignment into treatment and control groups is critical for successful evaluations, but some circumstances, known as wild card enrollments, warranted intentional placement into either the treatment or control groups. Wild card enrollments occurred on three occasions during the LLC enrollment period:

1. A career consultant accidentally informed a participant and family of the wrong assignment status, so the study team manually overwrote the status to match the information provided.
2. The parents or guardians of two eligible students had existing relationships with staff providing LLC services or working in partnering schools, creating significant potential for contamination if the students were assigned to the usual service group.
3. A career consultant made a compelling case for an exceptional student to receive LLC services.

We consider these wild card enrollees to be nonresearch cases. Although we include them in the implementation evaluation, we exclude them from the summative evaluation.

D. Enrollment and random assignment results

LLC exceeded its enrollment goal of 800 participants by 3, and the random assignment process was effective, producing two participant groups (LLC and usual services) with similar characteristics.³ In the following section, we describe enrollment data for each DVR district office, present the results of random assignment, and compare the attributes of LLC enrollees to similar youth in Vermont.

DVR district office enrollment. Most DVR district offices had a target of enrolling 34 LLC participants. To reach that goal, LLC staff had to enroll 65 to 69 students. Two district offices, Burlington and Middlebury, adjusted their target enrollments because they were contiguous, shared staff, and had differing numbers of students from which to draw for enrollment; their targets were 40 and 27 LLC participants, respectively. As shown in Table III.1, all but three district offices met or exceeded their goals for LLC enrollment. Two of the three district offices that did not meet their local targets—Morrisville and Springfield—missed their targets by only one or two LLC enrollments. For the third district office (Middlebury), staff in Burlington enrolled additional students to compensate for the enrollment deficit. After the first three months of the pilot period (with the first 29 enrollments in 2017 contributing only to the pilot effort), the number of study enrollments by quarter began slowly (Table III.2). Enrollment increased considerably after the first six months; when career consultants enrolled at a higher pace in the third quarter (with 156 students enrolled), they continued to meet this pace through the end of the enrollment period, with the largest enrollment occurring in the final quarter.

Table III.1. LLC recruitment and enrollment efforts, by district office

	Recruitment goal (all participants)	Percentage of target	Number enrolled in treatment group	Number enrolled in control group	Total enrolled
Total	802	100%	413	390	803
Barre-Montpelier	69	104%	35	37	72
Bennington	67	112%	38	37	75
Brattleboro	67	104%	36	34	70
Burlington	80	121%	49	48	97
Middlebury	54	54%	17	12	29
Morrisville	67	97%	33	32	65
Newport	67	103%	35	34	69
Rutland	67	100%	34	33	67
Springfield	67	88%	32	27	59
St. Albans	65	100%	34	31	65
St. Johnsbury	65	100%	34	31	65
White River Junction	67	104%	36	34	70

Source: DVR administrative data.

Note: Some participants moved over the course of the demonstration. This table reflects the participant's location at enrollment. The counts do not include pilot cases.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers.

³ One LLC participant passed away during the evaluation period and was withdrawn.

Table III.2. LLC enrollment, by calendar quarter and year

	Total	Treatment group	Control group
April, May, June 2017	25	25	0
July, August, September 2017	32	17	15
October, November, December 2017	156	78	78
January, February, March 2018	154	83	71
April, May, June 2018	147	75	72
July, August, September 2018	106	52	54
October, November, December 2018	212	112	100
Total	832	442	390

Source: DVR administrative data.

Note: The 25 treatment group cases enrolled in April, May, and June 2017 were pilot cases (another 4 pilot cases enrolled in July 2017) and 1 of the 212 who enrolled in the fourth quarter of 2018 did not enroll until January 2019.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers.

Enrollees’ characteristics. When comparing participants’ traits at random assignment, the demographic characteristics are largely similar between the LLC and usual service groups, suggesting that random assignment procedures were successful (Table III.3). Participants were more frequently enrolled in 11th grade, male, and white. The most common disability conditions included learning disabilities and attention-deficit hyperactivity disorder (ADHD). Most were not VR clients at the time of enrollment, and about half were eligible for free or reduced-price lunch (underscoring the families’ limited means). Moreover, most parents or guardians had high expectations for their youth regarding work and education after high school.

However, a smaller percentage of participants (about 3 to 5 percentage points) in the LLC group had the following disabilities: ADHD, emotional disorders, physical disabilities, and speech or sensory impairments (visual and hearing). These between-group differences, although small, could be associated with differences in participation rates for some services and outcomes, in a positive or negative direction. The differences are small enough that we can control for them using multivariate regression models in estimating the impacts of LLC for the impact evaluation.

Table III.3 Characteristics of LLC and usual services participants at enrollment

	LLC	Usual services
Number	413	390
Average age (years)	16.7	16.8
Grade		
10th ^a	45.8%	46.7%
11th ^b	54.2%	53.3%
Gender		
Male	61.5%	60.0%
Female	36.8%	37.4%
Race		
White	93.0%	93.6%
Black	4.6%	5.6%
Other	10.7%	9.0%
Hispanic ethnicity	5.3%	6.4%
Conditions (could have more than one)		
ADHD	45.6%	48.2%
Autism	16.2%	16.4%
Emotional disorder	34.6%	39.5%
Intellectual disability	11.1%	10.3%
Learning disability	49.4%	49.7%
Physical impairment or other	15.3%	18.7%
Speech, hearing, or visual impairment	27.4%	30.5%
VR client type at time of enrollment		
Potentially eligible	77.5%	75.1%
VR client	22.5%	24.9%
Receives SSI	17.9%	18.7%
Eligible for free or reduced-price school lunch	51.8%	52.6%
Parent's education: at least one parent has a college degree	37.0%	35.6%
Expects to attend postsecondary education	60.8%	60.5%
Expects to be working at age 30	98.3%	96.4%

Sources: LLC baseline survey and DVR administrative data.

^a At the time of enrollment, 3 students reported being in 9th grade and have been included in this category.

^b At the time of enrollment, 28 students reported being in 12th grade at the time of enrollment, 2 reported an “ungraded school or program,” and 8 students did not report their grade; they have been included in this category.

ADHD = attention-deficit hyperactivity disorder; LLC = Linking Learning to Careers; SSI = Supplemental Security Income; VR = vocational rehabilitation.

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IV. Implementing LLC Services

Measuring and describing LLC participants' service receipt is key to understanding how well DVR implemented the program according to its plan and the extent to which the program influenced impacts. This chapter combines qualitative and quantitative data to illustrate the implementation of LLC services during the first 18 months after LLC participants enrolled. We describe the LLC staff's use of a key planning tool and case notes, which show how LLC staff engaged with LLC participants, and discuss LLC participants' use of WBLEs, postsecondary education, and transportation services. We also consider how the COVID-19 pandemic affected LLC service provision.

A. LLC planning tools and case notes

As LLC staff contact participants and coordinate services, they use planning tools to facilitate transition planning and record case notes to document their engagement with or on behalf of the youth.

LLC Career Pathway Plan. As noted in Chapter II, the LLC Career Pathway Plan is a tool LLC staff use to learn about LLC participants and help with their transition and career exploration. Among all LLC participants and pilot enrollees (441 individuals), 253 had LLC Career Pathway Plans (57 percent) within the first 18 months of enrollment. The LLC Career Pathway Plan is an optional tool for LLC staff to complete with each participant.

LLC case notes. LLC staff use case notes to record their contacts with LLC participants and describe service coordination activities. Our analysis of DVR case note data, summarized in Table IV.1, indicates LLC staff recorded case notes for almost all LLC participants. On average, each participant had 28 case note entries and had entries in roughly half of their first 18 months after enrollment. Participants had about the same average frequency of entries (9) from career consultants, YESs, and transition counselors, and only an average of less than 1 case note entry by an AT specialist. Given the career consultant's unique position as a lead coordinator of LLC services, one might expect the percentage of participants with career consultant case notes (81 percent) to be highest. However, LLC participants most frequently had notes recorded by the transition counselor, who is the "holder of the case," (87 percent) followed by the YES (85 percent). These data show that each of the three primary LLC staff are involved at similar levels with LLC participants. Participants had the least involvement with AT specialists, who entered notes on 18 percent of participants. This involvement likely reflects the nature of their interactions, which relies on referrals made by other LLC staff.

To assess potential differences in LLC staff's engagement with participants over time and whether this engagement varied for participants who enrolled early or late, we plotted the proportion of participants with a case note by month after enrollment (Figure IV.1). The figure shows LLC staff recorded case notes fairly consistently over time, with about 25 to 30 percent of participants having a case note entry in any given month. In addition, a slightly higher proportion of late enrollees (those enrolled from April 1, 2018, to December 31, 2018) had a case note in the sixth month after enrollment and thereafter than did early

Key findings

- Career consultants, YESs, and transition counselor were equally involved in engaging LLC participants.
- Although most participants had WBLEs, few had more than one.
- About an equal number of participants had unpaid WBLEs and competitive integrated employment (CIE), and few engaged in job shadows.
- About one in five participants received AT, postsecondary education, and LLC-funded transportation services; however, those who used the latter two services did so frequently.

enrollees (those enrolled before April 1, 2018). Enrollment activities on the part of LLC staff, which would have been more intensive during the observation period for early enrollees than for late enrollees, is one reason for this difference in case note entries.

Table IV.1. Case notes from LLC staff within 18 months of enrollment

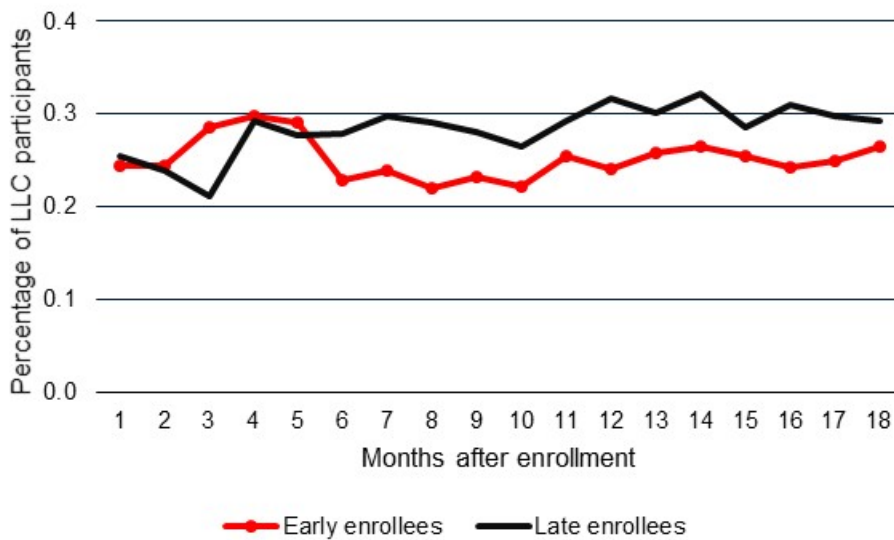
	Percentage of LLC participants with case notes from staff	Average number of case notes	Average number of months with case notes
Any LLC staff	99.5	28.16	9.62
Career consultant	81.0	9.26	4.14
YES (LLC or regular)	84.8	9.47	3.82
Transition counselor	87.1	8.86	4.18
AT specialists	18.3	0.57	0.40

Source: DVR administrative data.

Note: N = 442 LLC participants.

AT = assistive technology; LLC = Linking Learning to Careers; YES = youth employment specialist.

Figure IV.1. Case notes from LLC staff within 18 months of enrollment, by month and early versus late enrollment



LLC = Linking Learning to Careers.

B. WBLE services

Work-based learning is the central feature of LLC. Here, we summarize how programs implemented WBLEs and present data on WBLE implementation activities, including the percentage of participants with each type of WBLE, participants' WBLE occupations and earnings, participants' experience receiving WBLEs, and participants' and LLC staff satisfaction with the WBLE component.

1. WBLE implementation

WBLE implementation and progressive employment strategies.

To implement the WBLEs component, LLC staff, led by the YES, used progressive steps toward employment and worked to secure local opportunities aligned with participants' interests, job readiness, and vocational goals. To identify and secure WBLEs for participants, YESs and business account managers networked with employers and partner associations, such as CWS. In some cases, LLC staff used a single employer to obtain WBLEs for multiple participants with similar interests. LLC required that participating employers and partner organizations complete additional information forms at the beginning and the end of the WBLE to document expectations and reflections.

WBLE usage and time to first placement. Among LLC participants, 61 percent had at least one completed or ongoing WBLE within 18 months of enrollment (Table IV.2). One in five (22 percent) had their first WBLE within the first 6 months of enrollment, a relatively rapid pace compared with other LLC participants. A few LLC staff commented on the pace of LLC services, noting they tried to move faster with LLC participants by connecting them with career and educational resources and services.

2. WBLE types

LLC relied on three types of WBLEs: job shadows, other unpaid WBLEs, and CIEs. Table IV.2 provides statistics on the use of these three types of experiences.

Job shadows. Job shadows were the least common type of WBLE, used by 9 percent of LLC participants. These experiences are, by definition, brief, on average lasting less than three hours and occurring over two days. During job shadows, participants observe a worker and do not do any tasks. LLC staff noted many participants were ready for and primarily interested in paid employment or jobs that lead to paid work, so were reluctant to participate in job shadow experiences.

Other unpaid WBLEs. One-third of LLC participants (32 percent) had one or more other unpaid WBLEs, such as internships or volunteer experiences. Unpaid WBLEs averaged seven hours per week and varied substantially in length: one-half

Progressive steps toward employment

LLC staff defined progressive employment “as small steps toward paid employment ... [and] getting students’ exposure. It may start with an informational interview with someone in a field they’re interested in or going on a company tour to see what an office or auto shop looks like, or we could [set] up job shadows where people are watching someone in action. And then those work experiences are two- to eight-week-long experiences set up at a place of employment—treated like a job—but VR is providing the funding for that, so they’re paid a training offset stipend for their time, and they’re gaining employment skills. It’s how we can assess how they would thrive in a place of competitive employment.”

– LLC YES staff

Table IV.2. LLC participants' use of WBLEs during the first 18 months of enrollment

	Percentage with experience	Average number of experiences	Average number of experiences among participants who had the experience	Mean weekly hours among those with experience	Number of completed experiences	Number of experiences not completed within 18 months of enrollment	Mean duration of completed experiences (days)	Median duration of completed experiences (days)
Any WBLE (job shadow, WBLE, or CIE)	61.1	1.06	1.74	13.36	323	147	64.89	40
Job shadow	8.6	0.10	1.18	2.64	45	0	1.89	1
Other unpaid WBLEs	32.4	0.48	1.50	7.24	192	22	54.92	36
CIE	33.9	0.48	1.41	21.86	86	125	120.09	88

Source: DVR administrative data.

Note: N=442 LLC participants.

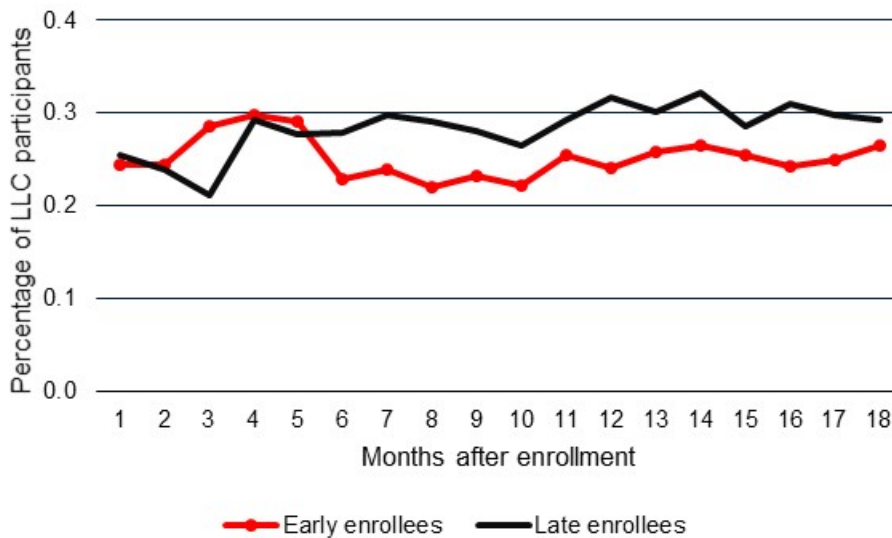
CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

of the completed unpaid WBLEs lasted more than 36 days. LLC staff reported these WBLEs are often similar in tasks and expectations to paid employment, but within a limited time frame. Unpaid WBLEs are often exploratory opportunities for participants to learn about topics or careers they know little about to gauge their interest. Although employers do not pay participants for these experiences, the DVR provided training offset payments for some of these participants; the average amount paid per hour was \$8.27 (or below Vermont’s minimum wage).

CIE. One-third of LLC participants (34 percent) had a WBLE in a CIE environment, meaning an employer paid wages for the job. The duration for completed CIE opportunities was substantially longer (120 days on average) than for other types of WBLEs. Participants engaging in CIE also averaged more hours of work per week (22 hours) than participants who completed unpaid WBLEs or job shadows. Most CIE opportunities were ongoing at 18 months after enrollment, meaning LLC participants continued to work or LLC staff were not aware of the CIE ending.

Multiple WBLEs. LLC intends for each LLC participant to have three WBLEs by the end of the program. However, only a small proportion had participated in three WBLEs of any type during the first 18 months of enrollment (11 percent), and just 18 percent of LLC participants had participated in at least two WBLEs that included one that was a CIE, an important statistic for the RSA (Figure IV.2). LLC implementation activities are ongoing, and the percentage of participants with multiple WBLEs could increase before LLC concludes in August 2021. LLC participants with a long-term CIE might also be likely to have just one experience, so the goal of three WBLEs would not be relevant for them.

Figure IV.2. Percentage of LLC participants with WBLE experiences



Source: DVR administrative data.

Note: N = 442 LLC participants.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

3. WBLE characteristics

In this section, we consider selected characteristics of the WBLEs, including occupations, earnings, and the distribution of WBLEs by program year and participants' age. These characteristics provide insight into the most commonly obtained jobs, variation in wages, and when CIE and WBLEs occurred.

WBLEs and worker safety issues

Worker safety regulations and local job opportunities affected the types of occupations available to LLC participants. For example, one YES said that although many participants were interested in car mechanics, these jobs have age restrictions because of risks from the heavy equipment or limitations from insurance policies. Instead, LLC team members sought similar work to avoid these restrictions, such as automotive parts sales.

Occupations. An occupation is the specific task or collection of tasks an individual performs. LLC participants had various WBLE occupations, ranging from computer coding to photography. Retail worker roles, such as cashiers, salespersons, counter, and rental clerks, were the most common occupations, representing 25 percent of WBLEs (Table IV.3). About 15 percent of WBLEs included food preparation or food service jobs, and 10 percent of WBLEs involved providing personal, child, or animal care services.

Industries. Industry refers to the type of business or firm where a person works. Most WBLEs involved

two industries: retail and wholesale trade (32 percent) and services (27 percent). Retail and wholesale trade industries refer to businesses that sell directly to the public or other retail companies. Service industries represent an array of person-to-person activities, such as recreation, hospitality, and personal care. The remainder of WBLEs were in industries in other sectors (20 percent), such as transportation and social services, or were unknown because of missing data (22 percent).

Hourly wages. Among all LLC participants with WBLEs or CIEs, the average hourly wage was \$11.21 (in 2020 dollars), which is slightly above Vermont's minimum wage of \$10.96 per hour in 2020 (Table IV.4). Several participants' hourly wage was below this minimum for the following reasons. Some participants held a job in earlier years (when the Vermont minimum wage was slightly lower) or were employed in New Hampshire, which does not have a state minimum wage but requires employers pay the federal minimum wage of \$7.25 per hour. Some LLC participants also received less than minimum wage for their WBLEs because they received DVR training offset payments. The DVR paid 38 LLC participants an average of \$8.27 per hour for their unpaid WBLEs. Youth with WBLEs in child care, (nonfarm) animal care, education, and personal service occupations were least likely to receive wages for their WBLEs (35 percent); however, these occupations had the highest hourly wages (\$12.21) compared to all other occupations among youth who did receive wages. These positions require higher levels of expertise or pay higher entry-level wages. WBLEs with agricultural occupations were most likely to receive pay for their WBLEs (80 percent of participants), but received the lowest hourly wage (\$10.32) among those receiving wages. LLC staff reported that food service jobs were typical among participants who were primarily interested in earning money. Most participants with food preparation or service jobs received pay for their WBLEs (79 percent) and had an average hourly wage of \$11.19.

WBLE success story

LLC staff reported many WBLE success stories and unique job placements. For example, one participant expressed an interest in photojournalism, and the LLC youth team connected her with a local newspaper: "It all worked out very well; she had some articles published with some pictures."

Wages across industries were relatively similar, though WBLEs in the service industry were less frequently paid than WBLEs in the retail and wholesale trade or other industries.

Table IV.3. Characteristics of CIEs or WBLEs within 18 months of enrollment

	Number of CIEs and WBLEs	Percentage of total CIEs and WBLEs
Total	470	100.0
Occupation group		
Agricultural workers	25	5.3
Building and grounds maintenance	19	4.0
Child and (nonfarm) animal care, education, and personal service providers	48	10.2
Food preparation and service	70	14.9
Office-based ^a	27	5.7
Retail workers, store clerks and customer service workers	115	24.5
Other occupations ^b	64	13.6
Missing ^c	102	21.7
Industry group		
Retail and wholesale trade	149	31.7
Services ^d	127	27.0
Other ^e	93	19.8
Missing	101	21.5
Year		
2018	174	37.0
2019	277	58.9
2020	19	4.0
By age at enrollment		
Ages 15 and younger	15	3.2
Ages 16–17	314	66.8
Ages 18 and older	141	30.0

Source: DVR administrative data.

^a Office-based occupation groups are architecture and engineering; arts, design, entertainment, sports, and media; business and financial operations; computer and mathematical; education, training, and library; life, physical, and social sciences; management; and office and administrative support.

^b Other occupations include those with too few cases to report separately: manufacturing technicians, protective services workers, electricians, construction, transportation, military, and automotive workers.

^c We note occupation and industry as missing values if the participant's AWARE record for the WBLE had neither a numerical code for occupation and industry nor a narrative description of it.

^d Services industry group includes education, health and personal care, business and social services, hospitality, recreation, and public administration.

^e Other industry groups are agriculture, forestry, and fishing; construction; manufacturing; and transportation, communication, electric, gas, and sanitary services.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

LLC program year and age at enrollment. WBLE and CIEs varied substantially by LLC program year and participants’ ages at enrollment. The number and percentage of WBLEs increased sharply from 2018 to 2019 but declined in early 2020. Nearly 60 percent of CIEs and WBLEs occurred in 2019, as LLC’s implementation activities increased. The decline in WBLEs and CIEs in the first part of 2020 (4 percent) is due to both the COVID-19 pandemic and the observation window being limited to 18 months from enrollment. Participants who were ages 16 and 17 at enrollment had the most CIEs and WBLEs (67 percent), followed by those 18 or older (30 percent).

Table IV.4. Wages for CIEs or WBLEs within 18 months of enrollment, by job characteristics and year

	Percentage who were paid	Average wage of LLC participants who were paid ^a
Total	48.7	\$11.21
Occupation group		
Agricultural workers	80.0	\$10.32
Building and grounds maintenance	73.7	\$11.02
Child and (nonfarm) animal care, education, and personal service providers	35.4	\$12.21
Food preparation and service	78.6	\$11.19
Office-based ^b	48.1	\$10.65
Retail workers, store clerks and customer service workers	60.0	\$10.97
Other occupations ^c	59.4	\$11.97
Missing ^d	2.9	\$11.07
Industry group		
Retail and wholesale trade	71.8	\$11.06
Services ^e	43.3	\$11.36
Other ^f	68.8	\$11.33
Missing	3.0	\$11.07

Source: DVR administrative data.

Notes: N=470 WBLEs and CIEs.

^a Wages are adjusted to 2020 dollars.

^b Office-based occupation groups are architecture and engineering; arts, design, entertainment, sports, and media; business and financial operations; computer and mathematical; education, training, and library; life, physical, and social sciences; management; and office and administrative support.

^c Other occupations include those with too few cases to report separately: manufacturing technicians, protective services workers, electricians, construction, transportation, military, and automotive workers

^d We note occupation and industry as missing values if the participant’s AWARE record for the WBLE had neither a numerical code for occupation and industry nor a narrative description of it.

^e Services industry group includes education, health and personal care, business and social services, hospitality, recreation, and public administration.

^f Other industry groups are agriculture, forestry, and fishing; construction; manufacturing; and transportation, communication, electric, gas, and sanitary services.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience

4. Challenges to WBLE implementation

LLC staff and managers described several challenges to providing participants with WBLEs.

- LLC staff shortages in the YES position affected WBLE service delivery, particularly during the early part of implementing LLC. After Vermont launched LLC, the program hired new LLC YES positions for the demonstration; however, the hire dates varied by the district office. To recruit these new staff, LLC hired from existing VR ranks and found new team members outside the agency.
- Some parents were reluctant to have their children engage in multiple WBLEs, preferring instead for their children to focus on school and academic performance. This preference might have been stronger when participants' academic performance was poor. Also, at least one LLC team member mentioned parents or guardians were concerned about the effect employment might have on their children's disability benefit payments.
- Transportation was a significant barrier to setting up WBLEs. Despite the availability of transportation funding through LLC, participants' access to rides or transit services was limited, particularly in rural areas. Other staff noted that establishing WBLEs during the winter months was difficult because inclement weather often made travel unsafe or impossible.
- Because most participants are minors, coordination with the school, parents, and sometimes the Vermont DOL was often necessary to plan WBLEs, particularly if a participant needed a job coach present during a WBLE.
- One staff member noted arranging WBLEs for youth is generally more difficult than for adult VR clients and believed the paperwork burden associated with LLC participation might have deterred some employers from participating.
- Schools in many VR district offices employ work-based learning coordinators, who also provide WBLE services to students, including both LLC and usual service participants. Although LLC staff collaborate with school work-based learning coordinators, the availability of school sponsored services might have affected some LLC participants' motivation to complete LLC WBLEs.

As challenges to arranging WBLEs emerged, LLC staff and TA providers developed strategies to address them. These strategies included hiring new staff, making benefits counseling available to families receiving Social Security Administration supports, and training LLC staff to work more effectively with schools.

5. Participants' and staff satisfaction with WBLEs

After participants finished a WBLE, LLC staff asked them to complete a satisfaction survey that characterized their experience. LLC staff then completed a similar assessment to indicate their perceptions of whether the WBLE was successful for the participant. In Table IV.5, we summarize the survey results on 166 of 332 completed WBLEs (representing a 50 percent survey response rate). The survey results were overwhelmingly positive.

Participants' satisfaction with WBLEs. Nearly all LLC participants who responded to the survey (96 percent) indicated their WBLE was successful. LLC participants learned new skills (96 percent) and met their goals (97 percent). Some participants could interpret a failed or incomplete WBLE as a positive experience because they learned about career options or workplace settings that they did not wish to pursue.

LLC staff satisfaction with WBLE implementation. The majority of LLC staff surveyed were satisfied with the WBLE component. Almost all agreed or strongly agreed that participants’ WBLEs were successful (96 percent) and reported that WBLEs helped youth make career decisions for the future (99 percent). Most LLC staff (95 percent) also viewed employers as meeting expectations for the WBLEs, an important aspect of the employers’ future involvement.

Table IV.5. LLC participant and staff satisfaction with WBLEs within 18 months of enrollment

	Percentage responding agree or strongly agree
Number of completed surveys	166
Number of completed WBLEs	323
Participant’s assessment	
Met goals participant set out to accomplish	97.0
Will help make career decisions for the future	95.8
Learned new skills	96.4
Had a positive experience	94.0
Successful WBLE	95.8
Staff assessment	
Met goals participant and staff wanted to accomplish	94.6
Will help youth make career decisions for the future	98.8
Youth learned new skills	96.4
Youth had a positive experience	93.4
Employer met participant's established expectations for participation	94.6
Successful WBLE	95.8

Source: WBLE survey.

Note: For each survey question, participants and staff could respond strongly agree, agree, disagree, or strongly disagree. The composite measure of “Successful WBLEs” are those with a score of 10 for participants and a score of 13 for staff (based on scoring each item from 1 [strongly disagree] to 4 [strongly agree]).

LLC = Linking Learning to Careers; WBLE = work-based learning experience.

C. AT services

Most LLC team members and managers enjoyed working with AT specialists and routinely praised their services. This section describes LLC participants’ receipt of AT services, including consultations, product demonstrations, and AT loans or purchases (Table IV.6). We also describe LLC participants’ satisfaction with AT services (Table IV.7) and identify challenges to implementing AT services. We described AT services for usual service participants in Chapter II.

LLC staff experience with AT

“I think that truly the biggest difference between LLC and [usual services] is that those LLC students have access to AT so early on. I think that there’s just so much that our AT specialist can offer.”

–YES staff

Table IV.6. LLC AT services within 18 months of enrollment

AT services	Percentage of LLC participants who used service	Average number of services used	Average number of services among those who used the service
AT consultation	18.3	0.19	1.06
AT demonstration session	9.5	0.12	1.21
AT purchase or loan	7.2	0.17	2.34

Source: DVR administrative data.

Note: N = 442 LLC participants.

AT = assistive technology; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers.

1. AT service implementation

As previously noted, two dedicated AT specialists provide individualized assistance to LLC participants after receiving a referral from the participants' career consultant. AT services typically begin with information sessions designed to educate LLC participants and families about the AT process, possible accommodations, and purchase options through LLC. Information sessions are followed by more in-depth assessments and consultations, based on need. DVR did not record data on information sessions.

AT consultation. Although several LLC staff said they “made a push to make sure every single [participant] got an AT referral,” the overall percentage of LLC participants with an AT consultation was low. Less than 20 percent received an AT consultation within the first 18 months of enrollment (Table IV.6). On average, participants using these services received a single consultation. AT specialists noted these consultations varied in structure, ranging from one-on-one meetings to having 10 or more stakeholders in the room for a single participant. Many of the meetings focused on participants' reading, comprehension, and notetaking needs. The AT specialists also recommended strategies to help participants with visual, hearing, speech, and mobility impairments.

Product demonstration. About half of LLC participants with an AT consultation also received an AT product demonstration (or 10 percent of all participants). During product demonstrations, AT specialists teach participants about product options and functions to support their informed decision making about AT use. If the LLC participant believes the product will be personally useful after the demonstration, AT specialists can request to loan or purchase the product. Figure IV.3 shows the most common AT needs among LLC participants and the tools recommended, demonstrated, lent, or bought on the recommendation of the specialists.

AT loan or purchase. Slightly more than 7 percent of LLC participants received an AT product loan or purchase, indicating most participants with a demonstration session (10 percent) obtained a product. AT products include a wide range of high-tech equipment, such as laptops and downloadable software applications; low-tech options, such as specialized seating or grab bars; and no-tech options, such as rearranging or relocating items to improve physical access. The average cost per AT product was \$397. LLC participants who accessed AT services received an average of two loans or purchases. For example, AT specialists loaned participants iPads with specialized software to help them study for their tests, and C-pen readers, which read text aloud. After completing the loan or purchase, AT specialists provide ongoing follow-up support to LLC participants to monitor their progress and support their ability to benefit from AT.

Figure IV.3. Common AT needs of LLC participants and LLC tools to address them

AT needs	LLC technology or equipment provided
Auditory access	<ul style="list-style-type: none"> • Bluetooth headphones • Bone-conduction headphones • Personal amplifiers
Augmentative and alternative communication	<ul style="list-style-type: none"> • Touch-based speech tablets
Grammar tools, spelling	<ul style="list-style-type: none"> • Grammarly software • Dictionary and thesaurus applications
Math	<ul style="list-style-type: none"> • Downloadable computer applications • Khan Academy online tools • Fraction calculators
Mobility	<ul style="list-style-type: none"> • Accessible keyboard • Accessible mouse • Step stools for reaching objects • Accessible shelving • Egg pencil grip for writing • Hand-extension tools or grabbers
Reading, handwriting, solving problems	<ul style="list-style-type: none"> • Paper with raised lines • Reading guide strips • Online text-to-speech reading tool • PDF document readers • Claro ScanPen • Speech-to-text software • Handwriting workbooks
Study skills, notetaking, memorization, comprehension, concentration barriers	<ul style="list-style-type: none"> • Claro ScanPen • Computer applications (such as dictionaries, flashcards, and vocabulary-building programs) • Computer tablets • Chromebooks • Graphic organizer worksheets • Colored overlays for isolated reading • Time management tools • Icon-based watch • Reminder apps
Test taking, homework	<ul style="list-style-type: none"> • MyHomework application • Photo Math
Visual access	<ul style="list-style-type: none"> • Text magnification tools • Screen readers • Handheld magnifier • Irlen Overlays

Source: DVR administrative data.

Note: N = 442 LLC participants.

AT = assistive technology; LLC = Linking Learning to Careers; YES = youth employment specialist.

Examples of AT products and strategies

No-tech forms of support include schedule changes or the relocation of items, such as shelving.

Low-tech forms of support include simple or easy-to-use devices, such as reading guide strips to improve comprehension, graphic organizers and worksheets to communicate ideas, and grabber tools to extend a participant’s reach.

High-tech forms of support include smart pens, which can help with notetaking, and accessible computer devices for participants with limited dexterity, such as one-handed keyboards. Participants have also received Chromebook computers, screen reader software, bone-conduction Bluetooth headphones to enhance hearing, specialized grammar software, and various computer applications to meet participants’ learning needs.

Participants’ satisfaction with AT services. LLC participants have been receptive to AT consultations and demonstrations, according to AT staff. Many participants love their AT products and show them off to their friends, according to one AT specialist. AT staff delivered 49 demonstrations to 42 LLC participants within 18 months of enrollment. Staff then surveyed demonstration recipients about one month after they received an AT demonstration, and just over three-quarters of recipients completed the survey. After the demonstrations, 97 percent of participants said they were satisfied with their AT specialist and 86 percent said they were better able to perform at school or work due to the AT assistance received (Table IV.7). About 71 percent said they understood how to use the AT tools. Most participants (91 percent) said they might benefit from more AT assistance on devices from an AT specialist.

Table IV.7. Satisfaction of LLC participants with LLC AT services within 18 months of enrollment

	Percentage responding agree or strongly agree
Number of LLC participants with AT demonstration session	42
Number of AT demonstration sessions	49
Number of students with at least one completed AT survey	32
Knows how to use the tool(s)	71.4
Is better able to perform at school or work as a result of the tool(s)	68.6
Is satisfied with the experience getting the tool(s) from LLC	68.6
Is satisfied with the experience using the tool(s) provided by LLC	68.6
Is better able to perform at school or work as a result of the AT assistance from LLC	85.7
Is satisfied with the experience of meeting with an LLC AT specialist	97.1
The AT assistance provided by LLC was helpful	88.6
Could benefit from receiving additional AT assistance or tools from LLC	91.4

Source: AT survey.

Note: For each survey question on satisfaction, participants and staff could respond strongly agree, agree, disagree, or strongly disagree.

AT = assistive technology; LLC = Linking Learning to Careers.

2. Challenges to implementing AT services

LLC intended for AT specialists to meet with each LLC participant who might benefit from AT services and prioritized higher-need participants. The LLC managers and staff encountered several challenges to

implementing AT services within the first 18 months after enrollment. These challenges include a slow start-up period, extensive travel and missed appointments, and participants' reluctance to use AT.

Slow start-up. LLC enrollment challenges slowed the pace of engagement with AT services during the early phases of the program. In one district office, the AT specialists did not receive any participant referrals for several months due to enrollment delays and difficulties. One manager reported, "For the first six months or so that [AT specialists] were on board, they almost had nothing to do because the career consultants were just enrolling participants, just getting them on board (and) weren't yet paying attention to possible AT needs."

Travel requirements and missed appointments. Both AT specialists said their jobs required substantial travel around the state, making service delivery a challenge. AT staff also said many participants canceled their scheduled appointments, leading to missed opportunities to provide direct service to participants. AT specialists said the travel time required to reach each school made cancellations more difficult.

Participants' reluctance to use AT. According to AT specialists, some LLC participants were initially reluctant to use AT. Staff said most participants did not understand what AT was before their first consultation. Others were reluctant to use a tool that differs from those used by their peers. This reluctance might have decreased the percentage of those using AT information sessions or accepting AT loans or purchases. However, LLC staff noted some of the participants who did not initially show an interest in AT changed their minds and subsequently requested consultations.

D. Postsecondary education services

As previously described, LLC encourages participants to engage in postsecondary education services such as campus tours and information services, specialized contract courses, and dual enrollment courses. This section describes LLC participants' use of postsecondary education services in general and CCV specifically, along with the challenges in implementing these services.

Overall postsecondary education service use. About one in five LLC participants (19 percent) used any of the offered LLC postsecondary education services (Table IV.8) within 18 months of enrollment. Those who used these services received almost three services, on average.

Introduction to College and Careers. A small proportion of participants (3 percent) took an ICC course within 18 months of enrollment. Commenting on the small take-up rate, one LLC staff member noted that although some LLC participants were eager to take advantage of the CCV opportunities, others struggled to see the benefit.

LLC contracted course. A small proportion of participants (6 percent) attended the LLC-sponsored course at CCV within the first 18 months of enrollment. CCV and LLC staff mentioned several possible reasons for the low usage. First, the course had an 80-hour WBLE requirement that some LLC participants found challenging to complete. Also, CCV had class size requirements and limited staff resource capacity, which affected service use. CCV campuses can offer contracted courses only if enough LLC participants are interested in taking them. Securing enough participants was a challenge in some

Campus tours and information services

"We encourage them, you know, bring your students to a CCV campus, just take them for a tour, meet with the ADA [Americans with Disabilities Act] coordinator or the high school coordinator. Just sometimes having that experience of going into the building really makes postsecondary education feel far more accessible."

—CCV representative

district offices, particularly those serving rural areas. As one staff member mentioned, “Some students are farther from the CCV location and are interested in nontraditional education.” Some CCV campuses are small and do not have the staff to offer the course, making it unavailable to participants who live in areas served by those campuses. Hence, LLC could not provide the contracted course in all district offices, partially explaining the low course enrollment rates.

Table IV.8. LLC-provided postsecondary education services within 18 months of enrollment

	Percentage of LLC participants who used service	Average number of services used	Average number of services among those who used the service
Any postsecondary education services	19.0	0.52	2.71
ICC courses	2.7	0.05	1.67
LLC contracted postsecondary courses (CCV)	5.9	0.07	1.19
Dual enrollment courses	5.9	0.11	1.88
Other LLC postsecondary education services	15.2	0.29	1.91

Source: DVR administrative data.

Notes: N = 442 LLC participants.

CCV = Community College of Vermont; ICC = Introduction to College and Careers; LLC = Linking Learning to Careers.

Dual enrollment courses. Only 6 percent of LLC participants took advantage of the dual enrollment program within the first 18 months after enrollment. Of this group, participants enrolled in almost two courses on average, which is half the number LLC participants are eligible to attend. LLC staff said most participants used their dual enrollment vouchers at CCV for English composition courses or math, which participants need to meet their high school requirements. LLC staff also reported participants expressed interest in technical education options that have work-based learning or internship components. A few LLC staff and managers explained the low use rates by remarking that participants with disabilities historically underused dual enrollment. An LLC manager said dual enrollment “Rarely if ever happens on the transition side for core [usual] VR participants with IEPs or 504 plans.”

“We have students who never even thought about going to college or would be able to afford it, so having those extra classes that they’re able to take while they’re in high school was definitely helpful. So now we have students who are going to college who normally wouldn’t.”

–LLC staff

Postsecondary education success stories

LLC created a film, “Meet Justina,” to illustrate an LLC participant’s success story with CCV.

Introduction: <https://youtu.be/sWY0KDuYliM>

Short version: <https://youtu.be/0KCK7jiDqvM>

Full version: <https://youtu.be/TO7XiJoZdIU>

Other postsecondary education services. About 15 percent of participants accessed other postsecondary services, such as campus tours, meetings, or other information services highlighted in Chapter II. Staff noted these services can provide an insightful experience for participants; however, similar to AT services, LLC staff said the overall implementation of postsecondary education services was slower than expected due to enrollment delays. Also, LLC staff

struggled to obtain consent from parents or guardians for some participants to receive postsecondary education services at CCV.

LLC mentoring pilot initiative. LLC piloted a mentoring program in two locations with 10 mentor–mentee pairs. According to LLC managers, 10 mentors—work-study participants at CCV—shared their stories about transitioning to postsecondary education, discussed career goals, and helped LLC participants navigate their work-based learning experiences. LLC staff said mentors and mentees reported positive experiences during the pilot. However, participants’ school and work schedules presented a significant challenge, and the DVR did not incorporate mentoring into the formal LLC demonstration. This report does not present data on the mentoring program because Mathematica did not evaluate the mentor program and it was not a fully operational LLC service component.

E. Transportation services

LLC designated funding to support participants’ work-based learning and postsecondary educational opportunities.

Transportation service use. Within the first 18 months, slightly less than 18 percent of participants used the LLC-funded transportation service, and the average participant who used the service did so twice. The modest use of transportation services could be a result of LLC staff relying on DVR transportation funds before spending LLC funds. A few staff reported the transportation support is a critical feature of LLC services for participants in need of support accessing job sites or activities such as a job tour. Staff in one district office reported they “try to use it as a carrot for some of the disengaged” participants. One example provided was when a participant texted that their car broke down, the staff offered money to help repair the vehicle. In this case, the money served as an incentive for the LLC participant to remain engaged in LLC and potentially benefit from employment and educational services.

Challenges to transportation service use. Despite LLC funding support, many participants face barriers to accessing reliable transportation. One LLC manager said, “In a rural state like Vermont, it doesn’t matter how much money you’ve got, you can’t get kids to [all] places.” He said some areas in Vermont have little to no public transportation. Culture can also affect participants’ decision making, which might explain the take-up rates. One LLC staff member noted some families are “too proud” to accept the extra help. Some staff addressed these challenges by coordinating with schools to arrange transportation, mainly when a participant needed one-on-one support, such as having a paraeducator or job coach present.

F. COVID-19 effects on LLC services

In April and May 2020, we asked LLC staff to reflect on how the COVID-19 pandemic affected LLC service delivery. In Vermont, DVR instructed all but essential employees to work from home, including LLC staff, beginning in mid-March 2020. Subsequently, staff had been unable to conduct face-to-face counseling activities due to the work from home orders, and WBLE activities for participants were delayed or paused. As a result, LLC staff have been out of touch with many LLC participants, and some LLC participants are disengaged or isolated. One staff member said this is especially true as participants hit “virtual fatigue” after only engaging with people outside their household via online means.

In addition, staff noted that in-school interactions, both scheduled and ad hoc, were typically the best ways to catch up with participants. Generally, staff also anecdotally have found that many LLC participants and families are reluctant to trust the establishment or outsiders. Not having the opportunity

to interact in person only exacerbates this avoidance. With more LLC participants ignoring emails, calls, and texts, one staff member said, “I wish I could knock on their door.” Another staff person mentioned she is trying to tackle this avoidance by “[trying] to be persistent and respectful,” but many participants are uncomfortable being contacted.

G. Longer-term findings on LLC service implementation

This report focuses on the first 18 months of LLC service use after participants’ enrollment. Appendix B includes tables that show services through October 6, 2020, which covers 21 to 41 months after enrollment, depending on when each student enrolled. LLC service use increased for several outcomes after the first 18 months of participants’ enrollment. Notable changes include:

- The average number of case notes reported by LLC staff (an increase of 16 notes, for an average of 44 case notes)
- The percentage of LLC participants with CIE (an increase of 7 percentage points, for an average of 41 percent)
- The percentage of LLC participants with any WBLE (an increase of 7 percentage points, for an average of 68 percent)
- The use of AT services (an increase of 7 percentage points, for an average of 25 percent)
- The use of any postsecondary education services (an increase of 4 percentage points, for an average of 24 percent)

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V. Pre-Employment Transition and Services for VR Clients

LLC participants might receive other services through the DVR in addition to those specific to LLC that could potentially contribute to their short-term involvement or long-term outcomes. Two types of other services are most relevant for the LLC evaluation: pre-employment transition services and services for VR clients. This chapter describes participants' receipt of pre-employment transition services, their VR case status, and VR services received under an IPE.

A. Pre-employment transition services other than WBLEs

As discussed in Chapter II, LLC participants can receive four pre-employment transition services from DVR, other than WBLEs, while they are students. Pre-employment transition service activities are broad and include training sessions, information exchange about effective practices, collaborations on behalf of participants, meetings, and small-group or one-on-one counseling. This section summarizes LLC participants' use of these services, as recorded in DVR data (Table V.1). We described LLC participants' WBLE use, the primary focus of LLC, in Chapter IV.

Key findings

- A substantial proportion of LLC participants received pre-employment transition services, with job exploration counseling and counseling on postsecondary education opportunities being the most frequently used services.
- Most LLC participants (93 percent) applied for VR services and had an open VR case. Among this group, the DVR had opened 75 percent of these cases upon or after LLC enrollment.
- Among the direct and authorized services offered to VR clients, LLC participants most frequently used career services.

Table V.1. Use of pre-employment transition services other than WBLEs within 18 months of enrollment

	Percentage of LLC participants with service	Average number of services	Average number of services among those who used the service
Job exploration counseling	80.3	4.30	5.36
Counseling on opportunities for enrollment in postsecondary education	55.1	1.38	2.50
Workplace readiness training	27.9	1.05	3.78
Instruction in self advocacy	21.3	0.34	1.62

Source: DVR administrative data. DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Job exploration counseling. Most LLC participants (80 percent) received job exploration counseling services. Staff reported job exploration counseling typically included efforts to discover participants' interests, skills, and strategies for pursuing employment goals. For example, one LLC participant wanted to become a football coach. The LLC YES matched him with a local athletic director and coach for an informational interview. Among LLC participants receiving this service, LLC staff recorded an average of five service activities per participant.

Counseling on postsecondary education opportunities. More than half of LLC participants (55 percent) received counseling on postsecondary education services. These counseling services involved information about training programs, financing postsecondary education, and strategies for finding the best fit regarding college. LLC participants receiving these services participated in an average of three service episodes.

Workplace readiness training. Slightly more than one-quarter of LLC participants (28 percent) received workplace readiness training. These services include activities such as assisting participants with completing job applications, writing resumes, and preparing for interviews. Work readiness also includes soft skills training, such as communication, listening, and time management. LLC staff said they often provide workplace readiness training as part of WBLE services. LLC staff often offer soft skills training to students with disabilities to understand how to handle everyday workplace interactions and figure out the best ways to respond during difficult situations. One staff member said, “I do a lot of role-playing with my students [with] autism because they don’t understand those social cues, so we try to work through different situations where that might happen.” LLC participants receiving this service participated in an average of four training activities.

“Pre-employment transition services means VR can work with kids earlier than we used to. We’re able to establish strong relationships and support the student, and a lot of times the family.”

– VR manager

Instruction in self-advocacy training. Among the services reported in Table V.1, LLC participants least frequently received instruction in self-advocacy. About one in five LLC participants (21 percent) received these services, which included training to help participants build confidence and independent living skills, such as budgeting, banking, and paying bills. On average, those receiving this service participated in just under two service episodes. However, staff reported that many schools provided similar training, which might explain the relatively low percentage of LLC participants receiving this service.

B. VR case status and services for VR clients

As previously noted, the DVR had an existing service relationship with most students recruited for LLC. The DVR guides its services based on participants’ VR case status and service plans, which indicate their stage within the rehabilitation process. The following section and Table V.2 summarize LLC participants’ VR case status, the time frame between VR open case status and LLC enrollment, and the average number of services for VR clients received by LLC participants.

1. VR case status

Pre-application status. Among all LLC participants, a small proportion (7 percent) were in pre-application status and never had an open VR case within 18 months of enrollment. Most of these participants received pre-employment transition services, as described in the previous section.

Open VR case status. Most LLC participants (93 percent) applied for VR services and had an open VR case, which means they were eligible for VR services. Among this group, the DVR had opened 75 percent of these cases upon or after LLC enrollment. The average length of time between LLC enrollment and VR open case status for this group was 8 months. A smaller proportion of LLC participants (25 percent) had open VR cases before their LLC enrollment. Among this group, DVR opened their case an average of 10 months before their enrollment in LLC.

Individualized plan for employment (IPE). After qualifying for VR, clients and their counselors develop and approve an IPE. As previously noted, the IPE is an essential planning document that specifies VR services that will be delivered relative to the client’s goals. DVR staff can provide services directly to LLC participants or authorize the purchase of rehabilitation services from an outside vendor. Among LLC participants with an open VR case, few (32 percent) had an approved IPE within 18 months of LLC enrollment.

Case status at 18 months. Most LLC participants with an open VR case had their cases remain open at 18 months after enrollment (92 percent). The remainder of LLC participants who had a VR case had exited from VR (8 percent), which means they no longer received VR services at the time of the data extract.

Table V.2. VR case status within 18 months of enrollment

	Percentage of LLC participants
Did not have an open VR case	7.0
Had an open VR case	93.0
Had a signed IPE	31.9
Case remained open 18 months after enrollment	92.1
Case was closed as of 18 months after enrollment	7.9

Source: DVR administrative data.

DVR = Division of Vocational Rehabilitation; IPE = individualized plan for employment; VR = vocational rehabilitation.

2. Services for VR clients

The DVR provided VR services to many LLC participants, including direct services offered by the DVR and authorized services purchased on behalf of the client. LLC participants most frequently received career services (Table V.3). Nearly one-half (47 percent) received any career services, such as information referral, benefits counseling, on-the-job supports, or job placement assistance. On average, participants with career services received nearly five service episodes. Training services, such as job readiness, disability-related skills, and vocational training, were less frequent, as just under 30 percent of LLC participants received them. Participants who received training services averaged two service episodes. Also, a substantial proportion of LLC participants (41 percent) received other VR services, such as personal attendants, interpreters, and reader services. LLC participants in this category received nearly four of these services, on average.

Table V.3. VR services for clients within 18 months of enrollment

	Percentage of LLC participants with service	Average number of services	Average number of months with a service	Average number of services among those who had the service
Career services	47.1	2.17	1.83	4.61
Training services	28.5	0.64	0.73	2.23
Other VR services	41.0	1.58	1.38	3.87

Source: DVR administrative data.

Note: N = 442 LLC participants.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; VR = vocational rehabilitation.

VI. LLC Implementation Differences by Individual Characteristics and District Offices

Statewide implementation and LLC uptake could differ by participants' characteristics and geographic regions. These variations provide essential insights for interpreting the program's impact and considering future implementation strategies. This chapter presents information about the use of selected LLC services by participants' characteristics and VR district office in the first 18 months after enrollment. We focus on the services discussed in Chapters IV and V that reflect the core aspects of the LLC model.

A. Selected LLC service use by participants' characteristics

We assessed LLC service use by participants' demographic characteristics (sex, race, and school grade); enrollment cohort (early and late); disability type (ADHD versus all other conditions); and economic characteristics (employment status and qualifying for free or reduced-price lunch). Pilot cases did not complete the baseline survey, on which these analyses are based. Thus, these analyses include only LLC participants randomly enrolled into the treatment group.

- **Sex.** Males received more transportation services (by 7 percentage points each) than females (Table VI.1). Female participants participated more frequently in WBLEs or CIEs (6 percentage points) and AT consultations (7 percentage points) than male participants.⁴
- **Race.** LLC service use rates for White and non-White participants (LLC participants who self-identified as Black, Hispanic, or other) were dissimilar for three of the seven selected service measures (Table VI.1). White participants received more CCV or other postsecondary education services (by 5 percentage points) and transportation services (by 4 percentage points) than non-White participants, and they also had more LLC case notes (an average of 42 versus 35, respectively).
- **Younger versus older participants.** LLC participants enrolled in 11th grade consistently accessed five of the seven selected services at slightly higher rates than their 10th-grade peers (by at least a 4 percentage point difference in these categories) (Table VI.1). Most older participants were nearing graduation, which might explain these differences, particularly for CCV and other postsecondary education services (5 percentage points) and AT services (5 percentage points). The largest difference in services occurred with completed IPEs: those enrolled in 10th grade had rates of IPE completion that were 20 percentage points lower than older participants.
- **Early versus late enrollment.** LLC participants who enrolled earlier accessed CCV or other postsecondary services and AT consultations and attained a signed IPE more frequently than later enrollees (Table VI.1). Because we calculated these statistics over the same amount of time (18 months) for all participants, the presumption that later enrollees might still be receiving services and so eventually would catch up with their early enrollee peers with time cannot explain this finding.

Key findings

- LLC service uptake differed by participants' characteristics; older participants, those with previous employment experience, and early cohort participants were more likely to use WBLE and CCV services than other participants.
- DVR district offices varied in service delivery rates, particularly for CCV and AT services.

⁴ Participants could also report gender identities other than male and female, but we excluded those cases from this analysis due to small sample size (six cases).

Table VI.1. Selected LLC and VR services within 18 months of enrollment, by individual characteristics at enrollment

	Male	Female	Race, white	Race, black or other	10th grade	11th grade	Early cohort	Later cohort	ADHD	Other conditions
Number of participants	254	152	384	60	189	224	203	239	188	225
WBLE or CIE experience	58.3%	63.8%	60.4%	61.7%	57.7%	62.5%	60.1%	61.9%	62.2%	58.7%
CCV or other postsecondary services	19.7%	18.4%	19.8%	15.0%	16.9%	21.4%	22.2%	16.3%	15.4%	22.7%
AT consultation	15.4%	22.4%	18.8%	16.7%	15.3%	20.5%	22.2%	15.1%	13.8%	21.8%
LLC-funded transportation	20.5%	13.8%	18.8%	15.0%	15.9%	19.6%	16.7%	18.4%	18.1%	17.8%
LLC case notes (mean)	42.6	39.6	42.1	34.6	43.3	40.6	39.4	43.8	44.3	39.8
Any other pre-employment transition services	87.0%	86.8%	87.2%	85.0%	86.8%	86.6%	89.2%	85.8%	85.6%	87.6%
Had a signed IPE	28.0%	25.7%	27.9%	25.0%	16.4%	36.6%	46.8%	19.2%	26.6%	28.0%

Source: DVR administrative data.

Note: N = 413 (LLC pilot cases are excluded because they did not complete the baseline survey). Sample sizes by gender are smaller due to nonresponse and are larger by race because students could identify as more than one race.

^a At the time of enrollment, 3 students reported being in 9th grade and have been included in this category.

^b At the time of enrollment, 28 students reported being in 12th grade at the time of enrollment, 2 reported an “ungraded school or program,” and 8 students did not report their grade; they have been included in this category.

ADHD = attention-deficit hyperactivity disorder; AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; IPE = individualized plan for employment; LLC = Linking Learning to Careers; WBLE=work-based learning experience.

- **ADHD compared to other conditions.** Participants who reported ADHD as a disabling condition accessed WBLEs or CIEs at slightly higher rates than those who did not report ADHD (Table VI.1). However, LLC participants with ADHD had slightly less engagement with CCV (by 7 percentage points) and AT consultations (by 8 percentage points).
- **Economic characteristics.** The picture of services by participants’ economic characteristics is complicated (Table VI.2). Participants who had worked before they enrolled in LLC had higher rates of WBLEs or CIEs, as well as AT consultations and signed IPEs, but lower rates of transportation and other pre-employment transition services, relative to participants who had not worked. The latter group also had more case notes than their counterparts who had prior work experience. In addition, participants who did not qualify for free or reduced-price lunch at school had higher rates of WBLEs or CIEs, postsecondary education services, AT consultations, and signed IPEs, but lower rates of most other services, compared to participants who did qualify for free or reduced-price lunch. These patterns suggest participants with prior work experience or from households with more resources could take advantage of the services that are the primary focus of the demonstration, WBLEs and CIEs, whereas other participants might have benefited from the other services that LLC offered.

Table VI.2. Selected LLC and VR services within 18 months of enrollment, by economic characteristics at enrollment

	Employed	Not employed	Qualifies for free or reduced-price lunch	Does not qualify for free or reduced-price school lunch
Number of participants	255	157	214	185
WBLE or CIE experience	64.3%	54.1%	57.9%	63.2%
CCV or other postsecondary services	19.6%	19.1%	15.4%	24.9%
AT consultation	20.4%	14.6%	16.4%	20.0%
LLC-funded transportation	16.1%	21.0%	19.6%	15.7%
LLC case notes (mean)	38.1	46.8	45.5	37.5
Any other pre-employment transition services	83.5%	92.4%	86.9%	87.6%
Had a signed IPE	31.4%	21.0%	22.9%	32.4%

Source: DVR administrative data.

Note: N = 413 (LLC pilot cases are excluded because they did not complete the baseline survey). Sample sizes by characteristic are smaller due to nonresponse.

AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

The reason for these differences across individual characteristics is unclear. Some individual characteristics—such as race, grade at enrollment, and economic characteristics—were associated with greater receipt of LLC services in patterns that might be expected. However, enrolling later in the demonstration rather than earlier should have led to higher, not lower, service use, as staff became more familiar with the program and established relationships with partner organizations. The fact that service receipt was lower among students entering the demonstration with fewer economic resources might point

to a need for additional outreach or targeted approaches to service engagement for these groups of students.

B. Selected LLC services by DVR district office

Uptake of many LLC services varied substantially across district offices. Table VI.3 displays the percentage of LLC participants in each district office who received each type of LLC service. The variation across district offices suggests local challenges and solutions, such as family socioeconomics, staff turnover, or relationships with local partners, can influence individual interest in services and service uptake.

- **WBLEs and CIEs.** Across all district offices, the proportion of LLC participants who had at least one WBLE or CIE within 18 months of enrollment ranged from 41 to 87 percent. In 10 of the 12 district offices, more than half of the LLC participants had at least one WBLE or CIE experience. Newport, Barre-Montpelier, and St. Johnsbury had the highest uptake of WBLEs and CIE experiences (above 70 percent), whereas White River Junction and Springfield had the lowest (below 50 percent).
- **CCV and other postsecondary education services.** Engagement with CCV and other postsecondary education services ranged from 0 to 47 percent; it was highest in St. Albans, Newport, and Rutland (each above 35 percent); Brattleboro and Burlington were below 5 percent and no participants in Middlebury received this service.
- **AT consultations.** Participation in AT consultations ranged from 3 to 35 percent. Newport and Rutland had the highest rates of AT consultations (more than 30 percent). Fewer than 8 percent of participants in Brattleboro, Burlington, and Springfield accessed this service.
- **Transportation.** Across district offices, 3 to 38 percent of LLC participants used the LLC transportation service. More than 35 percent of St. Albans and Newport LLC participants used the transportation funds, whereas in Barre-Montpelier, Morrisville, and St. Johnsbury, less than 6 percent of LLC participants did.
- **Case notes.** The mean number of case notes entered for LLC participants varied widely across district offices, from 15 notes per participant in White River Junction to 73 notes per participant in Middlebury.
- **Other pre-employment transition services.** Most participants received other pre-employment transition services in all district offices. The rates ranged from 64 (St. Albans) to 100 percent (Bennington and Middlebury).
- **Signed IPE.** District office variation in the proportion of LLC participants who obtained a signed IPE ranged from 5 to 100 percent. In St. Albans, all participants had a signed IPE, followed by Rutland with 57 percent. In Springfield and White River Junction, fewer than 7 percent of participants had a signed IPE.

The service take-up rates shown in Table VI.3 suggest a participant's district office affected access to and receipt of LLC services. In particular, participants in Burlington, Springfield, and White River Junction generally received fewer services than participants in Bennington, Newport, and Rutland, at least as recorded within DVR's AWARE system.

Three issues might lead to lower service uptake rates in some district offices. First, district offices might have encountered staff shortages that altered service delivery. For example, in one district office, a vacant

LLC YES position required other LLC staff to fill that role, affecting the staff's ability to provide WBLE and CIE services. In another district office, staff reported every LLC position on the team had turned over at least once during the LLC project; this turnover interrupted the flow in services and required reestablishing rapport with both LLC participants and community partners. LLC staff said CCV coordination and staff interaction had not been uniform across district offices. Second, in some district offices, the staff had strong relationships with their CCV representative and secondary schools, but in others staff struggled to establish relationships and services with these entities, as intended. Third, the need for some services likely varied based on factors outside of LLC staff's control, such as participants' interest in services or employment and the need for transportation funds.

Table VI.3. Selected LLC and VR services within 18 months of enrollment, by district office

	Barre-Montpelier	Bennington	Brattleboro	Burlington	Middlebury	Morrisville	Newport	Rutland	Springfield	St. Albans	St. Johnsbury	White River Junction
Number of participants	36	41	40	55	19	35	37	39	32	36	35	37
WBLE or CIE experience	77.8%	56.1%	52.5%	50.9%	57.9%	60.0%	86.5%	69.2%	40.6%	66.7%	71.4%	45.9%
CCV or other postsecondary services	19.4%	26.8%	5.0%	3.6%	0.0%	11.4%	40.5%	35.9%	9.4%	47.2%	14.3%	10.8%
AT consultation	22.2%	17.1%	7.5%	7.3%	10.5%	25.7%	35.1%	30.8%	3.1%	13.9%	25.7%	21.6%
LLC-funded transportation	2.8%	19.5%	17.5%	21.8%	10.5%	5.7%	37.8%	20.5%	12.5%	36.1%	5.7%	13.5%
LLC case notes (mean)	52.9	50.4	42.5	24.1	72.6	24.3	28.1	39.5	35.1	41.4	53.0	14.6
Any other pre-employment transition services	83.3%	100.0%	97.5%	85.5%	100.0%	94.3%	83.8%	87.2%	93.8%	63.9%	97.1%	67.6%
Had a signed IPE	13.9%	29.3%	15.0%	29.1%	31.6%	17.1%	56.8%	56.4%	6.3%	100.0%	20.0%	5.4%

Source: DVR administrative data.

Note: Some participants moved over the course of the demonstration. This table reflects the participant's location at enrollment.

AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

VII. Lessons Learned from LLC Implementation

Vermont DVR experienced many successes and challenges in implementing LLC. Lessons learned from implementing LLC could inform other VR agency administrators interested in developing similar initiatives for students with disabilities. This chapter highlights some of the lessons management and line staff identified from implementing LLC.

A. LLC outreach and enrollment

The first critical steps for launching LLC involved efforts to identify and enroll eligible students. Outreach and enrollment activities required staff to learn and use different skills.

- **LLC might have benefited from having a dedicated outreach and enrollment specialist.**

LLC staff encountered substantial challenges with outreach and enrollment. One regional manager said, “Our staff didn’t have the experience or expertise necessary to go out and get student customers ... so it was a huge undertaking for them to make sure that happened effectively.” Several LLC staff suggested it would have been helpful to have a dedicated contractor or marketing staff person coordinate LLC enrollment.

- **Future efforts should include more staff training on how to explain the demonstration to students and families.** A few staff indicated the challenge to enrollment involved a lack of clarity about how to market and explain what services LLC would entail and how those services would differ from existing usual VR transition services. One staff member said, “Normally our customers come to us.... We had to convince students and parents that this is something else you should sign up for, and it was a major undertaking.”

B. Training and TA to support LLC

With staff in 12 district offices implementing LLC, the directors, regional managers, TransCen, and Mathematica aimed to provide informative and responsive training and TA to ensure staff implemented LLC consistently and with fidelity.

- **Both LLC managers and staff found fidelity checklists to be useful TA resources.** LLC staff and managers used TransCen’s fidelity checklist, a tool to monitor and track LLC’s planned implementation activities. Especially at the beginning of implementation, the process of regularly reviewing the checklist helped teams establish and define their implementation roles and responsibilities. Staff in one district office visited by the evaluation team developed checklists and flow charts for their internal teams to ensure teams implemented LLC as intended.
- **Training in data systems should be provided before implementation.** LLC’s enrollment and data collection system for the intervention (RAPTER[®]) began at the same time as the DVR launched a new VR case management data system (AWARE), which created challenges for some LLC staff.

Key findings

- LLC implementation might have benefited from having a dedicated marketing and enrollment specialist.
- Training and TA checklist tools can help ongoing monitoring and operations.
- Although LLC participants were satisfied with WBLEs, participating in three WBLEs during high school might be an ambitious goal within the first 18 months of LLC enrollment.
- LLC staff encountered challenges engaging participants and encouraging families to use services.

Staff had to learn two new data systems while also enrolling participants and learning how to implement LLC. LLC directors suggested it would have been helpful, in retrospect, to include additional training and TA on data entry and use of the new case management system.

C. Staffing and caseload management

Caseloads for LLC staff are smaller than for staff providing usual services, which allows for more intensive interaction with participants. However, VR agencies require adequate staffing levels to provide services for an LLC-like program as designed.

- **Smaller caseloads can lead to personalized services and stronger relationships.** Unlike the large caseloads handled by transition counselors, LLC enabled career consultants—and later, LLC YESs—to have smaller caseloads, which provided staff more time to build individual relationships and service portfolios. As one LLC staff member reported, “With the LLC consumer, I think we really try to deliver everything in our arsenal for them. Here’s the litany of service we can provide, let’s tap into as many as possible, you have a right to say no if you want, but here they are. And I would say we’re more cautious to make sure every consumer has that opportunity.”
- **Staff turnover affected delivery of program services and relationships with participants and partners.** Staff turnover was a challenge for many district office teams in the career consultant, transition counselor, and YES positions. In addition to delaying or preventing service delivery with participants, staff emphasized the additional burden of rebuilding relationships with participants and employers when new staff joined the team.

“I think one of the greatest services the LLC program brought was just the ability to have fewer students. [We were] more focused and [had] more time to get to know these students, build a relationship with them and their families, [and] more time to coordinate with the schools. I think the time and relationships that have been built through this whole thing—I think that’s just really, really invaluable.”

–LLC staff

D. WBLEs

For most participants and staff, WBLEs are insightful and satisfying; however, scheduling can be a persistent challenge, and three WBLEs might be an ambitious goal for most participants.

- **WBLEs can offer participants a new perspective on career options.** LLC staff noted the importance of WBLEs for enabling participants to decide about their lives after high school. One business account manager staff member said, “Work-based learning has been really great for us, and I think we need to do more of it for sure. There have been many students who have graduated high school and then thought ‘Well, I don’t know what I want to do next,’ and so the work-based learning experiences have helped them.”
- **VR agencies should anticipate challenges when implementing WBLEs.** LLC staff encountered numerous barriers to implementing WBLEs, as

WBLEs educate about careers

“For me to be able to tell a young woman or a young man, ‘Hey, this is what it looks like to work in advanced manufacturing,’ they might kind of glaze over. But you actually take them to [a local industrial firm] and you see advanced manufacturing live in front of them, it makes it real, it changes their perspective of what we’re talking about.”

–Business account manager

described in Chapter IV. These challenges included parental concerns, schedule conflicts, and participants' need to prioritize academic performance. To successfully implement LLC, VR agencies will need to consider these potential implementation barriers to ease participation in WBLEs and develop strategies to address them. Because of these challenges, it might not be feasible to expect students to complete three WBLEs in high school within the first 18 months of LLC enrollment.

- **WBLEs have no one-size-fits-all approach.** LLC staff intended participants to flow through three types of WBLEs (job shadow, unpaid, and paid employment), but the sequence of WBLE types varied in practice. According to staff, some LLC participants started with job shadows, whereas others might have begun with paid employment. Of particular interest, some participants who started with a paid WBLE might be reluctant to engage in a job shadow or unpaid work experience because it seems “like a step backward.” This view might explain why the take-up rates for job shadows were lowest among LLC participants.

E. Other LLC services

Some participants used LLC services less frequently than other services in the first 18 months after enrollment, and the lack of service use can potentially minimize program impacts. VR agencies interested in these LLC services might want to consider steps to engage participants.

- **LLC might need new strategies to increase postsecondary education service use.** In general, LLC participants' use of CCV services was lower than other services LLC offered, with few participants using, for example, LLC contracted courses. A few LLC staff said it was uncommon for transition-age youth with disabilities to participate in postsecondary education activities. Also, many parents were not on board with the idea of their children enrolling in college courses during high school. In a few district offices, resource capacity hindered progress, as CCV offered limited services due to a lack of staffing or sufficient participants to form a class.
- **Most LLC staff would like to continue AT services, though two AT specialists might be insufficient to serve the caseload of participants.** Most staff said AT was a valuable resource they would like to see continued. However, LLC had two AT specialists responsible for serving the entire state, and it might have been more effective to have double that number, as the two AT specialists spent “a lot more time traveling than actually directly serving students.”
- **Some participants were reluctant to use AT.** According to AT specialists, some LLC participants were initially unwilling to use AT. Staff said most participants did not understand what AT was before their first consultation. Others were reluctant to use a tool that made them feel different from their peers. This reluctance might contribute to the percentage of participants who received an AT service session or pursued an AT loan or purchase.
- **Having dedicated transportation funds did not eliminate all barriers to transportation.** Though staff noted that having access to the dedicated transportation funds enabled them to be creative in bridging some transportation issues to keep participants engaged in services, the funds did not address all participants' transportation issues. In particular, staff in more rural areas reported having fewer options to use the funding to alleviate this barrier. For example, with few or no feasible public transportation options, staff and participants could rely only on family or school transportation options. Staff noted lack of transportation could affect aspects of LLC participation, including employment and CCV efforts.

F. Challenges of working with transition-age youth and families

Many LLC staff had not worked with high school students before LLC and were more experienced with adult VR caseloads. Whereas adult VR clients can make choices independently, youth often depend on their families when making choices about their participation in LLC. In implementing LLC, staff found they had to engage and encourage participants and their families consistently, many of whom were initially ambivalent about the services.

- **LLC staff used different engagement strategies when working with a teenage population.** Most career consultants who previously maintained adult caseloads were not familiar with the difficulties of engaging and navigating the “hot and cold” personalities of youth clients. One staff member said, “They’re teenagers. And I think whether it’s enhanced [LLC participant] or core students, they really have to buy into this process and want these services. And they don’t always. And that may change from month to month, from week to week, how involved and engaged they are with us.” To address this issue, staff went out of their way to meet participants and families whenever it was most convenient. However, this strategy did not always work. In one anecdote, a career consultant described when she and the transition counselor traveled more than an hour to a satellite office to meet with an eligible participant. Even though they saw the participant going to the nearby store, the participant never showed up for the appointment. This missed appointment kept the staff out of their office for hours, and they had nothing to show for the excursion. Conversely, another career consultant had an LLC participant who very adamantly did not want to engage in services after enrollment. A chance encounter with the participant after they had graduated from high school found that the participant had matured enough to realize the benefit of the services and was enthusiastic about reengaging in services.
- **Participants and families need encouragement.** A few staff described some parents and participants’ low expectations or goals when thinking of their futures. Many families come from lower socioeconomic backgrounds and live in rural areas. Some of these parents or guardians can be resistant to their high school students attending college classes or aiming beyond what feels, to them, to be a realistic job. During a statewide transition team meeting, one staff member noted she struggled to encourage her participants and families to “dream bigger.”

G. LLC partnerships

Partnerships with schools and CCV emerged as a concern in some areas, potentially affecting LLC implementation.

- **VR–school partnerships affected LLC implementation.** In some district offices, LLC staff had strong relationships with teachers and administrators, but in others, it was more difficult for staff to establish strong relationships with schools. One LLC YES staff said some school staff may not fully understand the role of VR in schools and its benefits. The variability in VR-school partnership affected both LLC enrollment and service delivery. For example, when LLC expanded enrollment eligibility to include more students, school relationships were critical for career consultants to receive updated student lists. During implementation, some schools were happy to coordinate with LLC staff to provide physical space for meetings and coordinate schedules with participants, but other school teams were not.
- **With multiple LLC staff working with a school’s students, designating a primary VR point of contact with schools could reduce confusion or frustration.** To build partnerships with schools,

some LLC youth teams selected a primary VR point of contact, especially as the teams expanded to include the LLC YES position. Staff also worked to educate and encourage school staff about VR and the benefits of LLC, which maintained collaborations when schools hired new teachers and coordinators.

- **DVR staff developed new connections with CCV.** Staff noted LLC's relationship with CCV grew because of the more frequent interactions to coordinate postsecondary education services on behalf of LLC participants.

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VIII. Conclusion

Vermont DVR developed LLC to improve the college and career readiness of high school students with disabilities by expanding the education and employment services it offered. The LLC model included access to a dedicated career consultant who helped develop and oversee a participant's individualized transition plan and worked with a team of staff to coordinate WBLEs, postsecondary education activities, and AT services. LLC also provided funds to alleviate barriers to transportation. LLC directors and teams from TransCen and Mathematica delivered training and TA to implement and improve the program and monitor service delivery. The DVR will continue implementing LLC services to participants through summer 2021.

This implementation evaluation report presented findings about LLC's structure, processes, and staff experience implementing the program, including challenges and lessons learned. It described LLC participants, their use of services, and satisfaction with WBLEs and AT services during the first 18 months of operation. The students who enrolled in LLC had similar characteristics across the treatment (LLC participant) and control groups. Most LLC participants engaged in at least one WBLE and participated in pre-employment transition services; a small proportion of participants used the postsecondary education, AT, and transportation services that the program offered. Notably, the uptake of LLC services varied across DVR district offices, with staff turnover hindering the consistency of service delivery in many district offices. LLC staff found partnerships with schools, CCV, and other community partners to be critical to service delivery. Those staff with weaker local connections focused on strengthening these partnerships throughout the evaluation period. In the next section, we conclude with implications for the impact evaluation, an assessment of the risks of cross-over and contamination, and suggestions for future replication.

A. Implications for impact evaluation

Four of the findings in this report have significant implications for the impact evaluation.

- 1. Any impacts are likely due to a subset of LLC model components.** The essential services received by LLC participants included a dedicated staff (the career consultant) with a small caseload who worked with a team of others addressing transition needs related to pre-employment transition services and WBLEs. Should the LLC program impact students' employment and education outcomes, it will likely be due to these model components. However, because students assigned to the control group also had access to the latter three of these four components, the impact evaluation must assess whether LLC participants received these components at higher rates than usual service participants did.
- 2. Though most participants had at least one WBLE, few met the program's goals within the first 18 months of enrollment.** WBLEs are a central component of the LLC model, and many participants gained positive career experiences in various occupations. Indeed, more than 60 percent of LLC participants had at least one WBLE, and many LLC staff reported success in placing participants with supportive employers. Participants and staff reported high levels of satisfaction with these work experiences. However, few participants (11 percent) achieved the LLC target goal of three WBLEs. The LLC demonstration is ongoing, and the percentage of participants with WBLEs will likely increase by the close of the project in summer 2021.
- 3. District office variation might influence impacts.** As noted in Chapter VI, DVR district offices varied substantially in service delivery. Participants in district offices that delivered fewer services

might also have poorer employment and education outcomes than those in district offices that delivered more. If so, such findings could provide support for the relevance of the LLC model in promoting students' outcomes. However, this variation across district offices could diminish the ability of the program to achieve measurable impacts because some areas did not provide services as planned.

- 4. Pre-employment transition services are a substantial part of LLC.** Pre-employment transition services, other than WBLEs, are not explicit components of the LLC model. However, a large proportion of LLC participants (ranging from 21 to 80 percent) received one or more pre-employment transition services, other than WBLEs. Though LLC recruited students who received these services, our results observe service use only after enrollment in the demonstration. Because both LLC and usual service participant groups can receive these services, an important consideration will be to determine if the two groups' use of these services differed significantly. If LLC participants used pre-employment transition services at significantly higher rates, this service might contribute to any observed LLC impacts.

B. Risks of cross-over or contamination

Though some LLC staff interacted with both LLC and usual service participants, contamination risks of usual service participants receiving LLC services were minimal. The LLC program had a potential risk of contamination because some LLC staff (mainly YESs and transition counselors) worked with both LLC and usual service participants. In addition, in some instances, LLC YESs, who should have worked exclusively with LLC participants, provided support for usual service participants, primarily due to staff shortages in some district offices. However, these LLC staff reported not altering their approaches in serving usual service participants. It is possible some of these staff might have changed their practices with usual service participants to better align with their practices with LLC participants. However, usual service participants would not have access to exclusive LLC components, including the team staffing approach, the role of the career consultant, the WBLE focus, and postsecondary and AT services.

C. Suggestions for replication

Other VR agencies interested in replicating the LLC model might consider strategies to enhance implementation and the potential for advancing students' employment and education outcomes.

Increase the length of the pilot phase to provide more time to improve operations. The LLC program encountered problems with enrollment, data entry, and staffing during the initial three-month pilot phase roll-out. VR agencies interested in replicating the LLC model might want to use an extended pilot period of six months to one year during which staff can practice and refine protocols for outreach, enrollment, and collecting test data. A prolonged pilot phase can also enable VR agencies to understand participants' perceptions of the program innovations and use that information to improve service delivery.

Establish local partnerships to enhance service delivery. The strength of connections to local partners was critical for LLC's enrollment and service delivery. District offices with strong champions in secondary schools were better able to schedule spaces and times to meet with LLC participants about enrollment, making their in-person trips more streamlined and efficient. On the other hand, in secondary schools without strong support, LLC staff attempted to catch participants organically without designated spaces or timeslots, and school staff did not prioritize or advocate for LLC participants to engage with the program. Similarly, in some district offices, LLC staff had strong relationships with their local CCV representatives, but in other district offices, the team struggled to establish postsecondary education

services as intended. VR agencies interested in implementing LLC should develop and maintain strong partnerships with secondary and postsecondary schools to encourage consistent service delivery.

Establish benchmarks for service use. Major challenges to implementing LLC included modest take-up of some components of the model and variation in service delivery by location and among some types of participants. Other VR agency administrators interested in developing a program similar to LLC might establish service delivery thresholds representing a substantial contrast with usual service delivery, along with mechanisms to rapidly improve service take-up rates.

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Appendix A

Technical Appendix

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The Vermont Division of Vocational Rehabilitation (DVR) received a five-year grant from the U.S. Department of Education, Rehabilitation Services Administration (RSA) to identify, implement, and evaluate evidence-based practices for providing work-based learning experiences (WBLEs) in integrated settings for students with disabilities. Vermont implemented the resulting effort, called Linking Learning to Careers (LLC), in July 2018. Mathematica is evaluating the Vermont LLC demonstration using a combination of qualitative and quantitative methods. In this technical appendix, we provide details on the quantitative data collection and analyses, technical assistance (TA) to support data collection, and qualitative data collection and analyses.

A. Quantitative data sources and analyses

The evaluation draws on three types of quantitative data: enrollment-related data, administrative data provided by Vermont DVR, and treatment group survey data collected by Mathematica. We summarize these data sources below and in Table A.1, and also describe our approach to analyzing these data.

Table A.1. Data sources used for the formative evaluation

Data source	Description	Data collection dates
RAPTER® enrollment data	LLC random assignment system identifies whether the participant was assigned to the LLC or usual services group	At enrollment (July 2017–January 2019)
LLC baseline survey	Participants’ demographic, disability, education, and economic characteristics	At enrollment (July 2017–January 2019)
DVR administrative data	Participant’s VR district office and case status; receipt of each LLC and usual VR service; case notes documenting meetings with LLC and VR counselors	Data extracted on October 8, 2020 and covers services received and recorded between a participant’s enrollment date and October 8, 2020
WBLE survey	Treatment group participants and staff satisfaction with WBLEs	August 2018–June 2020
AT survey	Treatment group participants’ satisfaction with LLC provided AT services	September 2018–June 2020
Interviews with LLC staff and others involved in the demonstration	Staff members’ experiences with LLC implementation, WBLEs, AT services, partnerships and collaboration, and lessons learned to date	Round 1 interviews: March 25–27, 2019 Round 2 interviews: April 3–May 8, 2020

AT = assistive technology; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; VR = vocational rehabilitation; WBLE = work-based learning experience.

1. Enrollment data

RAPTER® enrollment data. LLC staff used RAPTER® (Random Assignment, Participant Tracking, Enrollment, and Reporting system), Mathematica’s web-based management information system, to collect enrollment data from students and their parents or guardians (if the student was younger than 18) and conduct the random assignment. After a student and parent or guardian (if applicable) provided consent and assent to participate in the evaluation, LLC staff entered the student’s consent form, demographic data, and contact information into RAPTER. When the staff input the required information and the student passed verification checks, the RAPTER system routed the LLC staff to an online baseline survey to collect further information.

LLC baseline survey. We employed a baseline survey to collect data using a self-administered web survey launched through RAPTER following the collection of active consent and before random assignment. The student and the parent or guardian used the computer or tablet to complete the survey. In some cases, LLC staff administered the survey verbally to accommodate a student's preferences. The online baseline survey took about 15 minutes to complete and collected information on the participants' demographic, family, and disability characteristics (such as type and severity); high school enrollment and completion; employment and earnings; and Social Security disability program participation. The baseline survey also solicited information about participants' future goals and expectations, self-efficacy, and motivation. After the student and parent or guardian completed the baseline survey, RAPTER performed the random assignment process, assigning the student to either the treatment group (the LLC services group) or the control group (to receive usual vocational rehabilitation [VR] and other services).

2. Administrative data

We use administrative data from the DVR's AWARE case management system to measure the participants' use of services during the demonstration. The data, which the DVR extracted and transferred to Mathematica on October 8, 2020, cover all documented DVR services from the start of the demonstration in April 2017 through the extraction date for participants enrolled in the demonstration in the pilot, LLC services group, and the control group. The administrative data contain information on participants' demographics (such as gender, age, and disability); training and job-related services; assistive technology [AT] services; service receipt; and fidelity indicators for program design.

We use data elements on the participant's date of birth, the enrollment date, the participant's case status with the DVR as a VR case or pre-application status at enrollment, and the case status 18 months after enrollment. Also, we use data elements on key LLC and DVR milestones and services, including a participant's IPE, LLC Career Pathway Plan, WBLEs, and other services. We also use data elements on WBLE characteristics, such as wages, industry, occupation, and narrative case notes by LLC and VR counselors. In total, the data include more than 45,000 records of services and case notes throughout the participant's involvement with DVR.

Although the data contain substantial detail on the participant's involvement with LLC and the DVR, they have some limitations. First, they include information only on WBLEs and other services authorized or facilitated by the DVR. If a participant obtained a job independently or received a transition service directly from his or her school and did not inform the DVR counselor, the AWARE data would not have a record of it. As a result, the data could undercount WBLEs and other services. We know that LLC staff across district offices varied in how they entered information in AWARE on all services or interactions with participants, based on site visit interviews. This variation could bias the interpretation of differences in service receipt and case notes across district offices.

3. Treatment group survey data

As part of LLC implementation, Mathematica developed two targeted service surveys—one on WBLEs and another on AT use—that LLC administered at various points to select treatment group members.

WBLE survey. To document the quality of WBLEs, Mathematica developed a survey for participants and the coordinating LLC staff to complete at the end of each WBLE. The questions, which RSA developed with input from the WBLE demonstration grantees, assessed several features of a WBLE from both participants' and staff's perspectives. LLC staff accessed the WBLE survey through the RAPTER system and printed digital copies to administer offline. The survey asked participants to reflect on whether

the experience met their goals, helped them make future career decisions, provided new skills, and was a positive experience. The LLC staff completed four similar items and also provided input on the employer's participation. The study team received 166 surveys for 332 completed WBLEs (representing a 50 percent survey response rate).

AT survey. Similar to the WBLE survey, Mathematica developed a brief survey designed to capture participants' satisfaction with and use of AT services. LLC staff asked participants about their experiences one month after the initial tool demonstration with the AT specialist. Participants reported the frequency of using AT tools, their satisfaction with devices, and satisfaction with the assistance they received to use AT. Within 18 months of enrollment, 42 LLC participants received 49 demonstrations. Demonstration recipients were surveyed about one month after receiving an AT demonstration, and 32 completed the survey.

4. Quantitative analysis approach

We designed the analytical approach based on an intent to treat framework. The study sample includes all participants enrolled in the demonstration, including pilot participants. Participants remain in the study sample even if they dropped out of the demonstration or disengaged with the DVR. In analyses by district office, we classified participants based on the district office at enrollment; a handful of participants relocated to a different district office during the demonstration.

We merged data from three sources for the analysis: LLC enrollment information from RAPTER, demographic and baseline characteristics from the baseline survey, and the DVR administrative data from AWARE, using a unique identification number assigned to each participant at enrollment. The analysis sample includes 832 participants, 803 of whom were assigned to enhanced LLC services (N = 413) or usual DVR services (N = 390) by random assignment, and 29 participants enrolled in the demonstration in the enhanced LLC services group as a pilot cases. Because participants in the pilot group did not complete the baseline survey, analyses that use information from that survey are limited to the sample of 803 participants who enrolled under random assignment.

For each participant, we define the analysis period as the 18 months after enrollment in the demonstration. We use 18 months because this is the longest duration we can observe all participants for the same number of months, given that the demonstration enrolled participants on a rolling basis from April 2017 to December 2018. This means we include data from April 2017 through September 2018 for the first enrollee and from December 2018 through June 2020 for the last enrollee. Because many participants continued to receive LLC and DVR services for additional months, we include appendix tables and a figure that report complete services received from the start of the demonstration in April 2017 through September 2020 for all LLC participants (Appendix B, Tables B.1 through B.14 and Figure B.1.). Many participants received services from the DVR before enrollment; our tabulations did not include those services.

We made two adjustments to the data reported in AWARE. First, we adjust all reported wages to 2020 dollars to account for inflation. Second, when the administrative data did not include information on an occupation for a participant's WBLE, we imputed it, if possible, using the information on the reported industry. We used a similar process to impute missing information on the industry of WBLEs.

B. TA to support collecting administrative and survey data

Mathematica provided training, resource materials, and TA on use of the RAPTER system and surveys to facilitate data collection.

RAPTER. Mathematica provided training to LLC staff on the RAPTER system to administer enrollment and surveys. On June 26, 2017, a member of the Mathematica team provided a full-day, in-person training for career consultants and the state VR managers on the enrollment process, including the use of RAPTER and administering the baseline survey. The training provided background information on the goals and structure of the evaluation and the importance of random assignment for the LLC evaluation. The training detailed each enrollment step, from identifying eligible participants to random assignment. LLC staff had opportunities to use a training version of the RAPTER system and baseline survey to practice the enrollment and data entry processes. Mathematica provided example recruitment scripts that described the study and responded to various aspects of enrollment and participation, as well as example scripts for telling participants about their random assignment status, emphasizing the advantages in either scenario. Trainers encouraged LLC staff to tailor the scripts to make them feel more personal and approachable to build rapport with students and families. Trainers also asked LLC staff to role play the various stages of enrollment at the training, including giving personalized recruitment pitches and using mock random assignment outcomes to practice telling participants whether they were assigned to the LLC or usual service groups. We set up virtual videoconference training for career consultants who could not attend the initial in-person training or later hires.

Surveys. In summer 2018, the Mathematica trainer provided additional virtual training activities to state VR managers and career consultants to administer the newly launched AT and WBLE surveys. LLC staff accessed both surveys through the RAPTER system.

C. Qualitative data sources and analyses

In the spring of 2019 and 2020, staff from Mathematica conducted in-person and phone interviews with LLC staff, management, and partners to learn more about their experiences implementing LLC and providing services. In each district office, we conducted one-on-one and small-group interviews with district managers and key LLC staff. We also interviewed staff from LLC partner agencies, such as Community College of Vermont (CCV) and secondary school teachers, in 2019.⁵ The composition of the small-group interviews varied by district and staff availability. Table A.2 summarizes the DVR district offices and key informants who participated in the interviews.

1. Semistructured interviews

Spring 2019 site visit. Three Mathematica team members conducted in-person individual or small group interviews that lasted 60 to 90 minutes during the first site visit (March 25 to 27, 2019). The team conducted phone interviews for those we could not schedule in person. Before the site visit, we developed a semistructured interview guide that included questions on program implementation, the differences between LLC and usual services, WBLEs, educational institution involvement, partnerships and collaboration, TA, and lessons learned to date. The team recorded and transcribed all interviews.

The site visit focused on staff and activities in four district offices: Burlington, Newport, St. Albans, and White River Junction. We selected these district offices based on the percentage of participants with LLC

⁵ In spring 2020, school representatives were not available for interviews due to COVID-19.

plans, WBLEs, and other LLC services, including meetings with VR counselors and employment staff, and use of AT services and transportation benefits. We also considered the percentage of participants who were VR clients. Two of the district offices had relatively higher statistics for these measures, while the other two district offices had relatively lower statistics.

Table A.2. Summary of interview participants, by district office

DVR district office	Regional manager	Career consultant	Transition counselor	LLC YES	Business account manager	School representative
Year 1						
Burlington	X	X	X ^a	X		X
Newport	X	X	X	X		
St. Albans	X	X	X	X ^b		X
White River Junction		X	X		X	
Year 2						
Newport	X	X	X	X ^b		
Rutland	X	X	X	X ^b	X	
Springfield	X	X	X	X ^b	X ^c	
White River Junction	X	X	X	X ^b	X ^c	

^a We interviewed only one of the two transition counselors in this district office.

^b We spoke to both the LLC and regular YES in this district office.

^c The business account manager for Springfield and White River Junction is the same person. LLC = Linking Learning to Careers; YES = youth employment specialist.

For each district office, we attempted to speak with the regional manager, the career consultant, the transition counselor(s), and the LLC youth employment specialists (YESs); we also interviewed one business account manager and two school special educators (Table A.2). In addition to staff in each district office, we spoke with LLC project leadership, the two LLC AT specialists, the two TA providers from TransCen, and representatives from the CCV and DVR. We also observed a statewide transition team meeting on March 25, 2019, which included LLC directors, representatives from the DVR, CCV, Vermont’s Agency of Education, Vermont Adult Learning, career consultants, transition counselors, and YESs from district offices.

Spring 2020 phone interviews. We conducted phone interviews with LLC staff from April 3 to May 8, 2020. We could not complete a visit on site due to COVID-19 restrictions on travel and face-to-face meetings. As noted, we could not interview school representatives, who were unavailable due to COVID-related school closures. Two Mathematica team members conducted individual or small-group phone interviews that lasted 60 to 90 minutes. We revised the semistructured interview guide used for the spring 2019 site visit to cover similar topics as the previous rounds, with an in-depth focus on service implementation progress. As with the spring 2019 interviews, we recorded and transcribed all interviews.

This set of interviews focused on staff and activities in two of the same district offices as the spring 2019 interviews, Newport and White River Junction, while adding two new district offices, Rutland and Springfield. We selected these district offices to follow up on select high- and low-performing district offices and expanded our assessment to two new district offices with variable LLC service delivery measures. We attempted to speak with the regional manager, the career consultant, the transition

counselor(s), the LLC YES, and the regular YES; we also met with two business account managers (Table A.2). In addition to staff in each DVR district office, we spoke with LLC project leadership and a CCV representative. We also conducted follow-up interviews with the two TransCen TA providers in October 2020.

Site visit interview questions. Before the site visit and interviews, we developed a semistructured interview guide covering a range of topics. Topics included staff experience implementing LLC services, outreach and enrollment, pre-employment transition services other than WBLEs, partnerships, postsecondary education services, perceived participant and family experience, potential effects, and lessons learned. The following are examples of questions included in the interview guide:

- How does Vermont DVR usually provide core services?
- For each LLC component, how do LLC services differ from core services?
- How much and what kind of technical assistance was provided to improve fidelity?
- How did you conduct outreach and enrollment to potentially eligible students?
- How closely has the implementation of LLC adhered to the program model?
- How many WBLEs were arranged, and of what quality?
- Which LLC components were more likely to be delivered, and why?
- Did later LLC enrollees receive different services from early applicants?
- What is the process of providing assistive technology to LLC participants?
- Which DVR district offices had the most success in implementing LLC?
- How are VR district offices and schools providing pre-employment transition services?
- How did LLC affect how DVR, local schools, CCV, and other community partners worked together?
- What were the successes and challenges in implementing the LLC components?
- How satisfied were LLC participants with their services?
- What are the lessons learned about implementing LLC?

2. Qualitative analysis approach

We transcribed all interview data, used NVivo software to organize data, and created an analytic coding rubric to identify interest categories and review interview transcripts based on the semistructured interview protocols. Two staff performed a reliability check by coding a subset of interviews and refining the coding rubric. After coding all interviews, the staff who coded the data wrote analytic summaries based on key themes that emerged from the qualitative data. A second staff person reviewed their summaries for completion and accuracy. We used themes and findings to address the evaluation questions in this formative report.

D. Additional descriptive statistics on LLC implementation

The following tables show statistics on LLC services for LLC participants from enrollment through September 2020. As such, they show more complete information on participants' involvement in LLC, rather than the 18-month truncated version used for the report. All tables from Chapters IV, V, and VI are included.

Appendix B

Tables Showing Services Through October 6, 2020

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Table B.1. Case notes from LLC staff through October 6, 2020

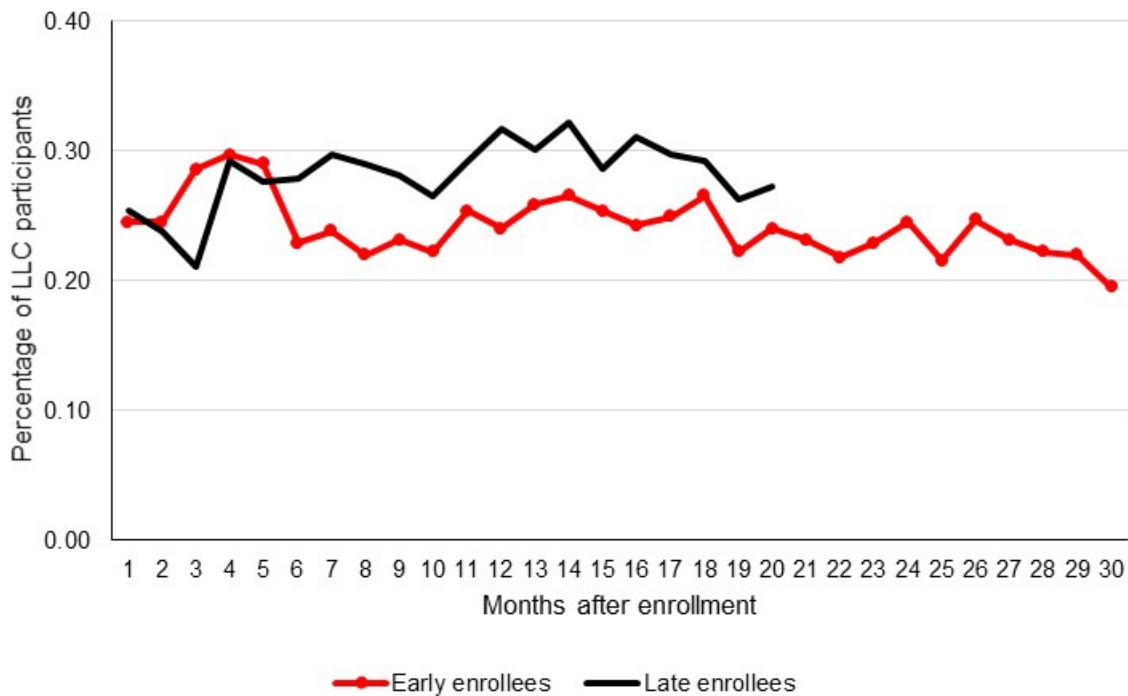
	Percentage of LLC participants with case notes from staff	Average number of case notes	Average number of months with case notes
Any LLC staff	99.5	44.15	15.21
Career consultant	82.8	14.76	6.85
YES (LLC or regular)	89.1	14.96	5.76
Transition counselor	89.8	13.50	6.38
AT specialists	26.2	0.93	0.65

Source: DVR administrative data.

Note: N = 442 LLC participants.

AT = assistive technology; DVR = Division of Vocational Rehabilitation.; LLC = Linking Learning to Careers; YES = youth employment specialist.

Figure B.1. Case notes from LLC staff through October 6, 2020, by month and early versus late enrollment



Source: DVR administrative data.

Notes: We consider participants enrolled from April 2017 to March 31, 2018, as early enrollees and those enrolled from April 1, 2018, to December 31, 2018, to be late enrollees.

We report through Month 21 for early enrollees and Month 30 for later enrollees because sample size decreases continuously following Months 21 and 30, respectively, due to rolling enrollment through December 31, 2018.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers.

Table B.2. LLC participants' use of WBLEs through October 6, 2020

	Percentage with experience	Average number of experiences	Average number of experiences among participants with the experience	Mean weekly hours among those with experience	Number of completed experiences	Number of experiences not completed within 18 months of enrollment	Mean duration of completed experiences (days)	Median duration of completed experiences (days)
Any WBLE (job shadow, WBLE, or CIE)	67.6	1.40	2.07	14.36	444	176	77.59	45
Job shadow	10.4	0.13	1.22	3.38	56	0	2.13	1
Other unpaid WBLEs	37.3	0.61	1.64	7.19	251	19	55.46	37
CIE	41.0	0.67	1.62	23.03	137	157	148.97	98

Source: DVR administrative data.

Note: N = 442 LLC participants.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.3. LLC participants' WBLE milestones through October 6, 2020

	Percentage with experience
At least two (one CIE) WBLEs	24.9
At least three (any kind)	19.2
Any WBLE within six months of LLC enrollment	21.5

Source: DVR administrative data.

Note: N = 442 LLC participants.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.4. Characteristics of CIEs or WBLEs through October 6, 2020

	Number of CIEs and WBLEs	Percentage of total CIEs and WBLEs
Total	620	100.0
Occupation group		
Agricultural workers	29	4.7
Building and grounds maintenance	27	4.4
Child and (nonfarm) animal care, education, and personal service providers	61	9.8
Food preparation and service	87	14.0
Office-based ^a	50	8.1
Retail workers, store clerks, and customer service workers	157	25.3
Other occupations ^b	89	14.4
Missing ^c	120	19.4
Industry group		
Retail and wholesale trade	204	32.9
Services ^d	169	27.3
Other ^e	128	20.6
Missing ^e	119	19.2
By year		
2018 or earlier	176	28.4
2019	357	57.6
2020	87	14.0
By age at start of the WBLE		
Ages 15 and younger	15	2.4
Ages 16 and 17	352	56.8
Ages 18 and older	253	40.8

Source: DVR administrative data.

^a Office-based occupation groups are architecture and engineering; arts, design, entertainment, sports, and media; business and financial operations; computer and mathematical; education, training, and library; life, physical, and social sciences; management; and office and administrative support.

^b Other occupations include those with too few cases to report separately: manufacturing technicians, protective services workers, electricians, construction, transportation, military, and automotive workers.

^c We note occupation and industry as missing values if the participant's AWARE record for the WBLE had neither a numerical code for occupation and industry nor a narrative description of it.

^d Services industry group includes education, health and personal care, business and social services, hospitality, recreation, and public administration.

^e Other industry groups are agriculture, forestry, and fishing; construction; manufacturing; and transportation, communication, electric, gas, and sanitary services.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.5. Wages of LLC participants with CIEs or WBLEs through October 6, 2020, by job characteristics and year

	Percentage who were paid	Average wage of LLC participants who were paid ^a
Total	51.8	\$11.33
Occupation group		
Agricultural workers	75.9	\$10.50
Building and grounds maintenance	70.4	\$10.81
Child and (nonfarm) animal care, education, and personal service providers	37.7	\$12.20
Food preparation and service	78.2	\$11.17
Office-based ^b	54.0	\$11.25
Retail workers, store clerks and customer service workers	62.4	\$11.06
Other occupations ^c	68.5	\$12.14
Missing ^d	2.5	\$11.07
Industry group		
Retail and wholesale trade	72.5	\$11.09
Services ^e	46.7	\$11.48
Other ^f	71.1	\$11.61
Missing ^d	2.5	\$11.07

Source: DVR administrative data.

Notes: N = 620 WBLEs and CIEs.

^a Wages are adjusted to 2020 dollars.

^b Office-based occupation groups are architecture and engineering; arts, design, entertainment, sports, and media; business and financial operations; computer and mathematical; education, training, and library; life, physical, and social sciences; management; and office and administrative support.

^c Other occupations include those with too few cases to report separately: manufacturing technicians, protective services workers, electricians, construction, transportation, military, and automotive workers.

^d We note occupation and industry as missing values if the participant's AWARE record for the WBLE had neither a numerical code for occupation and industry nor a narrative description of it.

^e Services industry group includes education, health and personal care, business and social services, hospitality, recreation, and public administration.

^f Other industry groups are agriculture, forestry, and fishing; construction; manufacturing; and transportation, communication, electric, gas, and sanitary services.

CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.6. LLC participant and staff satisfaction with WBLEs through October 6, 2020

	Percentage responding agree or strongly agree
Number of completed surveys	260
Number of completed WBLEs	444
Participant's assessment	
Met goals participant set out to accomplish	97.3
Will help make career decisions for the future	93.8
Learned new skills	95.8
Had a positive experience	95.8
Successful WBLE	95.4
Staff assessment	
Met goals participant and staff wanted to accomplish	95.0
Will help youth make career decisions for the future	98.8
Youth learned new skills	95.4
Youth had a positive experience	93.8
Employer met their established expectations for their participation	95.8
Successful WBLE	95.4

Source: WBLE survey.

Note: For each survey question, participants and staff could respond strongly agree, agree, disagree, or strongly disagree. The composite measure of "Successful WBLEs" are those with a score of 10 for participants and a score of 13 for staff (based on scoring each item from 1 [strongly disagree] to 4 [strongly agree]).

LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.7. LLC AT, postsecondary, and transportation services through October 6, 2020

	Percentage of LLC participants who used service	Average number of services used	Average number of services among those who used the service	Average cost
AT services				
AT consultation	24.9	0.29	1.15	n.a.
AT demonstration session	12.0	0.15	1.26	n.a.
AT purchase or loan	14.3	0.37	2.59	\$389.08
Any postsecondary education services	23.8	0.71	2.98	n.a.
ICC courses	4.8	0.09	1.81	n.a.
LLC contracted postsecondary courses (CCV)	6.6	0.08	1.17	n.a.
Dual enrollment courses	7.9	0.18	2.26	n.a.
Other LLC postsecondary education services	19.0	0.37	1.93	n.a.
LLC transportation	21.7	0.50	2.28	n.a.

Source: DVR administrative data.

Note: N = 442 LLC participants.

AT = assistive technology; CCV = Community College of Vermont; DVR = Division of Vocational Rehabilitation; ICC = Introduction to College and Careers; n.a. = not applicable; LLC = Linking Learning to Careers.

Table B.8. Satisfaction of LLC participants with LLC AT services through October 6, 2020

	Percentage responding agree or strongly agree
Number of participants with AT demonstration session	53
Number of AT demonstration sessions	61
Number of students with at least one completed AT survey	42
Knows how to use the tool(s)	70.2
Is better able to perform at school or work as a result of the tool(s)	66.7
Is satisfied with the experience getting the tool(s) from LLC	68.4
Is satisfied with the experience using the tool(s) provided by LLC	68.4
Is better able to perform at school or work as a result of the AT assistance from LLC	78.9
Is satisfied with the experience of meeting with an LLC AT specialist	98.2
The AT assistance provided by LLC was helpful	84.2
Could benefit from receiving additional AT assistance or tools from LLC	89.5

Source: AT survey.

Note: For each survey question on satisfaction, participants and staff could respond strongly agree, agree, disagree, or strongly disagree.

AT = assistive technology; LLC = Linking Learning to Careers.

Table B.9. Use of pre-employment transition services other than WBLEs through October 6, 2020

	Percentage of LLC participants with service	Average number of services	Average number of services among those who used the service
Job exploration counseling	82.1	5.61	6.83
Counseling on opportunities for enrollment in postsecondary education	63.1	2.16	3.42
Workplace readiness training	32.1	1.38	4.29
Instruction in self-advocacy	23.8	0.50	2.10

Source: DVR administrative data.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.10. VR case status through October 6, 2020

	Percentage of LLC participants
Did not have an open VR case	7.0
Had an open VR case	93.0
Had a signed IPE	31.9
Case remained open	92.3
Case was closed	7.7

Source: DVR administrative data.

DVR = Division of Vocational Rehabilitation; IPE = individualized plan for employment; LLC = Linking Learning to Careers; VR = vocational rehabilitation.

Table B.11. VR services for clients through October 6, 2020

	Percentage of LLC participants with service	Average number of services	Average number of months with a service	Average number of services among those who had the service
Career services	61.1	3.62	3.10	5.92
Training services	38.5	1.28	1.60	3.34
Other VR services	51.6	2.37	2.16	4.60

Source: DVR administrative data.

Note: N = 442 LLC participants.

DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; VR = vocational rehabilitation.

Table B.12. Selected LLC and VR services through October 6, 2020, by individual characteristics at enrollment

	Male	Female	Race, White	Race, Black or other	9th and 10th grade	11th grade, later, other, or missing	Early cohort	Later cohort	ADHD	Other conditions
Number of participants	254	152	384	60	189	224	203	239	188	225
WBLE or CIE experience	65.0%	69.7%	66.9%	63.3%	65.1%	67.9%	70.0%	65.7%	68.1%	65.3%
CCV or other postsecondary services	22.0%	25.0%	24.0%	16.7%	22.8%	23.7%	30.0%	18.4%	19.1%	26.7%
AT consultation	19.7%	30.3%	24.7%	21.7%	23.3%	24.6%	30.0%	20.5%	20.7%	26.7%
LLC-funded transportation	24.0%	16.4%	22.1%	18.3%	16.9%	24.6%	24.6%	19.2%	20.7%	21.3%
LLC case notes (mean)	67.3	61.1	65.3	57.9	66.1	64.1	70.1	57.7	65.9	64.4
Any other pre-employment transition services	89.4%	87.5%	88.8%	85.0%	89.9%	87.1%	91.6%	86.6%	88.3%	88.4%
Had a signed IPE	28.7%	25.7%	28.1%	26.7%	17.5%	36.6%	47.8%	19.2%	27.7%	28.0%

Source: DVR administrative data.

Note: N = 413 (LLC pilot cases are excluded because they did not complete the baseline survey). Sample sizes by gender are smaller due to nonresponse and are larger by race because students could identify as more than one race.

ADHD = attention-deficit hyperactivity disorder; AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; IPE = individualized plan for employment; LLC = Linking Learning to Careers; WBLE=work-based learning experience.

Table B.13. Selected LLC services through October 6, 2020, by economic characteristics at enrollment

	Employed	Not employed	Qualifies for free or reduced-price lunch	Does not qualify for free or reduced-price school lunch
Number of participants	255	157	214	185
WBLE or CIE experience	69.4%	62.4%	64.0%	70.3%
CCV or other postsecondary services	23.9%	22.3%	19.2%	29.2%
AT consultation	27.1%	19.1%	22.0%	26.5%
LLC-funded transportation	19.6%	23.6%	22.9%	18.9%
LLC case notes (mean)	60.9	70.6	66.0	64.6
Any other pre-employment transition services	85.1%	94.3%	87.9%	90.3%
Had a signed IPE	31.8%	21.7%	23.4%	33.0%

Source: DVR administrative data.

Note: N = 413 (LLC pilot cases are excluded because they did not complete the baseline survey). Sample sizes by characteristic are smaller due to nonresponse.

AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

Table B.14. Selected LLC and VR services through October 6, 2020, by district office

	Barre-Montpelier	Bennington	Brattleboro	Burlington	Middlebury	Morrisville	Newport	Rutland	Springfield	St. Albans	St. Johnsbury	White River Junction
Number of participants	36	41	40	55	19	35	37	39	32	36	35	37
WBLE or CIE experience	80.6%	65.9%	62.5%	56.4%	78.9%	60.0%	86.5%	76.9%	43.8%	72.2%	82.9%	54.1%
CCV or other postsecondary services	19.4%	41.5%	10.0%	3.6%	5.3%	11.4%	40.5%	43.6%	15.6%	47.2%	28.6%	16.2%
AT consultation	27.8%	36.6%	22.5%	10.9%	10.5%	25.7%	37.8%	35.9%	6.3%	16.7%	25.7%	37.8%
LLC-funded transportation	8.3%	19.5%	20.0%	25.5%	26.3%	8.6%	45.9%	25.6%	12.5%	44.4%	8.6%	13.5%
LLC case notes (mean)	86.6	92.4	65.7	43.2	138.0	42.5	60.8	60.9	47.9	59.4	75.5	19.1
Any other pre-employment transition services	83.3%	100.0%	97.5%	89.1%	100.0%	94.3%	83.8%	87.2%	93.8%	63.9%	97.1%	81.1%
Had a signed IPE	13.9%	29.3%	15.0%	32.7%	31.6%	17.1%	56.8%	56.4%	6.3%	100.0%	20.0%	5.4%

Source: DVR administrative data.

Note: Some participants moved over the course of the demonstration. This table reflects the participant's location at enrollment.

AT = assistive technology; CCV = Community College of Vermont; CIE = competitive, integrated employment; DVR = Division of Vocational Rehabilitation; LLC = Linking Learning to Careers; WBLE = work-based learning experience.

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