



Issue BRIEF

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Assistive Technology Services for Youth in the Vermont Linking Learning to Careers Program

The Rehabilitation Services Administration awarded five-year grants to state VR agencies to identify, implement, and evaluate evidence-based practices for providing work-based learning in integrated settings for transition-age youth with disabilities. State VR agencies in five states received awards: California, Maine, Maryland, Massachusetts, and Vermont.

Mathematica is evaluating the Maryland and Vermont demonstrations. See the issue brief **“Roadmap for Change—Linking Learning to Careers Program”** for more information about the Vermont LLC program’s design, services, and evaluation.

The Vermont Linking Learning to Careers (LLC) program is a five-year statewide initiative designed by Vermont’s Division of Vocational Rehabilitation (VR). The program is intended to improve the employment and postsecondary educational outcomes of high school students who have disabilities. LLC provides enhanced services on top of the core state VR services typically provided to eligible high school students. One of these enhanced services is access to assistive technology (AT), provided by dedicated staff. This brief summarizes students’ AT needs and their experiences with LLC’s AT services.

WHAT IS AT?

AT is any technology or equipment that helps people, regardless of age or disability. It includes high-tech options, such as laptops and downloadable software applications, and no- and low-tech options, such as specialized seating or grab bars. AT can be particularly useful for students with disabilities because it can provide reasonable accommodations that help them better participate in education- or work-based settings.

to gain a better understanding of the areas in which students might benefit from AT. After consulting with students and assessing their school or workplace needs, the AT specialists demonstrate products to help students make informed choices. LLC then loans the products to or purchases the products for the student, and the specialists provide ongoing follow-up help to monitor the student’s progress.

LLC’S AT SERVICES COMPARED WITH CORE AT SERVICES IN VERMONT

LLC employs two dedicated AT specialists who provide consultations, product demonstrations, and access to AT products via loan or purchase to students receiving enhanced services. Table 1 shows the types of services that AT specialists provide to these students. Services typically begin with general information sessions involving students, teachers, and family members

On the other hand, students who receive core VR services in Vermont 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 students and their families and provide guidance, device demonstrations, and short-term equipment loans. However, due to funding policy, the VATP cannot purchase equipment or devices for students, and high schools only provide AT for specific educational purposes and the equipment remains with the school, not the individual, upon graduation.

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

Table 1. Enhanced AT services offered by LLC

WHAT TYPES OF AT DO LLC STUDENTS NEED AND RECEIVE?

Between November 2017 and October 15, 2019, LLC AT specialists provided a wide range of services, technology, and equipment to 80 of the program's 441 students. Of these students, 75 received a consultation, 43 received a product demonstration, and 30 received purchased AT products. The AT products and strategies were mainly designed to address students' reading, comprehension, and notetaking needs. The AT specialists also recommended strategies to help students with visual, hearing, speech, and mobility impairments. Table 2 shows the most common AT needs among LLC students and the tools recommended, lent, or bought by the specialists.

NO-TECH, LOW-TECH, AND HIGH-TECH AT

AT specialists can recommend no-tech, low-tech, or high-tech forms of AT, depending on a student's needs and preferences.

- 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 help with communicating ideas, and grabber tools to extend a student's reach.
- High-tech forms of support include smartpens, which can help with notetaking, and accessible computer devices for students with limited dexterity, such as one-handed keyboards. Students have also received Chromebook computers, screen reader software, bone conduction Bluetooth headphones to enhance hearing, specialized grammar software, and a variety of computer applications to meet students' learning needs.

AT CAN HELP STUDENTS, BUT IT'S NOT ALWAYS THEIR PREFERRED SOLUTION

Of the LLC students who completed initial AT satisfaction surveys after receiving a product demonstration, most (77 percent) said that they were better able to perform at school or work as a result of the help they received through LLC.¹ But a large share of respondents who received an AT consultation (33 percent) said that they did not use the AT offered through LLC.

AT needs	LLC technology or equipment provided	
Auditory access	Bluetooth headphones Bone-conduction headphones	Personal amplifiers
Augmentative and alternative communication	Touch-based speech tablets	
Grammar tools, spelling	Grammarly software	Dictionary and thesaurus applications
Math	Downloadable computer applications Khan Academy online tools	Fraction calculators
Mobility	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	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, note taking, memorization, comprehension, concentration barriers	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	MyHomework application	Photo Math
Visual access	Text magnification tools Screen readers	Handheld magnifier Irlen Overlays

Table 2. Common AT needs and LLC tools to address them

According to AT specialists, most students do not understand what AT is before their first consultation. Others are reluctant to use a tool that is different from those of their peers. This reluctance may be a contributing factor to the percentage of students who indicated they did not use the AT equipment offered by LLC.

AT is one of many tools that students with disabilities may need to make a successful transition from high school to college, a job, or independent living. However, students' preferences and beliefs may sometimes affect their decisions about using AT in ways that may not be in their own self-interest.

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contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. (Authority: 20 U.S.C. 1221e-3 and 3474).

ENDNOTES

¹ Of the 43 LLC students who received at least one AT product demonstration, 30 completed at least one survey, for a total of 39 survey responses.

Data Sources

Data sources for this brief include LLC administrative data files, LLC AT surveys, and site visit interviews with LLC AT specialists.

