

### ASSISTIVE TECHNOLOGY SHARING PROGRAMS STUDY

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### **Table of Contents**

#### ASSISTIVE TECHNOLOGY SHARING PROGRAMS STUDY

AT Sharing Study Acronyms	5
AT Study Report Findings and Recommendation Highlights	.9
Executive Summary	11
Introduction • The Potential of Assistive Technology • Assistive Technology Sharing Programs • Scope of Study • Research Methods • Report Organization	.15
<ul> <li>I. Assistive Technology Supports, Services, and Sharing Programs         <ul> <li>AT and IDEA Requirements</li> <li>AT Devices</li> <li>AT Services</li> <li>The AT Consideration Process</li> </ul> </li> <li>AT Supports for CT LEAs         <ul> <li>Statewide and Regional AT Programs and Services</li> <li>CT Tech Act Project</li> <li>AT Device Loan Programs</li> <li>AT Device Reutilization Program</li> <li>State Financing for AT Devices and Services</li> <li>Additional CT Tech Act Project Partnerships</li> </ul> </li> </ul>	19
<ul> <li>II. AT Sharing Programs Study Methodology</li> <li>Data Collection Procedures         <ul> <li>CT AT Sharing Programs</li> <li>LEA AT Sharing Survey</li> </ul> </li> </ul>	
<ul> <li>III. AT Sharing Programs Study Findings         <ul> <li>AT Sharing Program Findings</li> <li>The New England Assistive Technology (NEAT) Center at Oak Hill</li> <li>Capitol Region Education Council (CREC)</li> <li>EASTCONN</li> <li>Southern Connecticut State University (SCSU)</li> </ul> </li> </ul>	.37

• • •	Use of CT AT Sharing Programs Additional AT Sharing Programs Barriers to AT Sharing Expressed by AT Sharing Programs LEA AT Sharing Survey Findings Description of LEA Respondents LEA Access to Intra- and Inter-AT Sharing Programs LEA Access to External AT Sharing Programs Summary of Patterns of LEA AT Sharing LEA Use of Intra- and Inter-District AT Sharing	
	LEA Use of External AT Sharing Programs Barriers to External AT Sharing Programs Online AT Device Sharing Findings	
IV. •	<b>Recommendations</b> The Status Quo of AT in CT LEAs Establishing a Comprehensive AT System for LEAs	65
Ар	pendices	
Α.	Contributors to the AT Sharing Programs Study	
Β.	Connecticut AT Sharing Program Survey	71
C.	NEAT 2015-16 LEA Members	76
D.	CREC 2015-16 AT Consortium Members	77
E.	EASTCONN 2015-16 AT Consortium Members	78
F.	SCSU 2015-16 AT Sharing Districts	
G.	LEA Respondents to the AT Sharing Programs Survey	

# AT Sharing Study Acronyms

AAC	Augmentative and Alternative Communication system, including sign language, gestures, communication boards, and electronic devices
ACES	Area Cooperative Educational Services; a RESC serving LEAs in the south central region of CT
ACS	American Community Survey
ADL	Activities of Daily Living
ASD	American School for the Deaf
AT	Assistive technology
ATAP	Rhode Island's Assistive Technology Access Partnership
ATSS	AT School Share; a secure online AT sharing program for Massachusetts and Rhode Island LEAs
BESB	CT Board of Education and Services for the Blind
BRS	Bureau of Rehabilitation Services
BSE	Bureau of Special Education, Connecticut State Department of Education
CATLP	Computer AT Loan Program at Southern Connecticut State University
ССМС	Connecticut Children's Medical Center
CES	Cooperative Educational Services; a RESC serving LEAs in the southwest region of CT
CREC	Capitol Region Education Council; a RESC serving LEAs in the north central region of CT
CSDE	Connecticut State Department of Education

СТТАР	Connecticut Tech Act Project
DDS	CT Department of Developmental Services
DME	Durable medical equipment
DMHAS	CT Department of Mental Health and Addiction Services
DOL	CT Department of Labor
DORS	CT Department of Rehabilitation Services
EASTCONN	A RESC serving LEAs in the northeast region of CT
ECAT	The Eastern CT Assistive Technology Center
EDUCATION CONNECTION	A RESC serving the western region of CT
ERC	Equipment Recycling Center
FAPE	Free Appropriate Public Education
FCC	Federal Communications Commission
FTE	Full-time Equivalent
IDEA	Individuals with Disabilities Education Improvement Act
IEP	Individualized education program
IFSP	Individual Family Service Plan
IT	Information Technology
LEAs	Local and Regional Education Agencies
LEARN	A RESC serving the southwest region of CT
LRE	Least Restrictive Environment
MOA	Memorandum of Agreement
NDBEDP	The National Deaf-Blind Equipment Distribution Program

NEAT	The New England Assistive Technology Center at Oak Hill
OPA (P&A)	Office of Protection and Advocacy for Persons with Disabilities
PPT	Planning and placement team
PRI	Legislative Program Review and Investigations Committee
RFP	Request for Proposals
SCSU	Southern Connecticut State University
SEA	State Education Agency
SERC	State Education Resource Center
SIMR	State-identified Measurable Result
SLD	Specific learning disabilities
SSIP	State Systemic Improvement Plan
UDL	Universal Design for Learning
VR	Connecticut's Vocational Rehabilitation program
WCAAA	Western CT Area Agency on Aging
WIOA	Workforce Innovation and Opportunity Act

### AT Study Report Findings and Recommendation Highlights

#### Background

The Assistive Technology (AT) consideration process is required by Part B of the Individuals with Disabilities Education Improvement Act (IDEA) and is an important part of developing an individualized education program (IEP) for students with disabilities ages 3 through 21. AT accommodations, which include a range of devices and services, may be required to ensure a student's access to the general education curriculum, including age-appropriate academic and social-emotional experiences. As such, AT consideration is important for students with a wide range of disabilities and has the potential to increase their success, independence, quality of life, and successful transition to adulthood.

Local and regional education agencies (LEAs) have the responsibility to ensure that AT is provided for students with disabilities who require them. As part of the AT consideration process, this responsibility can involve completion of an AT assessment and, as needed, trial of AT devices to determine what works best for the student. An external AT sharing program can be a useful resource during this trial and error process. External AT sharing programs, defined for the purpose of this study as "an external service that lends assistive technology devices at no cost (other than membership to the organization/agency) to local and regional education boards to support students with disabilities," are one CT system that supports the AT consideration process of LEAs. CT has a number of statewide and regional external AT supports and services in place, including four AT device lending programs that are partially funded by the CT Tech Act Project (CTTAP).

#### **Main Findings**

The findings of the AT Sharing Programs Study include the following:

- CT has many AT resources throughout the state, although access to them is not universal.
- LEAs vary in the AT expertise they have within their district. LEAs also have greater or lesser access to one or more of CT's external AT sharing programs depending on their geographical proximity to an AT sharing center.
- Approximately one-third of CT LEAs access external AT sharing program libraries.
- The majority of LEAs that access external AT sharing programs expressed satisfaction with the process and that the programs were highly effective.
- The most common reason LEAs offered for not accessing external AT sharing programs was that LEAs can provide the AT recommended by students' planning and placement teams (PPTs). The second most common reason was lack of awareness that these programs exist.

- LEAs expressed a strong need to have access to external AT sharing programs despite relatively low use of them.
- LEAs in the various regions of the state tend to access the external AT sharing programs within their region most often, but not exclusively.
- LEAs in the southwestern part of CT have the least geographic access to an AT sharing program that offers an array of AT services across the low- to mid-to high-tech continuum. Despite this, LEAs in this part of the state expressed the least need for such a program.
- LEAs in the western part of CT also have more limited geographic access to an AT sharing program. LEAs in this region expressed the highest need for their educators to access such a program.

#### Recommendations

A plan to create equitable access to AT sharing resources for those LEAs that do not currently have it will need to be comprehensive in scope and be created via oversight from the Connecticut State Department of Education, Bureau of Special Education. To coordinate these efforts at a statewide level, BSE will require resources for staffing and the oversight needed for the development and actualization of the plan. Additional funding may also be needed to support the involvement of agencies in the collaborative effort – for example, to develop RFPs for agencies to expand their AT sharing programs, develop new AT sharing options, and provide professional learning opportunities to CT educators.

This report outlines the role of an AT Advisory Workgroup, composed of essential stakeholders who can support the administrative responsibility of CSDE by:

- Establishing a statewide vision for a comprehensive coherent inclusive system of AT services.
- Engaging external partners who can offer fiscal or "in-kind" resources.
- Considering the feasibility of re-establishing a low-cost online AT sharing program exclusively for CT LEAs.
- Considering the financial feasibility of shipping AT devices to those LEAs for whom their geographical location is a barrier to borrowing AT devices.
- Creating greater public awareness of the range of AT supports that can improve independence for students with disabilities.
- Scaling up a comprehensive job-embedded model of AT professional learning that is currently endorsed and funded by CSDE (i.e., Creating and Sustaining an AT Team) that examines an LEA's infrastructure, polices, and practices regarding implementation of AT for students with disabilities.

### **Executive Summary**

#### **Background Information**

Disability encompasses a range of difficulties that impact an individual's capacity to see, hear, walk, talk, read, write, focus, remember, solve problems, or organize information. With appropriate accommodations, the impact of a disability can be mitigated, providing opportunities for access to typical experiences and a more independent quality of life. Assistive technology (AT) can provide these accommodations for individuals with disabilities. AT includes devices, ranging from low- to mid- to high-tech equipment and a range of professional services such as evaluation, consultation, training, and professional learning opportunities that ensure appropriate utilization of the device for the individual with the disability and the essential people in the person's life.

Children with disabilities ages 3 through 21 are ensured access to the AT devices and services they require under Part B of the Individuals with Disabilities Education Improvement Act (IDEA). Considering which device is most appropriate for a child can involve an extended process in which various AT devices, some of which are quite costly, are tried until the right fit is determined.

AT sharing programs can be an important resource for local and regional education agencies (LEAs) during the AT consideration process. This study was requested by the Connecticut General Assembly (CGA) to examine LEA access to this resource and to determine how to create a plan that would make AT sharing programs available to those LEAs that do not have access to them.

#### Methodology

The research methods used in this study included a systematic process for collecting and synthesizing data representing the perspectives of CT's AT sharing programs and CT LEAs. Semi-structured interviews were conducted with AT professionals representing each of CT's AT sharing programs and the director of the CT Tech Act Project (CTTAP), which provides partial funding for some of these programs. The perspective of LEAs was elicited through input gathered via an AT Sharing Programs Survey which requested information about their frequency of use of external AT sharing programs as well as their perceived effectiveness of them and satisfaction with the AT sharing process. Additionally, LEAs were asked to express their need for an online (i.e., Craigslist-style) AT sharing system.

#### **Results of the Study**

AT resources, involving device loans, evaluation, training, and technical assistance opportunities, are available in four out of five of CT's educational regions; LEAs in the western part of CT have the least geographical access to these resources, and LEAs in the north central region have the most access. These AT supports include four established AT sharing programs that receive some federal funding through CTTAP. LEA access to these programs can involve a membership fee, or participation in a fee-for-service consortium model, or can be free of charge.

School districts that know about and use one or more of these external AT sharing programs are generally satisfied with the process, and the majority of LEAs expressed a medium-to-high level of overall need for them. Perceived benefits most frequently noted by LEAs participating in an external AT sharing program included improving the AT consideration process by increasing the AT options available for trial and the potential for cost-saving by borrowing a device before purchasing it. Barriers to external AT sharing program use from the LEA perspective included: 1) lack of staff awareness that AT sharing programs exist, 2) the distance to external AT sharing programs that requires staff travel time, 3) the availability of newer AT equipment at the AT sharing programs, and 4) incompatibility between the LEA's Information Technology (IT) system and a student's AT device. The most frequent reason for not accessing an external AT sharing program was the ability of LEAs to provide students with disabilities access to the AT devices recommended by their respective planning and placement team (PPT). Juxtaposed with this reason was the finding that many LEAs were not aware of the availability of CT's AT sharing programs. The primary barrier to offering AT device loans expressed from the AT sharing program perspective was insufficient funding.

The majority of CT LEAs expressed that they were likely or extremely likely to use a CTbased online AT device posting system as long as it was an exclusive service for CT LEAs. Sufficient training and technical assistance provided by professionals with AT expertise was noted as a necessary component of AT device-sharing regardless of the form in which the sharing occurs (i.e., in-person or online).

#### Recommendations

Development of a plan for a comprehensive inclusive system of AT services for LEAs supporting students with disabilities ages 3 through 21 will require administrative support and oversight from the Connecticut State Department of Education (CSDE), Bureau of Special Education (BSE). To coordinate these efforts at a statewide level, BSE will require resources for staffing and the oversight needed for the development and actualization of the plan.

Additional funding may also be needed to support the involvement of agencies in the collaborative effort – for example, to develop requests for proposals (RFPs) for agencies to expand their AT sharing programs, develop new AT sharing options, and provide professional learning opportunities to CT educators. The collaboration of an AT Advisory Workgroup composed of stakeholders representing CT's AT expertise and individuals impacted by the efforts of this group, including representatives from LEAs, families, and students with disabilities, can support CSDE's efforts. Primary deliverables for the workgroup could establish an overarching statewide vision for providing AT supports and services, engage partners who can offer support for maintaining a comprehensive system, create public awareness on the part of educators and families of the possibilities for using AT to support learning and independence, examine the feasibility of re-establishing an online AT sharing system exclusively for CT schools and families, and implement a statewide comprehensive job-embedded model of AT professional learning to build LEA AT infrastructures, policies, and best practices.

### Introduction

Disability is typically understood as the impact of a physical, cognitive, emotional, sensory, or mental condition or impairment that results in reduced functioning. A disability can restrict an individual's participation in life events unless appropriate accommodations are available to ensure their access to experiences and engagement with society.

Disabilities impact a considerable number of Connecticut citizens. According to the American Community Survey (ACS) data compiled by the U.S. Census Bureau in 2013, the Connecticut disability prevalence rate for persons of all ages was 10.7% in approximately 380,600 individuals<sup>1</sup>. Student data reflective of the 2014-15 school year collected by the Connecticut State Department of Education (CSDE) indicate that the prevalence rate for children with disabilities ages 3 through 21 was 13%, a total of 68,445 students.

# The Potential of Assistive Technology for Students with Disabilities

Assistive technology (AT) can provide students, who are protected under the Individuals with Disabilities Education Improvement Act (IDEA), the accommodations they need for access to and meaningful participation in all aspects of life, resulting in more successful experiences and outcomes. AT is a device or service that supports an individual's functional capabilities, learning, independence, employment, leisure, and/or interaction in their community. AT devices are part of a continuum and range of supports for individuals with disabilities across their life span, including low-tech items (e.g., adapted cooking utensils or large print) to high-tech devices (e.g., an alternative keyboard or a voice recognition input or output system). Low-tech devices are typically easier to find and lower in cost; some can be homemade. High-tech-devices are more expensive and usually require training to be implemented successfully. AT can assist persons who have difficulty walking, speaking, engaging in activities of daily living (ADL), reading, writing, hearing, remembering, and/or organizing information due to a developmental disability, accident or injury, or an acquired age-related health condition.

#### **Assistive Technology Sharing Programs**

AT options for individuals with disabilities vary relative to the person's age, their needs, and the type and degree of their disability. Assistive technology equipment sharing programs are part of an organized system of supports within which a range of AT possibilities is available.

AT sharing programs include two distinct types of service. One service, comparable to a town's public library, is an AT device lending or demonstration program housed in a physical structure. A collection of AT devices is maintained at the site, and professionals

with AT expertise are available to assist the individual or the person's educators, family, or caretakers with the selection and use of an appropriate AT device. This "try it before you buy it" service promotes informed decision making about the appropriateness of the AT and supports short-term experimentation prior to purchasing a potentially costly device. AT lending sites can also be useful as part of the AT assessment process during which an individual's AT needs are determined and the effectiveness of a device is explored. Training regarding effective utilization of the device can also occur as part of the AT lending process.

An alternative AT equipment sharing program is a "classified ad" online system. An online AT equipment database is established to maintain an inventory of used devices from low- to high-tech; individuals or designated representatives, such as a family caretaker or a school member, can post secondhand AT devices for transfer to another person (or school) for sale or at no cost. Online AT device-sharing may be a misnomer, as this system does not involve the give-and-take typical of sharing. Rather, it is a process for individuals, schools, or families to utilize when they would like to relinquish an unused device or permanently acquire another device — for example, a duplicate AT apparatus for home use. Online sharing assumes that an AT evaluation process has occurred and that the device is appropriate for the individual's use. As such, it is not a "try it before you buy it" approach; rather, it is a low-cost/no-cost option for individuals, schools, or family members to acquire needed AT devices.

#### Scope of Study

This study of AT equipment sharing accessibility for Connecticut local and regional education agencies (LEAs) is in response to Bill Sec. 271, effective July 1, 2015, in which the joint standing committee of the Connecticut General Assembly (CGA) authorized the State Education Resource Center (SERC), established pursuant to section 10-357a of the General Statutes, to examine this issue. The parameters of the study included an examination of existing AT equipment sharing programs in Connecticut and an analysis of the capacity of these programs and their effectiveness. Specifically, the study was requested to examine whether LEAs have access to at least one AT equipment sharing program. Subsequent to the findings of this study, recommendations were requested about how to create a plan that would make AT equipment sharing programs available to school districts that do not have access to them.

Worth noting is that a separate study, also requested by the CGA in 2015 and being conducted by the Connecticut Legislative Program Review and Investigations Committee (PRI), has an area of overlap with this AT Equipment Sharing Programs study. The PRI study, entitled Regional Cooperative Agreements between Local Boards of Education, Bill No. 778, is charged with identifying existing cooperative efforts between two or more local boards of education, including shared operational arrangements such as administrative services, assistive technology equipment, procurement, and transportation. Collaboration between the primary investigator of the PRI research and SERC occurred during the undertaking of these studies to share methodology and information about state AT programs.

#### **Research Methods**

A summary of the research methods used to conduct this study include the following:

- Background information was researched regarding the federal requirements for considering AT for students with disabilities under the Individuals with Disabilities Education Improvement Act (IDEA). Similarly, CT's implementation of the IDEA relative to the provision of AT, as described in the Connecticut Assistive Technology Guidelines<sup>2</sup> (updated December, 2013), was reviewed.
- Data related to the scope and effectiveness of CT's AT sharing programs were collected via two telephone interviews conducted with the director of the CT Tech Act Project, which supports access to AT for CT residents with disabilities via federal funding. Subsequently, trend line data regarding use of AT distributed through the CT Tech Act Project and consumer satisfaction with the program were analyzed.
- Semi-structured telephone interviews were conducted with AT professionals representing each of CT's AT sharing programs partially funded by the CT Tech Act Project. These interviews yielded qualitative data relative to the scope and effectiveness of their respective programs.
- The same semi-structured interview process was implemented with three additional AT sharing programs that are not funded by the CT Tech Act Project to elicit information about the full scope of AT device sharing in the state.
- A customized semi-structured telephone interview was conducted with the Director of Family Support Strategies and Advocacy in the CT Department of Developmental Services (DDS) to elicit the perspective of this agency and AT programs in place.
- An AT Sharing Program Survey was designed and disseminated to all CT LEAs. The survey yielded quantitative and qualitative data by examining school districts' internal (within-district) and district-to-district AT sharing procedures and practices as well as their access to, use of, and satisfaction with external AT sharing programs. LEAs were also asked about their interest in online AT device sharing.
- The AT sharing programs of a number of states was reviewed by examining the scope of their systems as represented on their websites; follow-up emails were sent to the directors of programs in several states to clarify issues such as funding sources and collaborative partnerships. An in-depth telephone interview was conducted with the program director of MassMATCH, Massachusetts' federally funded AT sharing program. States were selected based on recommendations from CT professionals with AT expertise from CSDE CT's AT sharing programs.

#### **Report Organization**

This report is organized into four sections and seven appendices. Section 1 describes the AT statutory requirements of the Individuals with Disabilities Education Improvement Act (IDEA) and the array of supports and services a student's PPT must take into account within the AT consideration process. It also presents a brief history of the evolution of the federal Assistive Technology Act and a description of the CT Tech Act Project, including a summary of the various AT sharing programs available to CT LEAs, their partnerships with the CT Tech Act Project, the scope of services they offer, and outcome data resulting from these collaborations.

Section 2 presents the methodology used to gather information about AT sharing in CT. Section 3 presents the quantitative and qualitative findings of this study. It summarizes input from directors of CT's AT sharing programs regarding the scope of services provided, a synopsis of the barriers they encounter, and their input into the development of a state AT sharing plan. It also presents an analysis of the results of the LEA AT Sharing Programs Survey, including LEA frequency of use, satisfaction with, and effectiveness of inter-, intra-, and external AT sharing programs. It also details LEA input regarding the potential need for a CT school-based online AT sharing program.

Section 4 presents recommendations on how to create a plan that would make AT equipment sharing programs available to LEAs that do not have access to them.

### Assistive Technology Supports, Services, and Sharing Programs

Many students with physical, sensory, processing, learning, or cognitive disabilities face barriers that affect their ability to access, participate in, and experience success with the typical educational opportunities and social interactions of school. These barriers can impact access to the general education curriculum, which, in turn, can negatively affect a student's academic progress and/or social-emotional development.

AT does not eliminate a student's disability. It can, however, remove or reduce barriers, lessening the effect of the disability by increasing success, fostering independence, and nurturing self-esteem. Regardless of the student's special education determination (e.g., intellectual disability, specific learning disability (SLD)/dyslexia, multiple disabilities, autism, etc.), they are more likely to be challenged by the same high academic and behavioral expectations experienced by their age-level peers when AT is effectively utilized for those students with disabilities who require it. Consequently, appropriate utilization of AT can have a profound impact. Meaningful opportunities to interact with the general education curriculum and peers during the school years can subsequently influence a student's success transitioning into adulthood, resulting in a higher likelihood of competitive employment, and, ultimately, a better quality of life.

#### **AT and IDEA Requirements**

AT is intended to reduce the impact of a student's disability. It enables children with disabilities ages 3 through 21 to access their right to a Free Appropriate Public Education (FAPE) in the Least Restrictive Environment (LRE). According to Part B of the Individuals with Disabilities Education Improvement Act (IDEA 2004), which guides the decision making of LEAs for students ages 3 through 21, when appropriate "each public agency must ensure that assistive technology devices or assistive technology services" (Sec. 602[1][A]; 34 CFR §300.105) be provided to students with disabilities"<sup>2</sup>. Relative to AT, "Connecticut's special education laws and regulations essentially mirror the provisions of the IDEA." When AT is deemed necessary by a student's planning and placement team (PPT), inclusive of the student, educators, and family members, it is included in the student's individualized education program (IEP) as part of a special education program, as a related service, or as a supplementary aid or service required for access to the general education curriculum. It is the regulatory responsibility of the Bureau of Special Education (BSE) within CSDE to monitor LEA compliance with the IDEA and ensure that AT is included in the IEPs of students with disabilities who require it.

#### **AT Devices**

AT includes devices, tools, equipment, and an array of services. The federal definition of an assistive technology device is "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities" (Sec. 602[1][A]; 34 CFR §300.5). AT devices include mobility aids, such as walkers or wheelchairs; adapted on/off switches; audio books; hearing aids; educational software or "apps"; and a host of other options. AT devices are on a continuum from low-tech, which can be simple and low-cost, such as a hand-constructed communication board offering a selection of pictures representing basic needs, to high-tech, which can be complex and expensive, such as a sophisticated electronic communication device with digitized or synthesized voice output. Both of these AT options are examples of Augmentative and Alternative Communication (AAC) systems and exemplify the cost range of AT devices from a few dollars to a major expenditure of many thousands. "The type of AT a student may use will depend on the environment (e.g., an electronic communication device for the classroom and a picture communication system for the cafeteria); the needs and abilities of the student; and the demands of the task (e.g., a wheelchair for mobility and a text-to-speech device for reading)" (CSDE, 2013). Additionally, the provision of AT devices is a dynamic process. As the AT needs of students with disabilities change over time with growth and development and the impact of specially designed instruction, the student's need for alternative AT devices can change accordingly.

Many AT devices provide essential functionality that needs to be maintained across multiple settings if students are to benefit from them. For example, a writing software system that is used by a student to produce a first draft of an essay during classroom instruction will be needed by the student to complete a second draft of the essay in another setting as part of a homework assignment. Similarly, a communication system will need to be available for a student with a significant speech-language disability across all school contexts (e.g., the classroom, gym, playground, etc.) and at home to provide a consistent medium that supports communication with different educators, family members, and friends. As such, some AT devices need to be transportable, carried back and forth between home and school each day. In some situations, a duplicate AT device is indicated for use at home and/or recreational activities.

AT can also include Universal Design for Learning (UDL) instructional technology tools that are useful for all students, but are deemed as necessary supplemental aids for a specific student with a disability. For example, a classroom computer with word processing software or a math application program can be suitable for the teaching and learning experiences of many students, but would be considered an AT device for the student with a writing, spelling, or mathematics disability if the student's PPT team has determined that the AT is an educationally necessary accommodation due to the impact of the disability. Subsequently, the PPT would document the need for this instructional technology in the student's IEP.

#### **AT Services**

The definition of AT is inclusive of devices as well as a range of AT services. As noted in the IDEA and summarized in the Connecticut Assistive Technology Guidelines<sup>3</sup>:

"An *assistive technology service* means any service that directly assists a child with a disability in the selection, acquisition, or use of an AT device. Under Section 34 CFR §300.6, the term includes:

- the evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
- purchasing, leasing or otherwise providing for the acquisition of AT devices by children with disabilities;
- selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing AT devices;
- coordinating and using other therapies, interventions, or services with AT devices, such as those associated with existing education and rehabilitation plans and programs;
- training or technical assistance for a child with a disability or, if appropriate, that child's family; and
- training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child."

The delivery of AT services can require short- or long-term involvement from an AT specialist who has expertise in the types of AT devices appropriate for students with a range of abilities and disabilities, including modifying AT supports as needed, maintaining them, and troubleshooting problems. Services also involve training and technical assistance from an AT specialist, as needed, for students with disabilities and the children and adults who interact with them, including peers, educators, paraeducators, family members, and employment supervisors. Building the capacity of some or all of these individuals is an essential AT service.

#### **The AT Consideration Process**

Effective utilization of AT for students with disabilities, encompassing the appropriate use of devices and services, requires professional expertise and a collaborative individualized problem-solving team approach within an AT consideration process. Members of the student's PPT must have the collective knowledge and skills to be able to first systematically evaluate the student's individual academic, social-emotional, motor, health, and communication needs, analyze data to determine the student's present levels of performance, review general education standards and expectations, examine the instructional and social contexts in which the student functions, and develop appropriate IEP goals and objectives that address the learning gaps and require specialized support.

Second, team members must be able to consider what accommodations are in place for all students and then, based on gaps determined through a comprehensive evaluation process, generate individualized solutions that will provide access to the curriculum to the student with a disability. If a student is not making progress on their IEP goals and objectives, the team must consider a range of additional AT accommodations and instructional options and, as needed, with input from a professional with AT expertise, select one or more AT devices that provide an appropriate type and amount of assisted support. This process can, and frequently does, require AT device trial-and-error and/or customization. The option to borrow an AT device can be essential at this step in the process.

Third, the team must be able to teach the student, educators, and family members how to use the device, and, as needed, coordinate the student's specially designed instruction with various therapeutic services, such as occupational, physical, or speech and language therapy. The importance of this step in the AT consideration process cannot be overstated as it may require ongoing teaching and learning opportunities for the student and professional learning or technical assistance for members of the student's educational team and family.

# AT Supports for CT LEAs

The provision of AT devices and services for students with disabilities is the responsibility of the student's LEA. In CT, a number of resources are in place to support these efforts.

#### Statewide and Regional AT Programs and Services

The NEAT (New England Assistive Technology) Center at Oak Hill is a statewide nonprofit education resource center that specializes in providing AT supports and services to children and adults. NEAT employs AT professionals with expertise in conducting AT assessments, determining AT solutions, and providing training and/or technical assistance as needed for students, educators, family members, and employers.

Regional AT resources are also available to some school districts. LEAs are members of their respective Regional Educational Service Centers (RESCs), six educational entities that, under state statute, provide goods and services for their local and regional boards of education. Each RESC, in a unique way, supports the educational needs of the LEAs in its geographical catchment area. The RESCs include: ACES (Area Cooperative Educational Services), in the south central region of CT; CES (Cooperative Educational Services), in the south central region Education Council), in the north central part of CT; EASTCONN, serving LEAs in the northeast region of CT; EDUCATION CONNECTION, in the western part of CT; and LEARN, in the southeast part of CT. Each RESC assists its LEAs with curriculum development, professional learning opportunities, technical assistance and evaluation activities, other services (e.g., transportation), and supports for students via magnet schools and the provision of special education programs.

Professionals with AT expertise are employed by five of the six RESCs: ACES, CES, CREC, EASTCONN, and LEARN. LEAs in the ACES, CES, CREC, and EASTCONN regions have easier access to an AT specialist, which a PPT team can recommend, and an LEA to contract with, when they have a student whose needs may be unique or complex enough to challenge their existing knowledge of AT or when professional learning is required to support building staff AT capacity. In response to recent LEA requests for AT expertise, LEARN is anticipating expanding their current AT specialization, which is limited to AAC, to a full-time equivalent (FTE) position, with the goal being to build the capacity of the LEAs in the region. EDUCATION CONNECTION has also fielded LEA requests for AT expertise this year, but it does not have anyone employed by the RESC who serves in this capacity. LEAs expressing the need for AT services are referred by EDUCATION CONNECTION to NEAT or CREC.

#### The CT Tech Act Project

In addition to regional AT support for LEAs, assistive technology services are also available at a statewide level, supporting LEAs and all CT citizens. These services originated in CT from federal funding via the Assistive Technology Act, initially called the Technology-Related Assistance Act, which was first passed by Congress in 1988 and was established initially to build general awareness of AT. The AT Act has been reauthorized several times since then. Originally administered by the U.S. Department of Education Rehabilitation Services Administration and, since July 1, 2015, the U.S. Department of Health and Human Services, Administration for Community Living, it provides formula grants to all 50 states and territories and currently focuses on improving access to an acquisition of AT through comprehensive consumer-responsive statewide programs.

CT has operated an AT Act program since 1992. The current program is governed by the AT Act of 1998, as amended in 2004, and is called the Connecticut Tech Act Project (CTTAP). The lead agency for CTTAP is the Connecticut Department of Rehabilitation Services (DORS), Bureau of Rehabilitation Services (BRS). Arlene Lugo provides leadership for the project as its program director within the Community Living Division of BRS.

The role of CTTAP is to supplement but not supplant AT programs and services already in place by maximizing resources. The goal of the project is to increase access to AT for people with all types of disabilities, in all environments, and across the life span via four core activities:

- 1) an AT Device Loan Program,
- 2) an AT Device Demonstration Program,
- 3) an AT Device Reutilization Program, and
- 4) State Financing for AT Devices and Services.

A requirement of this federal grant is that at least 60% of Tech Act funds must address these core activities. A maximum of 40% of a state's federal allocation can be used for state leadership activities, including training and technical assistance, to increase general awareness of AT as well as development of the knowledge and skills required to assess an individual's need for AT and successful implementation of it (i.e., the AT consideration process).

CTTAP budgets a minimum of 5% of its state leadership funding for transition-related activities. These are applicable for students with disabilities who receive special education services under the IDEA and adults with disabilities who are maintaining or transitioning to community living. Under the IDEA, these activities are determined by a student's PPT and facilitate movement from school to post-school activities, including postsecondary education, vocational education, integrated or supported employment, continuing and adult education, adult services, independent living, or community participation.

CTTAP has never been fully funded by the federal government. Its FFY 2015 grant award is for \$395,956.00, and leverage funding for part of the director's salary is provided by DORS. No other state programs provide fiscal support for the project, although a number of state agencies sponsored the project's first Achievement through Technology Conference in 2014 and will be providing sponsorship at its 2016 event. These agencies include DORS, the CT Department of Labor (DOL), the CT Board of Education and Services for the Blind (BESB), the CT Department of Developmental Services (DDS), the CT Office of Protection and Advocacy for Persons with Disabilities (OPA or P&A), and the CT Department of Mental Health and Addiction Services (DMHAS). The majority of participants who attended the first conference were CT educators.

CTTAP fulfills the federal requirement for oversight of its program via an advisory council. Members of the committee include an educational consultant from the Bureau of Special Education in CSDE as well as representatives from the project's partner agencies and other individuals who have expertise and interest in providing appropriate AT for people with disabilities. The requirement for 51% of council members being individuals with disabilities who use AT or their family members or guardians is fulfilled by membership in this advisory group.

CTTAP is also the certified agency in CT funded to operate the National Deaf-Blind Equipment Distribution Program (NDBEDP) administered by the Federal Communications Commission (FCC) and known in CT as Access through Technology. CTTAP provides inventory equipment to EASTCONN, CREC, and NEAT to operate this program. The three agencies also provide evaluations and training to eligible individuals, which can include students. Eligibility is based on a combination of deafness and blindness and household income. The equipment provided is specifically for the purpose of telecommunications, which may include computers and computer access software or hardware, smart phones, tablets, amplified telephones, and Braille refreshable keyboards.

NEAT, CREC, and EASTCONN are also under contract with CTTAP through BRS funding to provide AT evaluations and training of BRS consumers, inlcuding home to work evaluations.

#### **AT Device Loan Programs**

Since 2005, CTTAP has provided financial support for NEAT's AT lending library. Its large inventory of low- to mid- to high-tech AT devices, including AAC, are loaned out to professionals, students, or adults with disabilities or their family members as part of the AT assessment process, for trial as the device is being considered, or, if needed, as a short-term accommodation, for example, if a device requires repair.

For young children with disabilities, case coordinators working within the Connecticut Birth to Three program can determine the child's need for an AT device, describe the use of the accommodation in an Individual Family Service Plan (IFSP), and then coordinate acquisition of the device for the child's family, often by picking it up at NEAT and delivering it to the child's home.

AT includes durable medical equipment (DME), such as a wheelchair, stander, or walker, which can be loaned for an extended length of time, even beyond the point when the child ages out of the Birth to Three system. AT devices, such as switch-adapted toys and communication aids, are loaned for a period of six weeks. These short-term loans are intended to determine if an AT device is appropriate for a child; if this occurs, it is the responsibility of the individual agency to acquire it.

Two AT device lending programs are partially supported by CTTAP through Connecticut's RESCs. CREC, serving LEAs in the north central part of CT and beyond, and EASTCONN, serving LEAs in the northeastern part of the state, have been CTTAP partner agencies since 2011. Both RESCs use funds they receive from this program to obtain AT devices for their lending libraries. CREC's AT lending library is located in Hartford, supported by AT specialists, and, with the exception of high-tech AAC devices, includes low-to-high tech options. EASTCONN's AT lending library is located in Columbia and offers low-to-high tech AT options to LEAs, including AAC. Professionals with AT expertise also support the operation of this AT loan program.

Since 2008, CTTAP has also supported the Computer AT Loan Program (CATLP) at Southern Connecticut State University's (SCSU) Center for Adaptive Technology, which is a Board of Trustees Center. SCSU has used CTTAP funds to purchase PC and Mac laptops, several desktop computers, and several iPads. These AT devices are loaned to educators in LEAs for up to two semesters at a time. They are available to SCSU students with disabilities who require them as an accommodation, and they support the learning of AT by SCSU students enrolled in the special education preparation program. The teachers who borrow the technology are required to install the apps they need for their student(s). Demand for the AT devices offered by the center exceeds their supply.

In addition to services provided to LEAs, CTTAP also manages the AT Device Loan Program, which assists BRS consumers and Vocational Rehabilitation (VR) counselors in determining appropriate AT for their clients. AT devices inventoried in this program were purchased with funds from Connecticut's VR Program and are allocated exclusively for it. Adults are able to borrow a device for use during a work interview, evaluation, on-the-job training, or when hired.



As the CTTAP data in Figures 1 and 2 indicate, the number of AT devices loaned and the number of borrowers accessing AT through this project increased substantially from 2011 to 2014. Modest but consistent increases in both the number of AT devices loaned and the number of borrowers were recorded during 2013, indicating greater interest in AT. Another substantial increase in AT device loan was noted in 2014. Customer satisfaction for the services provided through the AT Device Loan Programs funded by CTTAP was also high, as 89% of the individuals who received this service in 2014 reported that they were highly satisfied.



#### **AT Device Demonstration Programs**

CTTAP also provides financial support to several AT device demonstration programs. NEAT's program has been funded by the project since 2005. NEAT provides AT device demonstrations at its main location in Hartford and at its satellite program, Access Independence, formerly the Disability Resource Center of Fairfield County.

The Eastern CT Assistive Technology Center (ECAT) in Willimantic is an AT demonstration center that has received funding from CTTAP since 2009; this program specializes in AT devices and equipment primarily for accessibility in the workplace. Project funds are used to purchase AT inventory and pay for personnel to operate the demonstration center.

Since 2012, CTTAP has supported the assistive technology center at the Western Connecticut Area Agency on Aging (WCAAA). AT device demonstrations at this site focus primarily on supports useful in the community for aging adults, but they also have applicability to other age groups. Funding from CTTAP supports the purchase of AT devices and personnel.

In addition to serving the needs of LEAs in northeast CT via an AT lending library, EASTCONN is also an AT demonstration site. A member of its team of AT specialists, who represent the disciplines of special education, occupational therapy, and speech and language pathology, provides AT device demonstrations for educators, family members, and employers. CREC also provides AT device demonstrations.

Through a 2015 Memorandum of Agreement (MOA) with CTTAP, the State Education Resource Center (SERC) maintains a small AT demonstration site housed within the centralized SERC Library of educational resources for professionals and families. CTTAP funds are being used to purchase inventory to be placed specifically in this demonstration center. SERC Library staff provide overview information about AT to library patrons and direct them to examine a selection of AT devices. A larger assortment of AT materials, including books, resource guides, and assessment tools, are available for lending at no cost to CT residents. AT device demonstrations are conducted by SERC's AT specialist by appointment.

CTTAP itself also maintains an inventory of AT devices and its program director, Arlene Lugo, provides demonstrations when requested by VR counselors, employers, DDS managers, or other interested individuals. AT device demonstrations are also incorporated into training sessions provided by the director of the project.



The expansion of AT demonstration sites in CT is reflected in data submitted by CTTAP as part of the requirements of the federal grant. Aggregate data representing all of the sites from 2011 through 2014 were available for review. As Figures 3 and 4 indicate, the number of AT device demonstrations and the number of individuals participating in the demonstrations grew exponentially in 2014, increasing by over 100% in comparison to relatively flat data for the previous three consecutive years. Customer satisfaction for the AT device demonstrations provided by CTTAP demonstration sites was exemplary, with 97% of the individuals served in 2014 indicating that they were highly satisfied with the service received.



#### **AT Device Reutilization Program**

AT device reutilization is also supported by CTTAP and is available to CT citizens via two distinct programs. NEAT has an AT Equipment Recycling Center (ERC), located in Hartford, and a satellite program, the AT device restoration center at the Western CT Area Agency on Aging (WCAAA). Donated AT devices, primarily DME, are refurbished, repaired as necessary, and then made available to consumers via an online inventory system, at a 50%-80% discount of the suggested retail price off the device. Consumers can review the list of available AT devices on NEAT's website or visit a center to examine the equipment, loan it out for trial, and purchase it if it meets their needs. Birth to Three providers, who are charged with coordination of services for the children on their caseload, can borrow equipment from the center – for example, a wheelchair – and return it when the child is no longer eligible for these services.

In addition to these centers, CT has had an online AT device reutilization system since 2007 called the AT Exchange in New England & New York; this program is also supported by CTTAP. All of the New England state AT Act Programs partner with one another for this program. Since 2014, New York State has supported this collaborative website (www.getATstuff.com) that facilitates the exchange of unused AT devices among consumers. Individuals opt to place a device in their possession online for sale or transfer; 148 items are currently available. None of the participating states charge consumers to access this system, and the AT devices posted on the site range from mobility equipment to items that provide accommodations for learning, communication, vision, and other disabilities. CT LEAs have access to the AT Exchange and seven CT school districts have registered on it, although their level of participation is not known.

Development of an online AT device reutilization system exclusively for CT LEAs was proposed by NEAT to CSDE in 2002, but was not funded. Subsequently, an online program was created during the 2006-2007 school year by CTTAP. This system was designed in collaboration with CSDE, BSE, prompted in response to the needs expressed by CT school districts via an AT LEA study conducted by the BSE in 2005. The program, called AT School Swap, debuted in 2008, but only a few schools committed to using it, and it did not achieve enough momentum in the ensuing years to continue it. The "shell" of CT's AT School Swap website was subsequently transferred to the Massachusetts Tech Act project, MassMATCH, where it was revamped, enhanced, and introduced to LEAs in the Commonwealth in 2012. The program was re-named in 2013, becoming AT School Share (ATSS) in response to feedback from LEAs that expressed confusion about the presumed give-and-take nature of a "swap." ATSS is a free service, and schools can use the online system to exchange AT devices and/or maintain an inventory of the devices they have in their school inventory. A total of 230 schools are currently registered on Massachusetts' site.

In 2015, Rhode Island's Tech Act program, called the Assistive Technology Access Partnership (ATAP), became an AT School Share partner with Massachusetts. Both states use the same web portal, and 27 Rhode Island schools have registered on the site since it was introduced in July 2015.

#### State Financing for AT Devices and Services

CTTAP has met the federal requirement for providing state financing for AT devices and services since 1993 via an agreement with a bank partner in which loans can be allocated to applicants of the program who may need financial resources for the purpose of AT devices and/or services such as customizing a vehicle or making their home more accessible. The bank utilizes CTTAP's approval process, which includes staff review of applications, a credit report, a debt-to-income ratio, and discretionary income, as well as the individual's need for the AT device. Loans are offered at an interest rate of 4%.

#### Additional CT Tech Act Project Partnerships

DDS has expanded its focus on AT in the past two years. It does not receive funding from CTTAP, but it does have a collaborative partnership. In addition to referring their clients to CT's AT demonstration sites, DDS staff have created a training program entitled "Using Technology to Create a Good Life." This program includes monthly learning opportunities for families that promote the use of technology across the life span as well as the availability of resources. The goal of the program is to create public awareness of the benefits of AT in school, at home, and in the workplace.

CTTAP also partnered with SERC for two consecutive school years, 2007-2008 and 2008-2009, to develop an LEA professional learning model for creating and sustaining AT teams at the high school level. Based on the success of this program, CTTAP announced a Request for Proposals (RFP) in 2009 for LEAs interested in developing an AT team. Orville H. Platt High School in Meriden was selected as one of the two participating schools; Easton also applied for and received customized professional learning to build staff capacity through this RFP.

Through a combination of training and on-site technical assistance provided by AT and secondary transition specialists over a period of two years, Platt High School developed an interdisciplinary AT team, documented its AT device inventory, completed a self-assessment of its AT practices, and systematized its AT consideration process<sup>3</sup>. Of note is that the initial roster of AT devices generated by Platt's AT team was minimal – approximately 5% of its total AT equipment inventory. This indicated to the CTTAP/SERC AT specialists that Platt team members were either unaware of the AT they had, were not considering some devices as AT, or that the AT was not located in areas easily visible to team members. Completing an inventory of the majority of AT available in this large school (approximately 2,300 students at that time) required 1½ days of technical assistance to complete.

In summary, many AT resources are available to CT educators and families of students with disabilities as their PPTs engage in the AT consideration process. These include the option of accessing an AT device sharing programs, and/or benefitting from the expertise of AT specialists throughout the state.

## AT Sharing Programs Study Methodology

The questions addressed by the AT Sharing Programs study were established by the parameters of CT Bill Sec. 271 and included examining:

- 1. Existing AT equipment sharing programs in the state;
- 2. The effectiveness and capacity of existing AT equipment sharing programs;
- 3. Whether LEAs have access to at least one AT equipment sharing program; and
- 4. How to create a plan that would make AT equipment sharing programs available to LEAs that do not have access to them.

#### **Data Collection Procedures**

A procedure for collecting, analyzing, and reporting data consistent with the requirements of the study was established in July 2015 by SERC in collaboration with the CSDE. Mr. Thomas S. Boudreau, in his role as Education Consultant with the BSE and the state department's representative on CTTAP's advisory council, provided AT content expertise. Mr. Boudreau described the scope of AT sharing programs in CT that support the needs of students with disabilities, primarily the programs that receive federal funding via contracts from CTTAP. Dr. Smita Worah and Mr. Sean Kavanaugh, Education Consultants and AT specialists at SERC, also provided content expertise and collaboration. Collectively, they contributed to the design of the questions posed in the AT Sharing Program LEA survey and the development of the question protocol used to elicit information from the AT sharing programs.

#### **CT AT Sharing Programs**

The first two requirements of the study were addressed by systematically eliciting information from CT's established AT sharing programs. Following initial emails from Mr. Boudreau, introducing the primary investigator of this study to the project director of CTTAP and a contact person at each of the AT sharing programs, each program coordinator was contacted by SERC and appointments were scheduled for individual telephone interviews. Questions were shared in advance via email, and each interviewee granted permission for their respective conversations to be tape recorded. The sequence of questions addressed in the semi-structured interviews included asking representatives from CT's AT sharing programs to:

• Describe the scope of their program, including the CT school districts or regions served, the types of students and disabilities addressed by the AT devices they share, their capacity to meet LEAs' needs for borrowing AT devices, and any projected plans they had for changes to their program;

- Discuss their system for loaning AT devices to LEAs, including the process for requesting a device, amount of time for which a device is loaned, access to a centralized inventory of AT devices, data collection procedures, and types of follow-up provided to LEAs; and
- Express their input to the state regarding how to create a plan in CT for AT equipment and device sharing.

Responses were probed for more in-depth information or examples as needed. Interviews were transcribed, and a qualitative analysis of the data was completed by identifying content themes and patterns of response.

#### LEA AT Sharing Programs

**Scope of Questions**. The questions designed for CT's LEA AT Sharing Program Study were developed by the SERC/CSDE team and went through multiple refinements and iterations, including a review by Dr. Isabelina Rodriguez, BSE Bureau Chief, CSDE. The survey, presented in Appendix B, asked LEAs to provide identifying demographic information, including the name of the respondent, the name of the LEA, the respondent's professional role in the LEA's system, and the LEA's RESC affiliation.

The first set of questions relating to AT sharing asked if the LEA had an internal AT sharing procedure in place (i.e., sharing/loaning AT devices within their own school system). Those LEAs who responded "yes" to this question were prompted to provide details about their procedures, including the types of AT equipment/devices shared, frequency of sharing, and degree of effectiveness and satisfaction with the sharing process among school personnel.

Subsequent to this line of inquiry, LEAs were asked if they shared AT equipment/devices with other LEAs (i.e., district-to-district sharing). Similar to the previous question sequence, LEAs that responded "yes" to this question were asked to describe their cross-district AT sharing procedure and provide information about its frequency of use as well as the effectiveness of the system and their staff's satisfaction with the process.

A subsequent set of questions queried LEA participation in, satisfaction with, and effectiveness of external AT sharing programs, defined, for the purpose of this study, as "an external service that lends assistive technology devices at no cost (other than membership to the organization/agency) to local and regional education boards to support students with disabilities." The caveat incorporated into this question, "at no cost (other than membership to the organization/agency)," was included to account for the various types of agencies in CT that require payment of a fee by LEAs as part of the provision of access to their AT device lending program. LEAs that indicated they had used external AT device sharing programs were asked to provide the names of the organizations or agencies they accessed. A list of CT's AT sharing programs, inclusive of but not limited to those programs funded by CTTAP, was provided, as well as the option to describe any "other" program.
of use of the external AT sharing program as well as educators' satisfaction with the experience and effectiveness of the program.

LEAs that responded that they had not accessed an external AT sharing program were asked the reasons why they had not availed themselves of this service. Response options included:

- My district can provide students with access to the AT devices that PPTs recommend.
- I am not aware of any AT Sharing Programs.
- When I contacted the AT Sharing Program(s), I found they did not have the AT device that the PPT recommended.
- When I contacted the AT Sharing Program(s), I found they were not able to provide the device in a timely manner.
- When I contacted the AT Sharing Program(s), I found they could not deliver the device requested.
- When I contacted the AT Sharing Program(s), I found that they were not able to provide the professional learning my staff needed for AT implementation.
- I encountered too many barriers when using the AT Sharing Program(s).
- Other: \_\_\_\_\_

For those LEAs that cited obstacles to using an external AT sharing program, a follow-up question was asked about the types of barriers experienced and whether removal of them would subsequently prompt them to use such a program.

Those LEAs that reported that they do use an external AT sharing program were queried about the benefits of participation. Response options included:

- An AT Sharing Program would help my district reduce costs associated with the AT consideration/evaluation process.
- An AT Sharing Program would help my district explore AT options for trial to make the right match to the student's needs.
- An AT Sharing Program would help my district reduce costs associated with providing AT devices for short-term use.
- An AT Sharing Program would allow a greater variety of assistive technology options and expand the AT consideration process across the continuum.
- An AT Sharing Program would expand the digital library and technology for all students in my district.
- Other:\_\_\_\_\_

Two final questions were asked of LEAs. The first asked about their likelihood of using a CT-based online posting service (Craigslist-style) for borrowing, selling, or purchasing AT devices. The final question in the survey asked LEAs to convey their overall need for an external AT sharing program in CT.

**Dissemination of the AT Sharing Survey.** The AT Sharing Survey was disseminated by CSDE electronically to their comprehensive list of LEAs on September 2, 2015. Subsequently, the directors and supervisors of special education who attended CSDE's Annual Back-to-School event on September 16, 2015 were reminded to complete the survey. A total of 79 LEAs responded by the end of September. As a follow up, directors of special education who had not responded by that time were personally contacted by telephone and invited to participate in the survey. Assistance was offered, including re-sending the survey link, which was requested by a majority of the directors contacted. An option for directors to provide verbal responses to the survey questions was also provided; in these situations, the respondent's answers were recorded on the survey by a SERC representative. No directors of special education refused to complete the survey, but a few asked if participation was mandatory. This level of follow-up, which concluded on November 12, 2015, yielded an additional 40 responses to the survey.

# AT Sharing Programs Study Findings

An array of AT sharing programs are in place in CT. LEAs, depending on where they are located in the state, have greater or lesser accessibility to them. This includes access to AT devices as well as the AT professionals who provide training and technical assistance to support the AT consideration process and/or implementation of a student's IEP.

#### AT Sharing Programs Funded by the CT Tech Act Project

CTTAP partially funds four partner agencies in CT (NEAT, CREC, EASTCONN, and SCSU) that offer AT devices to LEAs on behalf of the project. Each of these agencies offers various options for LEAs to borrow AT equipment and devices. A description of each of these programs is presented in this section and is summarized in Table 1. None of the sharing programs act as a vendor for AT devices, although the AT specialists at each site frequently offer assistance to LEAs in determining device specifications after an AT evaluation has been completed.

# The New England Assistive Technology (NEAT) Center at Oak Hill

NEAT's center is devoted exclusively to the mission of providing AT devices and services to CT citizens with disabilities across the age span. As such, they serve schools, businesses, libraries, and institutes of higher education. For an annual membership fee, LEAs can access the AT devices in NEAT's library and purchase an array of AT services at reduced rates, including evaluations for students, consultations, demonstrations, and professional learning opportunities. A total of 30 LEAs, listed in Appendix C, are participating in NEAT's 2015-16 program; other participating schools include private-approved special education facilities (Adelbrook, CT Children's Medical Center School [CCMC], and Eagle Hill).

LEAs that participate in NEAT's program represent five of CT's six RESCs; no LEAs from CES are represented in 2015-2016, although one private-approved special education school in the CES region is a member. Proportionally, the large majority of these LEAs, 57%, are located in the CREC region; 20% are members of EDUCATION CONNECTION; 10% are located in the LEARN region; and 6% are ACES or EASTCONN LEAs.

LEAs that join NEAT have access to an online inventory of AT devices, which is maintained by NEAT staff and supports the special education needs of students with all types of disabilities and of all ages. A full continuum of low- to high-tech AT devices is available for loan, including high-tech communication systems (AAC). The loan period for an AT device is

	AT Sharing Program Supported by CTTAP	Continuum of AT Devices	Access Model	Number of LEAs Served	AT Services	Online Inventory	Distribution Options
ACES	No	Primarily iPads	No fee	17 in 2014-15	Extensive	No	On-site pick up and availability of delivery
ASD	No	FM devices	Fee-for-service or cost reimburse- ment	Not known	Limited	No	On-site pick up
CES	No	Low-and mid- tech	No fee	2-3	Extensive	No	On-site pick up and availability of delivery
CREC	Yes	Low-to-high tech; no high- tech AAC	Annual AT consortium fee	14	Extensive	Restricted	On-site pick up and availability of delivery
EASTCONN	Yes	Low-to-high tech	Annual AT consortium Fee	11	Extensive	Public	On-site pick up and availability of delivery
NEAT	Yes	Low-to-high tech	Annual membership fee	30	Extensive	Restricted	On-site pick up and availability of delivery
SCSU	Yes	Primarily high-tech	No fee	16	Limited	Restricted	On-site pick up

Table 1: CT AT Device Sharing Programs for LEAs - 2015-16 School Year

typically a month, but extended loans of up to six weeks can be made. NEAT members can pick up a requested AT device, or, if an AT specialist is planning to be in the area in which the school is located, a drop-off is arranged.

#### Capitol Region Education Council (CREC)

CREC, one of CT's six RESCs, provides an array of supports and services for LEAs in its catchment area, including educational programs for students with special needs, professional learning opportunities for educators, and cooperative purchasing and business services. CREC currently supports 14 LEAs within their 2015-2016 AT Consortium program, including the CREC magnet schools; one private approved special education facility, the Intensive Education Academy in West Hartford, also participates. Most of this year's consortium members, 50%, are located in the CREC region, but this program also supports LEAs from four other RESCs; 29% of the members are from the EDUCATION CONNECTION catchment area; one LEA from the ACES, CES, and LEARN regions respectively represent 21% of the total membership. Participating districts (see Appendix D for a list of 2015-2016 consortium members) opt for a fee-for-service customized package of AT services that includes AT evaluations, training, and technical assistance, demonstrations, and consortium meetings delivered by AT experts.

CREC AT consortium members have access to their AT lending library, which includes low-to-high tech options, exclusive of high-priced AAC items, for students of all ages and types of disabilities. CREC personnel maintain an online inventory of AT devices on Microsoft's SharePoint that is accessible to consortium members. The average period of time for a device loan is four weeks, but an LEA can request an extension as needed. LEA representatives can pick up a requested AT device, or one of CREC's AT specialists can deliver the equipment as part of an on-site evaluation, consultation, and/or professional learning consortium service.

#### EASTCONN

EASTCONN, another CT RESC, also offers LEAs in its catchment area a range of educational supports and related services, and, similar to CREC, uses a fee-for-service AT consortium model to provide AT supports and services (i.e., AT evaluations, consultations, demonstrations, and professional learning opportunities) for LEAs. A total of 11 districts are members of EASTCONN's 2015-16 AT Consortium (see Appendix E); 73% are located in the EASTCONN catchment area; 18% are districts served by LEARN (2 LEAs); and 1 LEA, 9% of the total, is a member of CREC. This LEA, Manchester, is notable because it currently participates in all three AT programs, NEAT, CREC, and EASTCONN.

Districts participating in EASTCONN's consortium can borrow AT devices from its AT lending library, which includes low- to high-tech AT options, including higher-priced AAC. A multi-disciplinary team of AT specialists staffs the AT sharing program, responding to LEA AT inquiries. An online inventory of AT devices is managed by EASTCONN staff using

a customized version of FileMaker Pro. Requests from AT consortium members receive priority, but EASTCONN does not exclusively provide AT devices to consortium members. Each request is handled on a case-by-case basis; devices are loaned to non-consortium member LEAs if the requested device is available. The approach used by this RESC is that it is better to have AT devices being used by students with disabilities than to have them sitting on shelves. EASTCONN's loan period for AT devices is typically two weeks, but this time is extended if the student is continuing to experiment with the device or if the child is experiencing success and the LEA has initiated the purchase process. AT devices can be picked up at EASTCONN's AT lending library in Columbia, or a member of its AT team can deliver the device if EASTCONN is providing an on-site service at or near the requesting school.

EASTCONN has also recently started to accumulate technology equipment for clients who qualify as deaf-blind and can receive services through CTTAP's telecommunications program. EASTCONN also provides some home-to-work AT evaluations for some BRS clients.

#### Southern Connecticut State University (SCSU)

SCSU's AT sharing program is housed within the Center for Adaptive Technology for the State of Connecticut at SCSU. The lending library includes some low-tech equipment (e.g., switches), but most of the devices in this program are high-tech (i.e., iPads, Chromebooks, and laptops). There is no fee to borrow assistive technology, and membership is not required. Requests for an AT device are made most often by individual teachers representing LEAs across CT for the primary purpose of trialing the hardware or software/ apps by their students with disabilities in order to determine if the device is the right one for the student prior to the school making a purchase. The majority of requests come from the New Haven Public Schools (see Appendix F for a list of school districts supported by SCSU's program). A total of 16 LEAs have accessed SCSU's program thus far this school year, and one private nonprofit school is currently using the program; 11 LEAs access SCSU's AT lending program exclusively; 5 LEAs accessing SCSU's AT devices also participate in another AT lending library program.

AT devices at SCSU are loaned on a semester basis, with the option to extend the request for a second semester. As such, most of the AT devices loaned by the center are used by the requesting educators for an entire school year. An inventory of AT devices is maintained by the center, and requests are fielded on an individual basis via telephone or email request. Educators typically pick up the AT device and are required to return it at the conclusion of the loan period.

#### Use of CT AT Sharing Programs

Each of the AT sharing programs described above also shares AT devices with educational professionals who are interested in increasing their own capacity to learn about AT and apply it in the educational settings in which they work. Each program also has a policy about how long devices can be borrowed, typically a one-month period, with the exception of SCSU, which loans devices for a semester at a time. However, representatives of all of the AT sharing programs expressed flexibility with this requirement. In general, a student's needs supersede policy; if a device has not been requested by another LEA, educators are permitted to continue to use it.

In 2015, 36% of CT LEAs accessed one or more of the four external AT sharing programs that partner with CTTAP. In the current school year, 18% of CT LEAs have a membership at NEAT that permits access to its AT sharing program; 8% use CREC's program, and 6% avail themselves of EASTCONN's program through membership in their respective AT consortiums. Three LEAs participate in two AT options (NEAT and CREC) and one district has a membership in all three programs. An additional 11 school districts, 6% of CT's LEAs, participate exclusively in SCSU's AT sharing program.

Figure 5 illustrates AT sharing program use across CT. Highlighted LEAs are currently accessing one or more of CT's AT lending libraries. As this state map indicates, AT sharing programs are accessed by LEAs across the state, but there is a much denser pattern of use by LEAs in the north central and northeastern parts of the state. In general, districts that are geographically farther from an AT sharing center are less likely to access one.

LEA participation in one or more of the CT AT sharing programs in 2015 disaggregated by RESC regions yielded the following access rates:

- LEAs in the ACES region: 23%
- LEAs in the CES region: 7%
- LEAs in the CREC region: 56%
- LEAs in the EASTCONN region: 31%
- LEAs in the EDUCATION CONNECTION region: 26%
- LEAs in the LEARN region: 25%



Figure 5: LEA Participation in AT Sharing Programs

#### **Additional AT Sharing Programs**

Two additional RESCs, ACES and CES, and the American School for the Deaf (ASD) also support the AT needs of students with disabilities in CT, but do not receive financial support from CTTAP. Their AT sharing systems are described in the following section and are included in the summary of established CT AT sharing programs presented in Table 1.

AT specialists at ACES support its AT sharing program, which is small in scope and is limited to an inventory of about 10 iPads. These devices are shared with various LEAs, most of which are in the ACES catchment area, but some that are not. Some loans are informal with the device being shared for a single week; the time span for other loans can be as long as six weeks. Most of the requests for AT sharing involve the needs of elementary school students, especially students on the autism spectrum who have communication disabilities. The AT specialists at ACES also provide evaluations, consultations, and professional learning for educators and are seeing an increase of referrals to meet the AT needs of students who have educational plans developed under Section 504 of the federal Rehabilitation Act of 1973, which prohibits discrimination against students with disabilities.

CT students who are deaf or hard of hearing can receive support from ASD staff who provide consultations, training, technical assistance, and resources to LEAs on a fee-for-service and/or cost reimbursement basis. Personal or classroom frequency modulation (FM) systems, which are similar to miniature radio stations that operate on special frequencies and consist of a transmitter microphone used by the teacher and a receiver, used by the student, can be rented; loaner hearing aids are available for trial during the audiological assessment process.

The AT specialist at CES fields two to three requests per year for access to an AT device stored in its AT sharing program inventory. These requests usually follow an AT evaluation. These AT loans are mostly low- and mid-tech devices. According to CES, the LEAs in its catchment area appear to have the high-tech devices their students with disabilities need.

#### Barriers to AT Sharing Expressed by AT Sharing Programs

Based on input from the coordinators of CT's AT sharing programs, two overarching themes emerged reflecting barriers to implementing external AT sharing programs. These included:

- 1. Insufficient funding for personnel and acquisition of AT devices; and
- 2. Inadequate professional learning opportunities for CT educators to increase their knowledge and use of AT.

# LEA AT Sharing Survey Findings

### **Description of LEA Respondents**

A total of 119 individual responses were submitted by LEAs to the CT AT Sharing Study. However, when coding decision rules were applied, the sample size of respondents decreased to 100. Seven surveys were coded as "incomplete" and excluded from analysis; each of these respondents answered only the demographic questions, providing just their name, role, LEA, and RESC affiliation. Four responses were coded as "duplicate" and were subsequently omitted from the analysis; and an additional eight respondents completed less than 20% of the survey questions and were also eliminated from the final analysis. The total sample size of 100 respondents yielded a 59% LEA participation rate to the survey.

A listing of all LEA survey respondents disaggregated by RESC region is presented in Appendix G.



As Figure 6 illustrates, the majority of respondents to the LEA AT sharing survey were directors/supervisors of special education or assistant superintendents of Pupil Personnel Services. Seventeen respondents identified themselves as educators with AT expertise, including six individuals self-identified as AT directors or coordinators and 11 AT specialists serving as district AT facilitators or consultants and describing their certifications in special education, occupational therapy, or speech and language pathology.

The LEAs that responded to the AT survey were situated within each of CT's RESC regions. As illustrated in Figure 7, relatively more LEAs in the CREC and EASTCONN regions responded than LEAs in the LEARN and EDUCATION CONNECTION regions.

A comparison of the number of responding LEAs within each RESC to the total number of districts in their RESC region indicated a relatively low 29% LEA survey participation rate within the EDUCATION CONNECTION catchment area and a relatively high participation rate of 87% within the CES region. That is, even though only 14% of the total sample of LEA respondents was from the CES region, which has the fewest number of LEAs, a high percentage of CES LEAs participated in the survey. Participation rates for LEAs in the other RESC regions included 72% for CREC, 61% for EASTCONN, 59% for ACES, and 48% for LEARN.



Figure 7: LEA AT Survey Respondents by RESC Region

A distinct pattern emerged when the

respondents who identified themselves as

educators with AT expertise were categorized into their respective RESCs. Figure 8 illustrates the relative proportion of AT specialists responding to this survey from their respective RESCs.

As the data indicate, relative to the overall number of AT specialists self-identified in the AT sharing study, the highest percentage were employed in LEAs in the CES region, 41% (7 professionals), followed closely by CREC, 35% (6 professionals); three AT specialists,



Figure 8: Responding AT Specialists by RESC Region

18% of the sample, worked in LEAs in the ACES region. In comparison, a single AT specialist responded to the survey from EDUCATION CONNECTION; no respondents with this expertise were representative of LEAs in either the EASTCONN or LEARN regions. A further analysis of the data indicated that four of the six individuals who identified themselves as AT directors or coordinators were employed in LEAs located in the CES region; one professional in this category was employed in a CREC school district and another individual worked in an LEA in the CES region.

#### LEA Access to Intra- and Inter-AT Sharing Programs

**Intra-district AT Sharing Program Findings.** CT LEAs were about equally divided in their responses to a question about their use of an *internal* (i.e., intra-district) AT sharing system. Slightly more than half of the responding LEAs noted that they did have a process in place that enabled their schools to share/loan AT devices, and slightly less than half reported that they did not.



When the intra-district AT sharing system data were disaggregated by RESC, as displayed in Figure 9, LEAs from the CES region were most likely to respond that they had an internal system in place that facilitated sharing of AT devices within their school systems. Conversely, LEAs in the EASTCONN region were least likely to have an intra-district AT sharing system in place.



Of the LEAs that reported having an intra-district AT sharing program, their frequency of use of the process by educators was most often 2-4 times within the previous 12-month period. Figure 10 displays the range of AT sharing by LEAs.



The highest frequency of intra-district AT sharing was noted by responding LEAs in the ACES region. In contrast, the lowest frequency of intra-district AT device sharing was in the EASTCONN area. These data are illustrated in Figure 11.

The majority of LEAs that reported having an intra-district sharing system, 67%, noted that their school personnel were satisfied or very satisfied with their sharing program; 26% were unsure, and 7% were dissatisfied. The same LEAs that reported dissatisfaction with their internal sharing program also responded that the AT sharing was ineffective. In contrast, 60% reported that their sharing process was effective or very effective and 33% noted that they were unsure about the degree of effectiveness of their process. These results are summarized in Figures 12 and 13.



The reported LEA results of frequency of use, satisfaction with, and effectiveness of their intra-district AT sharing systems should be interpreted with some caution, as it was apparent that some confusion existed. A total of 23% of the LEAs that responded to this line of inquiry did *not* describe a within-district AT sharing system in a follow-up question. Rather, they explained their interface with one of CT's external AT sharing programs funded by CTTAP (i.e., NEAT, CREC, EASTCONN, or SCSU). An additional 12% of the LEA respondents who indicated they had an intra-district AT sharing program summarized their AT consideration process rather than an intra-district procedure for sharing AT devices.

A succinct description of an intra-district AT device sharing program was offered by one LEA: "1) Request made through Pupil Services; 2) Equipment located and availability checked; 3) Equipment shared/loaned." Several responses indicated that a director or supervisor of special education coordinated the intra-district AT sharing process; for example: "I meet regularly with school administrators. If AT needs arise, we will discuss if there are any buildings that have equipment/devices that they are not currently using which could then be shared with the building in need of the device or equipment. If there is equipment that is not being used, that equipment is shared." Several directors of special education described that PPT decisions for AT devices were routed through their office, where staff maintained a centralized system that accounted for the district's need to acquire AT, particularly high-tech devices.

Although information describing the process that LEAs use for keeping track of their AT devices was not requested in the AT Sharing Survey, 27% of the LEAs who reported having an intra-district AT sharing process also described having a formal inventory system in place to track AT device use and availability. Responses indicating this practice included:

"An inventory of available technology is maintained by central office."

"We have a regional AT team that has an inventory of equipment that can be shared throughout the schools within the district."

"The district-level AT consulting teacher checks our inventory and documents an AT loan in a Google Drive spreadsheet."

"I use an inventory database to keep track of items checked in and out."

"We have an inventory and we sign in and sign out each school year. We track sharing in a mobile management device program."

One LEA described a broad educational technology project in place for all students, writing: "We currently have a one-to-one Chromebook initiative for grades 2 through 12." Three additional districts interpreted intra-district AT device sharing to include their collaboration with families of students with disabilities, indicating that AT devices were also being used by the student in environments other than school.

**Inter-district AT Sharing Program Findings.** A minimal number of responding LEAs, 9%, reported that they share AT devices with another school district. In contrast, the overwhelming majority of responding districts, 91%, reported that they do not share AT equipment or devices with other LEAs.

An analysis of LEA responses to a follow-up open-ended question about their inter-district AT sharing indicated that, for the large majority of these respondents, 71%, their district-to-district AT device sharing process was actually more of an intra-district process. Only one survey response was from a director of special education representing a K-12 LEA. In contrast, most of the LEAs that responded that they engaged in inter-district AT sharing also noted that they were part of a regional school system (e.g., Region 11: Chaplin, Hampton, Scotland) and that their typical process was to share AT devices among the schools in their region. In addition, each of these LEAs reported that they also share the professional expertise of their AT specialists who provide the special education services needed by the students who require AT. These sharing experiences were described as part of a centralized system that provides a continuation of IEP AT supports and services for students transitioning from an elementary school to a regionalized middle school or from a local middle school to a regionalized high school.

Given the low number of LEAs who reported intra-district AT sharing, data relative to frequency of use and satisfaction with the sharing process should be interpreted with caution. The frequency of use of AT sharing for the regional LEAs that identified that they share devices across their schools was minimal, with all of these LEAs reporting between 1 and 4 AT devices having been shared in the prior 12-month period. LEAs from these regional programs reporting inter-district AT sharing indicated that the majority of their school personnel, 57%, were satisfied or very satisfied with the AT device sharing experience and 43% indicated that the AT sharing process was effective; 14% of respondents noted that they were unsure if their staff were satisfied, and 29% reported that they were unsure about the overall effectiveness of the AT device sharing.

A director of special education representing a K-12 LEA, the only special education director from this district configuration to respond, reported using inter-district AT sharing between two and four times in the previous 12-month period. The director rated the process "effective," and regarding satisfaction of staff with the AT lending experience, the director answered "unsure."

#### LEA Access to External AT Sharing Programs

The third question posed in this study was whether LEAs have access to at least one AT equipment sharing program. As previously noted, for the purposes of the AT Sharing Survey, an *external* sharing program was defined as "an external service that lends assistive technology devices at no cost (other than membership to the organization/agency) to local and regional education boards to support students with disabilities." This definition was used to encompass both fee-for-service and no-cost services, both of which are funded by CTTAP.

**LEA Frequency of Use of External AT Sharing Programs.** The large majority of responding LEAs, 78%, reported that they do not use an external AT sharing program to meet the special education needs of students in their respective school districts. In contrast, 22% reported that they do access an external AT sharing program to meet the needs of their students with disabilities.



When these responses were disaggregated by RESC region, districts in the EDUCATION CONNECTION catchment area had the highest percentage of responding LEAs that participated in an external AT sharing program. Figure 14 illustrates the participation rate of all responding LEAs disaggregated by the RESCs in which they are located.



The relative frequency of use of each of CT's external AT sharing programs is summarized in Figure 15. Districts that use an external AT sharing program responded by indicating all of the programs they had participated in within the previous 12 months.

AT sharing programs at NEAT and CREC were reported to be most often and equally used by LEAs to meet their students' needs to obtain AT devices. The AT sharing programs at EASTCONN and SCSU shared a second-place ranking, with equivalent access to both programs reported. AT sharing programs available through CES, ACES, and ASD were all ranked third by LEAs in terms of frequency of use of their AT sharing programs. One LEA reported using Abilitations, a for-profit brand of new/unused educational products, including AT equipment and devices for students with special needs, that are available for purchase via an online school specialty company.



Responding LEAs were grouped within their respective RESC catchment areas to determine their patterns of access to CT's AT sharing programs, including the AT Sharing programs they access and the number of times they utilize them. These results, summarized in Figure 16, indicate that LEAs were more likely to access an external AT sharing program that was in their RESC region or geographically closest to their RESC. However, this pattern of use was not exclusive, as LEAs used AT sharing programs in areas beyond those that were geographically close. Both analyses, in Figures 15 and 16, should be interpreted with some caution, as the number of instances in which any of the external AT sharing program were accessed by the LEAs responding to this survey was quite low.



Most of the LEAs that accessed the AT sharing programs noted above were doing so with minimal frequency. As Figure 17 indicates, 78% of responding LEAs reported accessing an external AT sharing program between one and four times. Three LEAs reported using an AT sharing program between five and twelve times and an additional two districts reported borrowing an AT device over 12 times.

**Degree of LEA Satisfaction with External AT Sharing Programs.** A high degree of satisfaction was reported by the LEAs accessing CT's AT sharing programs.



As reported in Figure 18, the large majority of responding LEAs noted that they were satisfied or very satisfied with the AT sharing experience. Two districts each reported that they were unsure about the degree of satisfaction of their staff with the external AT sharing program they had accessed, and one LEA reported dissatisfaction with the AT lending experience.

**LEA Perception of Effectiveness of External AT Sharing Programs.** A similar data pattern was observed relative to the effectiveness of CT's external AT sharing programs. Figure 19 illustrates that the large majority of LEAs reported that the AT sharing experience was effective or very effective for their school district. Two LEAs were unsure about the degree of effectiveness of external AT sharing, and one district expressed dissatisfaction with the process.

Seven LEAs noted a high degree of both satisfaction and effectiveness of the AT sharing process. Some of their positive comments included:

"Availability of device; location for pick up/ drop off."

"It was effective to evaluate the device for specific students as well as using it while we waited for budget approval."

"The AT devices were available for trials."

"People felt it was easy to access materials and equipment."



"The equipment was available to our district and provided promptly."

"... students were able to utilize different devices prior to the district or family ordering."

Only one LEA rated the external AT sharing program accessed as ineffective and expressed staff dissatisfaction with the process, commenting that "The first sharing program did not have the technology I needed. The second sharing program sent the incorrect one."

**LEA Need for External AT Sharing Programs.** As illustrated in Figure 20, the overall need for external AT sharing programs expressed by CT LEAs is at a medium-to-high level for 85% of the districts responding to the AT Sharing Survey. Only one responding LEA did not express a need for an external AT sharing program.



The LEAs' reported need for an external AT sharing program varied when disaggregated by RESC. A medium- to high-level need was most evident in the EDUCATION CONNECTION, ACES, and EASTCONN regions. These data are presented in Figure 21.



Despite many LEAs expressing a medium- to high-level of need for an AT sharing program, Figure 22 summarizes the reasons districts noted for not using such a program.



As the data in this figure indicate, the large majority of LEAs that responded that they did not use an external AT sharing program indicated most often that they were able to provide students with access to the AT devices recommended by their students' respective PPTs. However, the second most common reason for not accessing an external AT sharing program noted by LEAs was their lack of awareness of the availability of these programs as a potential resource.

Of note in this data was the finding that very few LEAs responded that they did not use an external AT sharing program because the AT devices recommended by their students' PPTs were not available or that the program could not deliver the device. No LEAs noted that the AT sharing program they accessed was unable to provide staff professional learning experiences needed for AT device implementation.

Disaggregated by RESC, little variability was noted in districts that reported they could provide their students with access to the AT devices recommended by PPTs. These percentages ranged from 60-75% and indicated a consistency of response across the RESCs.

**LEA Barriers to Participating in an External AT Sharing Program.** Barriers to participating in an external AT sharing program were expressed by 10 LEAs. These included inaccessibility of the AT device required by the PPT at the AT sharing program, stated by five LEAs, and timeliness of access to the AT devices, noted by three school districts. As Figure 23 illustrates, the large majority of LEAs that noted barriers to accessing external AT sharing programs expressed that they would use such a program if the barriers were removed.



Figure 23: Percentage of LEAs Who Would Use an External AT Sharing Program if Barriers Were Removed

**LEA Benefits of Participating in External AT Sharing Programs.** In addition to the barriers to accessing external AT sharing programs, the LEAs also noted benefits to participating in such a program by reacting to six response options summarized in Figure 24 and selecting all that applied in their district.



The benefits of an external AT sharing program for LEAs were most often related to improving the quality of special education services for students with disabilities. The highest percentage of responses addressed exploring appropriate AT options that would match the student's needs, and the second highest response was providing a greater variety of AT options — thus expanding the AT consideration process across the special education continuum of low- to high-tech devices. Cost savings for LEAs were also noted as a benefit to having an external AT sharing program, including the reduction of costs associated with the AT consideration process as well as borrowing an AT device for short-term use while the student tries it or during the lag time between ordering and receiving the device.

One-third of the LEAs responded that participation in an external AT sharing program would expand the digital library and technology for all students, while only 15% noted that the benefits of an external AT sharing program would not be significant for their school district.



At least 50% of the responding LEAs in all of the RESCs expressed that an external AT sharing program would help their district explore AT options for trial to make the right match to the student's needs. At least 50% of responding LEAs from four out of the six RESCs also reported that an external AT sharing program would help their district reduce costs associated with the AT consideration process. A large majority of responding LEAs in the EDUCATION CONNECTION region, 80%, expressed that an external AT sharing program would help their district explore AT options for trial to make the right match to the student's needs and that it would help their district reduce costs associated with the AT consideration process. These results are summarized in Figure 25.

**LEA Likelihood of Using an Online AT Sharing Program.** As Figure 26 indicates, the majority of CT LEAs, 68%, expressed that they were likely or extremely likely to use a CT-based online posting service (e.g., Craigslist-style) for borrowing, selling, or purchasing AT devices.



Figure 27 summarizes LEA responses to the question of their likelihood to use an online AT sharing program with responses disaggregated by their RESC region.

LEAs in the CREC and EDUCATION CONNECTION regions reported most often that they were likely or extremely likely to use a CT-based online AT device posting service, followed by EASTCONN. Slightly more than half of the responding LEAs in the ACES, CES, and LEARN regions expressed the need for this service.



## Summary of Patterns of LEA AT Sharing

#### LEA Use of Intra- and Inter-District AT Sharing

About half of the CT LEAs that responded to this study indicated that they maintain an intra-district system of AT-sharing across their schools. A complete inventory of all AT devices (low- to mid- to high-tech) within an LEA would be advantageous for intradistrict AT sharing. However, based on input from CT AT specialists in AT sharing programs, it appears that very few school districts maintain such an inventory. As the technical assistance experience from Platt High School illustrates, educators are not necessarily aware of the full range of devices and tools that are considered AT and may not know where these are stored or their degree of use. If an AT device database system is in place in an LEA, responsibility for providing oversight to keep it up-to-date rests on a director or supervisor of special education if the district does not have a dedicated AT specialist. In most cases, these AT inventories appear to be limited primarily to high-tech/high-priced devices.

In contrast to intra-district sharing, relatively little AT device-sharing exists across LEAs, with the exception of regional school districts that have cooperative arrangements among their schools. These districts may also know their students' AT needs and anticipate the transfer of AT devices as the children progress through the various schools in the region.

#### LEA Use of External AT Sharing Programs

About one-third of CT LEAs use an external AT sharing program. One statewide AT facility in Connecticut, NEAT, offers LEAs a comprehensive array of supports, services, and expertise, including an AT lending library available to LEAs for the cost of an annual membership. Two RESCs, CREC and EASTCONN, also offer comprehensive AT services. These include AT device sharing programs and AT professionals who assist LEAs by providing direct services to students or educators. RESC services, including access to their AT lending programs, are included in an annual LEA AT consortium professional learning opportunity. One of CT's state universities, SCSU, has a dedicated AT program that supports adult students with disabilities on campus and provides free long-term loans of high-tech AT devices to teachers from across CT who request them. All of the AT lending programs, with the exception of SCSU, accommodate educators who are borrowing AT devices by dropping them off and/or picking them up if possible.

Significant AT expertise is present in two additional RESCs, ACES and CES. In these RESCs, AT device lending is done on a small scale, but professional AT assistance is available to LEAs when needed. LEARN is in the process of expanding its current AT expertise;

EDUCATION CONNECTION does not employ a professional with AT specialization. An analysis of the findings of this study relative to the regions in which the LEAs are located yielded mixed results. Some guarded conclusions regarding LEA use of AT sharing programs across RESC regions can be made, but these should be interpreted with caution as some RESCs had relatively lower or higher overall LEA participation in this study. LEAs in the CREC region, which have the greatest availability of AT sharing programs, are, as might be predicted, accessing them the most; however, almost half of the LREs in this region are not accessing an AT sharing program that is geographically close, and only about a guarter of the LEAs in this region that responded to the survey indicated that they participate in external AT sharing. LEAs in the EDUCATION CONNECTION region reported a high degree of use of AT sharing programs, but, in actuality, only about a guarter of them actually do, most probably because they do not have geographically close access to them. LEAs in this region also expressed a high level of need for access to such a program. Data from LEAs in other RESC regions were less clear. About one-fifth of the LEAs in the CES region, which are geographically farthest from any of the external AT sharing programs, indicated that they participate in an external program, which may reflect an indication of their reliance on the AT expertise at their RESC. Only about a third of LEAs in the EASTCONN region access the AT sharing program in their region, but those LEAs that responded to the AT Study survey expressed a high need to have such a program available to them.

Even though the majority of CT LEAs report that they do not use an external AT sharing program, those that do access them use them infrequently; these LEAs report that they are mostly satisfied with the lending process and report that it is effective.

Despite the relatively low use of external AT sharing programs by LEAs, they expressed a strong need to have access to them. LEAs most often reported that they are able to meet the AT needs of their students with disabilities, but should they not be able to do this, slightly more than half of them were not aware that AT sharing programs were available to assist them in meeting this need. One comment from a director of special education illuminates this situation: "At the current time we are, and have been able to, provide our students with access to the AT devices recommended. If the need arose in the future and we were not able to access the devices, I would contact AT sharing programs, but I have very little information about AT sharing programs in our area." LEAs also reported that the geographical locations of the AT lending libraries required staff travel time sufficient enough to constrain their decision to use them.

The benefits for LEAs of having access to an external AT sharing program included maintaining FAPE by providing quality special education services and being able to offer a range of low- to mid- to high-tech AT options within the AT consideration process at no cost to the district.

#### Barriers to External AT Sharing Programs

The primary factors described by LEAs as barriers to participating in an external AT sharing Program included: 1) lack of staff awareness that AT sharing programs exist, 2) the distance to external AT sharing programs that require staff travel time, 3) the availability of newer AT equipment at the AT sharing programs, and 4) incompatibility between the LEA's Information Technology (IT) system and a student's AT device.

Some barriers to external AT sharing programs overlapped when the perspectives of the AT sharing programs were compared with input from CT LEAs. Specifically:

- Accessibility of traditional technology exists in schools, but educators lack appreciation of the possibilities that can unfold for students with disabilities when AT is considered within a thoughtful and comprehensive team process. Lack of awareness that AT is a largely untapped resource and that providing over-support (for example, recommending a scribe for a student rather than exploring an AT solution), does not increase independence. Also, lack of educator awareness that AT is a quality-of-life issue for many students with disabilities and that providing under-support by delaying the decision to engage in the AT consideration process until a student is in high school can subsequently marginalize life outcomes for them.
- There is a need for general and special educators to receive professional learning opportunities about AT so that the knowledge and understanding of AT best practices in an LEA is not person-specific and the AT consideration process is effective. As stated by the coordinator of one AT sharing program: "There is nothing worse than sending out an AT device and having staff say it is not successful when the educators didn't have the training needed to support use of the equipment."

Additional barriers to AT sharing programs as expressed by representatives from the programs included the following:

- AT sharing programs face a lack of the funding needed to support the labor and time required to maintain an AT sharing center. As stated by the director of one program, "It's not the lending of the items that requires the time." Rather, it is the time needed for AT professionals to learn about new technologies, which are frequently revised or replaced and quickly become obsolete. It also includes the administration and coordination time needed to purchase devices and volume purchase apps ("a complicated process"), maintain an inventory of devices, install software applications, and constantly update or upgrade devices with newer technology.
- There is a need to maintain AT supports that students receive under the IDEA as they transition from school into the adult world focusing these services on increasing independence at work, in the home, and in the community.

• There is a lack of understanding that IT personnel employed by an LEA are essential to support AT by ensuring that systems are compatible, but IT professionals do not have the specialized training needed to understand applications of AT in schools.

#### **Online AT Device Sharing Findings**

An online system for sharing unused AT equipment or acquiring a used AT device restricted exclusively to CT schools was an appealing option for CT LEAs. Some respondents qualified their response with statements such as "Possibly" or "Maybe" or "If the service was authenticated." Two respondents spoke to the need for ease of use of the system: "It depends on the simplicity," and "It needs to be user-friendly." Another LEA respondent addressed that the online sharing program would need to be exclusive to school districts, and one other respondent wrote that the LEA was in the process of seeking out this type of service and that "This would be a great asset to our district."

Similar to the perspectives of CT LEAs, AT sharing program directors were not opposed to creating an online AT sharing programs for use by school districts. However, they did speak to maintaining the integrity of a high-quality AT consideration process, including: a) determining if the AT being requested is appropriate for the student's needs; and b) ensuring that the student's educational team has sufficient knowledge and training to utilize the AT device in such a manner that supports educational benefit for the student. As these AT experts noted, without this measure of quality control, there is the risk that utilization of the AT device would be unsuccessful.

### Recommendations

#### The Status Quo of AT in CT LEAs

For several decades, considering assistive technology has been an important part of the special education process for determining the accommodations and specialized supports students with disabilities ages 3 through 21 require to access the general education curriculum. CT LEAs have responded to this requirement by seeking the expertise of AT specialists throughout the state and accessing a range of supports and services, including consultations, capacity-building efforts for educators, training for students, and AT professional learning opportunities, including implementation of the CT AT Guidelines, to improve staff knowledge and skills. Some LEAs, albeit relatively few, employ a dedicated AT specialist whose role is to coordinate or direct AT in the district.

About one-third of CT LEAs also access AT lending libraries, which can assist their PPTs during the AT consideration process, particularly when device trials are indicated or when a short-term loan is needed for device maintenance, repair, or replacement. Educators in CT school districts also access AT sharing programs for their own professional learning about devices. Those LEAs that access AT sharing programs do so infrequently, but their overall satisfaction with the programs and the effectiveness of them is high.

LEAs do not necessarily share an AT device they have purchased for their district with another LEA, even when their student no longer needs it. Similarly, they do not seek to purchase used AT equipment, even if substantial cost savings are involved, when the AT consideration process has indicated that a particular device would permit access to the general education curriculum for a student.

It is not entirely clear why some LEAs are not accessing CT's established AT sharing programs that are geographically close to them, but based on the results of this study, some possible conclusions can be drawn:

- LEAs clearly lack awareness of AT sharing programs.
- LEAs also might have sufficient AT expertise in their schools and do not have a need to investigate other AT options, although the low frequency with which LEAs identified this expertise makes this less probable.
- It could be that LEAs take advantage of device loans offered by companies that sell high-tech AT equipment. This option is viable when the AT consideration process is nearing completion, but the use of an AT sharing program could be an additional support for PPTs during the trial and error phase of the process.
- Perhaps LEAs would like to access an AT sharing program on an "as needed" basis in lieu of involvement in a program or consortium.
- Districts may also not have enough perceived need to explore participation in an AT sharing program.

• Alternatively, educators working with students with less obvious but more prevalent special education needs, such as specific learning disabilities (SLD)/dyslexia, are not aware of the learning possibilities that exist for students when AT is used appropriately and the degree of independence it can provide.

All of these factors will need to be considered in developing a plan for CT LEAs to access AT sharing programs.

#### Establishing a Comprehensive AT System for LEAs

The challenge facing CT relative to AT equipment sharing is how to create a comprehensive coherent inclusive system of AT services that can offer a range of programmatic supports to LEAs for students with disabilities ages 3 through 21 while maximizing the AT projects and expertise already in place in the state. Many of the individuals who were interviewed as part of this study expressed a willingness to move this agenda forward. As stated succinctly by the coordinator of one of CT's AT sharing programs: "Connecticut needs coordination, collaboration, and inspiration."

It is recommended that the BSE have administrative responsibility and oversight for the development of a statewide AT plan, given its obligation under the IDEA as the responsible State Education Agency (SEA) for special education program monitoring and compliance. To coordinate these efforts at a statewide level, BSE will require resources for staffing and the oversight needed for the development and actualization of the plan. Additional funding may also be needed to support the involvement of agencies in the collaborative effort - for example, to develop RFPs for agencies to expand their AT sharing programs, develop new AT sharing options, and provide professional learning opportunities to CT educators. The development of such a plan requires stakeholder input and participation in an AT Advisory Workgroup whose members are willing to advise and partner with CSDE's BSE to improve access to AT for students with disabilities. AT Advisory Workgroup membership could include individuals with AT expertise, such as representatives from the BSE and CT's higher education system; AT directors/coordinators; the director of CTTAP; AT specialists from across the state, such as those who contributed to this study; and individuals who would be impacted by the outcomes of the group, such as LEA directors of special education/ pupil personnel, family members, students, and others. The members of the AT Advisory Workgroup would determine next steps in the process to address the scope and breadth of a statewide AT plan as it relates to the current needs of the state.

The work of the AT Advisory Workgroup would be strategic planning; primary deliverables of this process would include:

• An overarching statewide vision for providing AT supports and services for students with disabilities. This would need to address the essential role of AT in meeting the

needs of CT's students with all types of disabilities. It will also need to be targeted to meet CT's State-identified Measurable Result (SIMR) of its IDEA Part B State Systemic Improvement Plan (SSIP): specifically, to increase reading performance of all third grade students with disabilities.

- A plan to engage external partners that can offer fiscal and "in-kind" resources to maintain a comprehensive system of AT supports and services in CT, inclusive of state agencies such as CTTAP of DORS. For example, a result of the Workforce Innovation and Opportunity Act (WIOA - 2014), BRS and the Bureau of Education and Services for the Blind (BESB) – the Connecticut Vocational Rehabilitation agencies – are required to allocate 15% of their federal funds to provide pre-employment transition services, which may include AT, for students with disabilities ages 16-21. Additional funding sources could derive from grant opportunities, public or private foundations, or other agencies or organizations.
- A gap analysis as to the scope of AT resources available to CT LEAs, including individuals with AT specialization, professional learning experts, AT device libraries, and demonstration sites to determine which areas of the state require which types of additional support for the delivery of AT services.
- A cost analysis of the option for AT devices to be shipped at no cost to those LEAs for which pick-up and drop-off of AT equipment is an undue burden. This option, which is utilized in other states, would increase accessibility of AT devices for some LEAs.
- A schematic representation of CT's AT resources as part of an LEA AT public awareness campaign so that educators would be able to identify AT supports in their area of the state at a glance and easily contact an individual or program representative.
- A feasibility review to re-establish an online AT sharing program, which would provide universal access to AT device accessibility for CT LEAs. This would require collaboration with the director of MassMATCH to change the architecture of the AT School Share website for the additional and exclusive use of CT school personnel. Establishment of a CT AT School Share program would require time, a modest investment of capital, and continuing resources for administration and maintenance of the program. However, because the development of Massachusetts' web-based resource was developed with federal Tech Act funds, additional states can be included in this platform. Discussion regarding the viability of this recommendation occurred with the director of MassMATCH during the completion of this AT study, with the outcome being a preliminary agreement to collaborate and share costs. An online AT sharing program is a low-cost efficient solution to AT device accessibility for CT LEAs.
- Awareness-level online professional learning opportunities to increase educator awareness of the potential power of AT accommodations.

- A scaled-up comprehensive job-embedded model of AT professional learning, aligned with the CT Standards for Professional Learning, that is currently endorsed and funded by CSDE (i.e., Creating and Sustaining an AT Team) and examines a district's infrastructure, policies, and practices regarding implementation of AT for students with disabilities.
  - Priority status for this professional learning given to LEAs in those regions of the state where AT resources are not as pronounced or are not geographically accessible.
  - o A requirement of AT Team districts to enter their LEA's AT inventory into CT's AT School Share system so that educators, system-wide, could become aware of the scope of AT resources available. There would be no expectation that the LEA would be prepared to relinquish items unless or until it was ready to do so.
  - A step-by-step online guide that describes the AT that should be included in an online inventory and supports AT teams in completing and updating this process, complete with prompts, to encourage sharing this responsibility between professional and clerical staff and to reduce the amount of face-to-face technical assistance time needed within a professional learning opportunity.
  - o Technical assistance in the development of a district or school-wide AT sustainability plan for systematically increasing the knowledge base of LEA educators.

This recommended plan to create a comprehensive AT system for CT LEAs would be in addition to the supports already in place, as these provide valuable services to LEAs, particularly when a consultation or training is required to support the application of AT for individual students with complex special education needs.

#### References

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- 2. CT State Department of Education. (Updated 2013). Connecticut Assistive Technology Guidelines. Accessed from http://www.sde.ct.gov/sde/lib/sde/pdf/publications/atguide/atguide.pdf.
- 3. Ibid.
- 4. Ibid.
- 5. Lugo, A., Worah, S., & Stigliano, K. (2012). Technology and Transition: Resource Guide to Creating and Sustaining an AT Team at the High School Level. Accessed from <u>http://ctserc.net/atandhs</u>.

## Appendices

#### Appendix A Contributors to Connecticut AT Sharing Programs Study

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**Rob Parenti,** Director of Business Operations and Special Services Education Connection

**Luisa Soboleski**, Director of Admissions ASD

**Vanessa Taragowski**, Director of Pupil Services and Collaborative Programs ACES

**Robin Wood**, Director of Family Support Strategies and Advocacy Department of Developmental Services

### Smita Worah, Ph.D., Education Consultant SERC

#### Bogdan Zamfir, Coordinator of Adaptive Technology

Center for Adaptive Technology for the State of Connecticut at Southern Connecticut State University
# Appendix B Connecticut AT Sharing Program Survey

The Connecticut General Assembly has commissioned the State Education Resource Center (SERC) to collaborate with the Connecticut State Department of Education (CSDE) to conduct a study about Assistive Technology (AT) equipment-sharing programs. This short survey is being administered as part of the study in order to understand practices pertaining to AT equipment sharing at the local and regional levels. Your feedback is critical to shaping recommendations that will be made to the General Assembly regarding a plan that would make AT sharing programs available to local and regional boards of education that do not have access to them. Please complete the survey no later than Monday, September 14. If you have any questions, please contact Donna Merritt at merritt@ctserc.org. Thank you in advance for your time and input.

Section 1: Respondent Characteristics

Q1: Please enter the name of the person completing this survey.

Q2: Please tell us your role.

- Director/Supervisor of Special Education for a local or regional education board
- Other:\_\_\_\_\_

Q3: What is the name of your local or regional education board? \_\_\_\_\_\_

Q4: What Regional Educational Service Center (RESC) is your district affiliated with?

- Area Cooperative Educational Services (ACES)
- Capitol Region Education Council (CREC)
- Cooperative Educational Services (CES)
- EASTCONN
- EDUCATION CONNECTION
- LEARN Regional Educational Service Center

Section 2: Current Access to and Satisfaction with AT Sharing Programs

The federal definition of an assistive technology device is "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of children with disabilities" (Sec. 602[1][A]; 34 CFR §300.5).

Q5: Does your local or regional education board have an internal procedure that enables your schools to share/loan AT devices?

- Yes
- No

Q5A1: If you answered "Yes" to Question 5, please provide details about the procedure you use and the AT equipment/devices that you share/loan.

Q5A2: In the past 12 months, how often would you estimate your district has shared/loaned AT devices across schools?

- 1 time
- 2-4 times
- 5-12 times
- More than 12 times

Q5A3: How satisfied have your school personnel been with the experience of using the district's AT Sharing Program?

- Very satisfied
- Satisfied
- Unsure
- Dissatisfied
- Very dissatisfied

Q5A4: How effective is the AT Sharing Program at meeting the district's needs?

- Very effective
- Effective
- Unsure
- Ineffective
- Very ineffective

Q6: Does your local or regional education board share AT devices with another district?

- Yes
- No

Q6A: If you answered "Yes" to Question 6, please provide details about the district(s) you share with and the equipment/devices that you share/loan.

Q6A1: In the past 12 months, how often would you estimate your district shared/loaned AT devices to other districts?

- 1 time
- 2-4 times
- 5-12 times
- More than 12 times

Q6A2: How satisfied have your school personnel been with the experience of sharing/ loaning AT devices to other districts?

- Very satisfied
- Satisfied
- Unsure
- Dissatisfied
- Very dissatisfied

Q6A3: How effective is your district-to-district AT Sharing Program?

- Very satisfied
- Satisfied
- Unsure
- Dissatisfied
- Very dissatisfied

For the purposes of the remainder of this survey, we are defining an "AT Sharing Program" as an external service that lends assistive technology devices at no cost (other than membership to the organization/agency) to local and regional education boards to support students with disabilities.

Q7: Has your local or regional education board participated in an external AT sharing program in the last 12 months?

- Yes
- No

Q7A1: If you answered "Yes" to Question 7, please provide the name(s) of the organization(s) or agency(ies) whose AT sharing program you access. (Check all that apply.)

- American School for the Deaf
- Area Cooperative Educational Services (ACES)
- Capitol Region Education Council (CREC)
- Cooperative Educational Services (CES)
- EASTCONN
- New England Assistive Technology (NEAT) Marketplace at Oak Hill
- The Connecticut Tech Act Project
- Southern Connecticut State University
- Other:\_\_\_\_\_

Q7A2: In the past 12 months, how often did your district access an AT Sharing Program?

- 1 time
- 2-4 times
- 5-12 times
- More than 12 times

Q7A3: How satisfied were you with your experience using an AT Sharing Program(s)?

- Very satisfied
- Satisfied
- Unsure
- Dissatisfied
- Very dissatisfied

Q7A4: How effective was the AT Sharing Program(s) at meeting the district's needs?

- Very satisfied
- Satisfied
- Unsure
- Dissatisfied
- Very dissatisfied
- •

Q7A5: Please describe the factors that you considered in answering the previous question.

Q7B1: If you answered "No" to Question 7, please check the option(s) that best describes your reason(s) for not accessing an AT Sharing Program.

- My district can provide students with access to the AT devices that PPTs recommend.
- I am not aware of any AT Sharing Programs.
- When I contacted the AT Sharing Program(s), I found they did not have the AT device that the PPT recommended.
- When I contacted the AT Sharing Program(s), I found they were not able to provide the device in a timely manner.
- When I contacted the AT Sharing Program(s), I found they could not deliver the device requested.
- When I contacted the AT Sharing Program(s), I found they were not able to provide the professional learning my staff needed for AT implementation.
- I encountered too many barriers when using the AT Sharing Program(s). Please explain:
- Other:\_\_\_\_\_

Q7B2: If the barriers noted in the previous question were removed, would you use an AT Sharing Program(s)?

- Yes
- No

Q8: In your opinion, what are the benefits of participating in an AT Sharing Program?

- The benefits of an AT Sharing Program are not significant for my district.
- An AT Sharing Program would help my district reduce costs associated with the AT consideration/evaluation process.
- An AT Sharing Program would help my district explore AT options for trial to make the right match to the student's needs.
- An AT Sharing Program would help my district reduce costs associated with providing AT devices for short-term use.
- An AT Sharing Program would allow a greater variety of assistive technology options and expand the AT consideration process across the continuum.
- An AT Sharing Program would expand the digital library and technology for all students in my district.
- Other:\_\_\_\_\_

Q9: How likely might you be to use a Connecticut-based online posting service (e.g., Craigslist-style) for borrowing, selling, or purchasing AT devices?

- Extremely likely
- Likely
- Unlikely
- Extremely unlikely
- Comments:\_\_\_\_\_

Q10: In your opinion, what is the need level for an AT Sharing Program in Connecticut?

- High
- Medium
- Low
- None

Q11: Please share any additional comments or feedback regarding AT Sharing Programs.

## Appendix C NEAT 2015-16 LEA Members

LEA	RESC
Avon	CREC
Berlin	CREC
Bethany	ACES
Bethel	EDUCATION CONNECTION
Bristol	CREC
Cromwell	CREC
East Hartford	CREC
East Lyme	LEARN
East Windsor	CREC
Easton	EDUCATION CONNECTION
Enfield	CREC
Farmington	CREC
Granby	CREC
Hartford	CREC
Lisbon	EASTCONN
Manchester	CREC
Marlborough	EASTCONN
Montville	LEARN
New Britain	CREC
Newtown	EDUCATION CONNECTION
Plainville	CREC
Regional School District #1	EDUCATION CONNECTION
Regional School District #7	EDUCATION CONNECTION
Rocky Hill	CREC
Salem	LEARN
Simsbury	CREC
Wallingford	ACES
Watertown	EDUCATION CONNECTION
West Hartford	CREC
Windsor	CREC

## Appendix D CREC 2015-16 AT Consortium Districts

LEA	RESC
Avon	CREC
Bristol	CREC
CREC Magnet Schools	CREC
East Hampton	LEARN
Manchester	CREC
Meriden	ACES
New Fairfield	EDUCATION CONNECTION
Regional School District #12	EDUCATION CONNECTION
Regional School District #15	EDUCATION CONNECTION
Ridgefield	CES
Suffield	CREC
Torrington	EDUCATION CONNECTION
Vernon	CREC
Windsor	CREC

### Appendix E EASTCONN 2015-16 AT Consortium Districts

LEA	RESC
Coventry	EASTCONN
Hebron	EASTCONN
Manchester	CREC
Mansfield	EASTCONN
New London	LEARN
Plainfield	EASTCONN
Pomfret	EASTCONN
Putnam	EASTCONN
Regional School District #19	EASTCONN
Westbrook	LEARN
Windham	EASTCONN

### Appendix F SCSU AT Lending Library 2015-16 Participating LEAs and Schools

LEA	RESC
Avon	CREC
Bridgeport	CES
Brookfield	EDUCATION CONNECTION
Colchester	EASTCONN
East Hartford	CREC
Hamden	ACES
Hartford	CREC
Ledyard	LEARN
New Haven	ACES
Newington	CREC
Pomfret	EASTCONN
Rocky Hill	CREC
Stamford	CES
South Windsor	CREC
Trumbull	CES
Washington	EDUCATION CONNECTION

## Appendix G LEA Respondents to the AT Sharing Programs Survey

#### ACES

- Ansonia •
- Bethany •
- Branford •
- Hamden •
- Meriden •
- Milford •
- Naugatuck •
- North Branford •
- North Haven •
- Orange •
- Regional School District #5 •
- Seymour •
- Waterbury •
- West Haven •
- Wolcott •
- Woodbridge •

#### CES

- Brookfield •
- **CES Schools** •
- Greenwich •
- Monroe •
- Norwalk •
- Redding •
- Regional School District #9 •
- Ridgefield •
- Stamford •
- Stratford •
- Trumbull •
- Weston •
- Westport •
- Wilton •

#### CREC

- Avon •
- Berlin •
- Bloomfield ٠
- Bristol •
- . Canton

- **CREC Schools** •
- Cromwell •
- Danbury ٠
- East Hampton
- East Hartford •
- East Windsor
- Ellington
- Enfield
- Farmington •
- Granby •
- Hartford •
- Manchester •
- Plainville
- Portland •
- Rocky Hill
- Simsbury
- Somers
- Southington
- Unified School District #1 •
- West Hartford •
- Windsor

### **EASTCONN**

- Ashford
- Bozrah •
- Brooklyn
- Eastford •
- Franklin •
- Hampton
- Hebron •
- Lebanon •
- Mansfield
- Marlborough •
- Plainfield •
- Pomfret •
- Regional School District #11 ٠
- Regional School District #19
- Tolland ٠
- Union •
- Voluntown

•

- Willington
- Woodstock
- Woodstock Academy

### EDUCATION CONNECTION

- New Hartford
- Plymouth
- Regional School District #10
- Regional School District #12
- Regional School District #14
- Regional School District #15
- Thomaston
- Watertown
- Winchester

#### LEARN

- Clinton
- East Haddam
- Guilford
- Madison
- North Stonington
- Norwich
- Old Saybrook
- Preston
- Regional School District #4
- Regional School District #18
- Salem
- Waterford

