



**The Massachusetts Initiative to Maximize Assistive Technology
in Consumers' Hands:**

Federal Fiscal Year 2010 Annual Report

**Massachusetts Rehabilitation Commission
Charles Carr, Commissioner
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Executive Summary

MassMATCH Statistics

- 932 assistive technology (AT) devices were loaned by MassMATCH partners to state residents. AT device loans allowed people to test drive devices or fill a short-term equipment need.
- 349 people learned about AT at device demonstration events.
- 67 people with disabilities borrowed equipment from the new Long-Term Device Loan Program (for devices valued under \$500). The program is run in partnership with Easter Seals and saved consumers a total of \$25,075.
- 30 durable medical devices were refurbished through the Wheelchair Reuse program.
- Get AT Stuff, the New England “Craig’s List” for AT, completed 15 exchanges, saving Massachusetts residents an estimated \$22,171 over retail.
- The Massachusetts AT Loan Program provided \$1,245,578 in financial loans to 67 borrowers. Most loans were made to purchase vehicle modifications.
- 502 people were trained on AT topics.
- 1,018 people received information and referral services.
- 75,011 people were reached through public awareness activities including Web sites.

MassMATCH Highlights

- MassMATCH continued funding to two AT Regional Centers in partnership with Easter Seals in Boston and United Cerebral Palsy-Berkshire in Pittsfield. The Centers provide a variety of AT services to people with disabilities of all ages.
- MassMATCH began a partnership with the Boston Center for Independent Living to expand the Wheelchair Reuse program for the refurbishment of donated durable medical equipment.
- MassMATCH helped steward the creation of AT Toolkits for Employment. Paid for with federal ARRA (American Recovery and Reinvestment Act) funds, 29 suitcases of devices and information are now in the hands of job placement specialists throughout the state. Specialists are using them to raise awareness with employers about what AT is available to support working people with disabilities.
- MassMATCH helped design and steward the purchase of the state’s first modified van for high-tech driver evaluations and training. Now individuals with significant disabilities do not have to leave the state to learn what adaptive driving equipment works best for them or to receive training on the equipment. The van was bought with federal ARRA (American Recovery and Reinvestment Act) funds.

Introduction: Meeting the Requirements of the AT Act of 2004

MassMATCH is one of 56 state initiatives federally funded through the AT Act of 1998 as amended in 2004 (hereafter “the AT Act of 2004”). It stands for the Commonwealth's initiative to “Maximize Assistive Technology (AT) in Consumer's Hands,” and its goals are to improve awareness of and access to assistive technology for people with all kinds of disabilities, of all ages, and for all environments. The 2004 AT Act amendments specifically call for improving access to AT in the areas of education, employment, community living, and IT and telecommunications.

The AT Act of 2004 does not directly pay for AT devices. Instead the emphasis is on funding initiatives that create better access to affordable and appropriate equipment. Each state is required to carry-out the following:

State-level Activities

- State finance systems (for individuals to affordably purchase AT)
- Device reutilization programs (to exchange, repair or recycle used equipment)
- Device loan programs (for short-term trials of equipment)
- Device demonstration programs (to see and try out equipment)

State Leadership Activities

- Training (with a portion focused on transition assistance)
- Technical Assistance (with a portion focused on transition assistance)
- Public awareness, information and assistance
- Coordination and collaboration (among entities responsible for AT policies, procedures and/or funding of AT devices/services)

In addition, states must have an advisory council to provide consumer-responsive, consumer-driven advice on the design, implementation, and evaluation of all state-level and leadership activities funded by the AT Act grant.¹

In FFY10, MassMATCH focused on two areas. The first was the expansion of efforts begun the previous year, including the Long-Term Device loan program, Wheelchair Reutilization program and the AT School Swap. The second was to work closely with and advise other Massachusetts Rehabilitation Commission and provider staff on the use of ARRA (American Recovery and Reinvestment Act) funds to better integrate effective AT services and devices in vocational rehabilitation. This latter effort helped accomplish the creation of AT Employment Toolkits and a High-Tech Adapted Vehicle for driver training and evaluations—projects MassMATCH expects

¹ For more detail on state requirements [visit this ATAP web page](#).

will assist residents with disabilities who seek employment and/or driver's training for years to come. (Read more about these efforts in [Coordination and Collaboration](#) below.)

State-level Accomplishments

1. State Financing: The Mass. Assistive Technology Loan Program

The Massachusetts Assistive Technology Loan Program is an Alternative Financing Program (AFP) established with funds from the federal government, the Commonwealth of Massachusetts and private funds. It is an interest buy down and loan guarantee program enabling individuals with disabilities and families to access affordable credit to purchase AT. The program is administered by Easter Seals of Massachusetts, and Sovereign Bank is the program's lending partner.

To be eligible for a loan, applicants must meet the following requirements:

- They must have a disability or represent someone with a disability. For example, a parent might submit the application for a child with a disability.
- The devices being sought must be used primarily to increase the independence of someone with a disability.
- Applicants must have been Massachusetts residents for the past six months.

The program allows eligible individuals to borrow between \$500 and \$25,000 for program-guaranteed loans. In addition, there is no upper loan amount for loans provided directly by Sovereign Bank without a program guarantee. The rate is negotiated every twelve months (throughout FFY10 it was 4.5%). Loan terms are based on the expected life of the needed item, from three years for computers to seven years for adapted vans. Guaranteed loan terms may be customized to meet an individual's repayment needs.

Loan Applications

For FFY10 the AT Loan Program loaned \$1,245,580 to 72 borrowers, another 25 applicants were approved but chose not to take out a loan. The AT Loan Program loan approval rate was 75%.

Table A: AT Loan Program Approval Rate vs. National Approval Rate Average

FFY10 Loan Applications	Number	Percentage
Approved	96	75%
Denied	32	25%
Total Processed	128	100%

56% of the approved loans were made to applicants with incomes above \$35,000 per year. 22% went to incomes of \$15,000 per year or less.

Table B: Number of Loans and Approval Rate by Applicant Income

	Applicant Annual Income						Total
	\$15,000 or Less	\$15,001 to \$20,000	\$20,001 to \$25,000	\$25,001 to \$30,000	\$30,001 to \$35,000	\$35,001 or More	
Number of loans	16	6	2	4	4	40	72
% of loans approved	22%	8%	3%	6%	6%	56%	100%

To ensure that assistive technology loans are accessible to the Massachusetts disabilities community, Easter Seals contracts with more than 20 access sites across the state to provide outreach, marketing and individual assistance with completing AT Loan Program loan applications (when necessary). These access sites include independent living centers, elder organizations, disability-specific organizations, AT providers and rehabilitation facilities. Additionally, AT Loan Program brochures and informational materials have been translated into six languages to reach people with disabilities from under-served and un-served communities.

Table C: Point of Origin of Applications

FFY10 Applications	Number
Access Sites	15
AT Loan Program Directly	114
Total	128

Loan Type and Purpose

The average loan was \$17,300. 54% of the loans approved were interest-buy down only. 46% were interest buy-down with a loan guarantee (extending credit to applicants who would not otherwise have been approved by the lender).

Table D: Approval Rate by Loan Type

Loan Type Approved	Number	Percentage of Total Approved
Interest Buy-Down	39	54%
Interest Buy-Down + Loan Guarantee	33	46%

Broad ranges of AT and AT services are allowable under the AT Loan Program. The loans are commonly used to help purchase modified vehicles, adapted computers, computer software, durable medical devices and portable ramps. In addition, the AT Loan Program offers funding for assistive technology services to help people determine which device may be right for them.

These services help people locate and purchase items, train them on their use, and provide maintenance and repair.

As the following table demonstrates, in FFY10 91% of the total amount financed went to vehicle modifications and transportation needs. 5% was loaned for the purpose of environmental adaptations.

Table E: Number and Value of Loans Made by AT Device/Service Type

Type of AT Device/Service	Number of Devices Financed	Total Value of Loans	% of Amount Loaned
Vision	1	\$2,304	<2%
Hearing	10	\$34,256	<3%
Speech communication	0	\$0	0%
Learning, cognition, and developmental	0	\$0	0%
Mobility, seating and positioning	4	\$10,456	1%
Daily living	0	\$0	0%
Environmental adaptations	5	\$61,990	5%
Vehicle modification and transportation	51	\$1,135,823	91%
Computers and related	1	\$749	<1%
Recreation, sports, and leisure	0	\$0	0%
Total	72	\$1,245,578	100%

AT Loan Program Customer Satisfaction

22 of 72 loan recipients provided feedback on their satisfaction with the loan program. As the table below demonstrates, 91% were highly satisfied or satisfied with the program (20 total recipients) and 9% were somewhat satisfied (2 recipients).

Table F: Customer Satisfaction

Customer Rating of Services	Number of Customers	Percentage of Responders
Highly satisfied	15	68%
Satisfied	5	23%
Satisfied somewhat	2	9%
Not at all satisfied	0	0%
Sub total (responders)	22	
Non-respondent	50	
Total	72	
Response Rate	31%	

AT Loan Program Success Story:



“John” has multiple sclerosis and difficulty walking. By age 49, he had tried different devices to compensate for his inability to raise one foot at the ankle joint. This condition, known as “drop foot,” often results in falls and injury. When he approached the AT Loan Program he was using a brace (otherwise known as “ankle foot orthotics”). The brace improved his walking speed, but he found it extremely fatiguing.

John applied to the AT Loan Program because his doctor had recently told him about a new FDA-approved system called “WalkAide.” A cuff worn above the knee, WalkAide provides functional electrical stimulation to restore mobility to those with lower limb paralysis. John had tried the device on several occasions and was delighted to find that it worked well for him. The problem, of course, was that WalkAide is not covered by public or private health insurance. And with limited resources and a fixed-income, John could not afford to purchase it himself.

The Mass. AT Loan Program was created to solve this kind of dilemma. Through the program, John applied and was approved for a 4.5% interest guaranteed loan to purchase the device that would return his energy and vastly improve his mobility.

Today John is paying an affordable \$83/month for a 5 year term loan. And he is free of his foot brace.

2. Device Reutilization: GetATStuff, Long-Term Device Loan Program, Wheelchair Reuse Program

GetATStuff.org

www.GetATStuff.org is the website of the Assistive Technology Exchange in New England. GetATStuff's goal is to put AT that is currently not being used into the hands of someone who can benefit from it. The exchange offers a free "classified ad" so people can buy, sell, give away, or post their need for equipment (on the website we call it a "virtual AT porch sale").

MassMATCH joined with the AT Act programs of Connecticut, Maine, New Hampshire, Rhode Island, and Vermont to create GetATStuff. The site is designed to serve New Englanders, but residents in neighboring states may post as well. Users may sort postings by geography and/or device category or keyword.

In FFY10 there were 264 new users registered. Additionally, there were 4,735 hits to the website, 364 requests for contact information (contacts between posters and respondents), and 15 completed exchanges.

Table G: Community Participation Between FFY07 and FFY10

Activity	FFY07 (02/07-09/07)	FFY08	FFY09	FFY10
New Users to Register	183	283	290	264
Hits to Listings	687	3,580	4,229	4,735
Items Posted for Sale/Free	65	75	106	137
Items Posted as Needed	18	23	39	38
Completed Exchanges	1	23	27	15

The equipment category with the highest number of postings "for sale" or "as needed" was mobility, seating and positioning.

Table H: Items Posted for Sale/Donation

Category	Number
Vision	5
Hearing	2
Speech Communication	1
Mobility, Seating & Positioning	60
Daily Living	53
Environmental Adaptations	11
Transportation and Vehicle Modifications	2
Computers and Computer-related	1
Recreation, Sports, and Leisure	2
Total	13

Table I: Items Posted As Needed

Category	Number
Vision	2
Hearing	4
Mobility, Seating and Positioning	15
Daily Living	3
Environmental Adaptations	5
Transportation and Vehicle Modifications	2
Computers and Computer-related	5
Recreation, Sports, and Leisure	2
Total	38

Table J: Cost Savings As Reported By Sellers

Type of AT Device	Number of Completed Exchanges	Total Estimated Current Purchase Price	Total Amount for which Devices Were Sold	Savings to Consumers
Mobility, Seating & Positioning	8	\$20,340	\$1,105	\$19,235
Daily Living	5	\$1,441	\$30	\$1,411
Environmental Adaptations	1	\$1,400	\$0	\$1,400
Recreation, sports and leisure	1	\$150	\$25	\$125
Total	15	\$23,331	\$1,160	\$22,171

GetATStuff Performance Measures

As the table below shows, 10 of GetATStuff recipients (66% of respondents) provided feedback for how the exchange program served them. 6 reported they could only afford AT through the exchange program. 1 reported the AT was only available to them through the program. 1 reported it was easier to buy the AT this way than to pursue the other program available to him or her. 2 preferred not to answer. Most recipients wanted the AT for community living.

Table K: Primary Purpose for the Need for AT: GetATStuff

Response	Education	Employment	Community Living	Prefer Not to Answer	Total
I could only afford the AT through this program	1	0	4	1	6
The AT was only available to me through this program	0	0	1	0	1
The AT was available to me through other programs, but the system was too complex or the wait time was too long	0	0	1	0	1
None of the above	0	0	2	0	2
Prefer not to answer	0	0	2	0	2
Sub total	1	0	10	1	12
Non respondent					3
Total					15

GetATStuff User Satisfaction

Most sellers were highly satisfied with the service.

Table L: Feedback from Sellers

Seller Rating of Services	Number
Highly Satisfied	14
Satisfied	1
Satisfied somewhat	0
Non respondent	0
Total	15

Table M: Feedback from Recipients

Recipient Rating of Services	Number
Highly satisfied	10
Satisfied	2
Non respondent	3
Total	15

Long-Term Device Loan Program

The Long-Term Device Loan Program for Low Cost Devices (a.k.a. “the mini loan program”) is operated by Easter Seals-MA through a partnership with MassMATCH. The program loans AT devices valued at under \$500 to applicants who demonstrate financial need. The loans are “open-ended” which means that borrowers may use the devices for as long as they need them to live more independently. The program is available to residents of Massachusetts with a disability and family members who are applying on behalf of their relative with a disability.

Easter Seals purchases new devices based on applicant needs. When these items are no longer needed, they are returned and made available to future borrowers. In general, Easter Seals-MA supports the administration of the Long-Term Device Loan Program, and MassMATCH funds the devices.

In FFY10, the program saved 67 borrowers a total of \$25,078. The program provided computers, vision aids, environmental adaptations, mobility aids, and communication devices.

Table N: Cost Savings to Borrowers

Type of AT Device	Number of Devices Provided for Long-Term Loan (FFY10 only)	Total Estimated Current Purchase Price (i.e. savings to consumers)
Vision	1	\$395
Hearing	0	\$0
Speech communication	16	\$4,326
Learning, cognition and development	0	0
Mobility, Seating & Positioning	1	\$288
Daily Living	0	0
Environmental Adaptations	5	\$1,559
Transportation and Vehicle Modifications	0	0
Computers and related	44	\$18,511
Recreation, sports and leisure	0	0
Total	67	\$25,078

Long-Term Device Loan Program Performance Measures**Table O: Primary Purpose for the Need for AT**

Response	Education	Employment	Community Living	Total
I could only afford the AT through this program	29	3	28	60
The AT was only available to me through this program	2	0	0	2
The AT was available to me through other programs, but the system was too complex or the wait time was too long	1	0	2	3
None of the above	0	0	12	12
Non respondent	1	1	0	2
Total	33	4	42	79

Long-Term DLP User Satisfaction

Table P: Feedback from Borrowers

Recipient Rating of Services	Number
Highly satisfied	20
Satisfied	1
Satisfied somewhat	0
Not at all satisfied	0
Non respondent	46
Total	67

Long-Term DLP Success Story



“Janet” was anxious when she applied to the Long-Term Device Loan Program. At 19 years old, she had decided to enroll in a nursing program. The coursework was not the problem; Janet was on the honor roll in high school. The problem was using a stethoscope.

Janet has profound hearing loss and cannot use a conventional stethoscope. She applied to the Long-Term Device Loan Program because she had learned of a specialized electronic stethoscope that would work for her, one that transmits sound directly to the user’s hearing aids. But the device was expensive. At more than \$400, it was more than Janet or her nursing program could afford.

Janet had already been turned down by the school’s disability services office and so she expected hoops to jump through at Easter Seals. It didn’t work out that way. In a follow-up note, Janet writes:

“Thank you for making the AT Loan process so simple and easy for me.... I have received my electronic stethoscope and I cannot wait to put it to use in September. The best thing I have found with this program is that I never felt that I had to beg or lose my dignity. With many programs for low-income people, this is not the case. The loan program has made an incredible difference in my life and alleviated so much stress. I really didn’t think it was possible for me to get the stethoscope I needed in time for my clinical courses. Thank you again, I genuinely appreciate everything that this program has done for me.”

Wheelchair Reuse Program

This year MassMATCH began supporting the work of two independent living centers to refurbish donated wheelchairs and other durable medical equipment for distribution to individuals with disabilities. The ILCs are Stavros CIL in western Massachusetts, and the Boston Center for Independent Living in eastern Massachusetts. Donated equipment is refurbished by the ILCs and posted as available for free or at low cost on the GetATStuff website.

MassMATCH’s support for wheelchair reuse began in response to feedback gathered during the Statewide AT Summit held in 2009. Reuse is another way to provide wheelchairs and scooters to persons requiring this equipment who do not have an affordable way to obtain it. It is also a way to capture and prevent the waste of durable medical equipment that would otherwise go unused.

During FFY10, 30 devices were refurbished with MassMATCH support. As result, a minimum of 18 individuals received a device through MassMATCH’s Wheelchair Reuse, saving consumers at least \$16,350.

Table Q: Savings to Consumers by Device Type and Number of Devices

Type of Device	Number Redistributed (through GetATStuff.com)	Savings to Consumers
Mobility/seating/positioning	14	\$16,200
Daily Living	4	\$150
Total	18	\$16,350

3. Device Loan: AT Regional Centers Short-Term Device Loan Program

MassMATCH funds two AT Regional Centers to provide a variety of AT services to people who need them. United Cerebral Palsy (UCP) in Pittsfield operates the AT Regional Center serving western Massachusetts, and Easter Seals (ES) in Boston operates the AT Regional Center serving eastern Massachusetts. One of the MassMATCH services they provide is the short-term device loan program.

Short-term device loans offer people with disabilities the opportunity to use equipment up to four weeks free of charge. Short-term device loans serve several functions:

- Consumers use them to “test drive” and learn about equipment before purchasing.
- Employers use them to find appropriate “reasonable accommodations” for employees with disabilities (as required by the Americans with Disabilities Act) and to avoid wasting resources on uninformed decisions.
- Educators use them to integrate their students with disabilities into school activities at the start of the school year as they assess what equipment works best and while equipment is being procured.
- People with disabilities use them to help justify the purchase of durable medical equipment (DME). Insurance providers often require proof of a short-term trial of the equipment before providing reimbursement for DME expenses. Equipment vendors do not always provide trials or they may have prohibitive fees.

In FFY10, a total of 932 devices were loaned by the AT Regional Centers. As the table below illustrates, the most utilized device loan category was Speech Communication. 245 of 932 devices loaned (26%) were in speech communication.

Table R: Devices Loaned by Device Category

Device Category	Devices Loaned			
	UCP	ES	Combined	% Total
Speech Communication	44	201	245	26%
Vision	25	170	195	21%
Hearing	14	68	82	9%
Computers and Computer-related	10	154	164	>17%
Daily Living	13	79	92	10%
Learning, Cognition, and Developmental	10	78	88	>9%
Environmental Adapt.	24	32	56	6%
Mobility, Seating	0	10	10	1%
Vehicle Modifications and Transportation	0	0	0	
Recreation, Sports and Leisure	0	0	0	
Total	191	792	932	100%

Equipment loans are used by a broad range of professionals, as well as individuals with disabilities and their families. In FFY10, the AT Regional Centers were particularly effective at reaching individuals with disabilities and their family members (46%), education representatives (22%), and representatives of technology (13%).

Table S: Device Loan Participants by Category

Category of Participants	Device Loans			
	UCP	ES	Combined	% Total
Individuals with disabilities	23	149	172	29%
Family members	38	60	98	17%
Reps of Education	36	91	127	<22%
Reps of Employment	0	9	0	<2%
Reps of Health, Allied Health, Rehab.	9	51	60	>10%
Reps of Community Living	12	5	18	3%
Reps of Technology	5	74	79	>13%
Others	1	23	24	4%
Total	124	462	586	100%

The vast majority of FFY10 device loan participants used the program to help make a purchasing decision (79%).

Table T: Loans by Purpose

Loan Purpose	Device Loans			
	UCP	ES	Combined	% Total
Purchase Decision	105	357	462	79%
Loaner	2	37	39	<7%
Accommodation	17	41	58	10%
Other	0	27	27	<5%
Total	124	462	586	100%

Device Loan Customer Satisfaction and Performance Measures

94% of borrowers who provided feedback were satisfied with their device loan experience. Most were highly satisfied.

Table U: Device Loan Customer Satisfaction

Customer Rating of Services	Consumers			Percentage of Responders		
	UCP	ES	Both	UCP	ES	Both
Highly satisfied	60	93	153	58%	78%	68%
Satisfied	39	19	58	38%	16%	26%
Satisfied somewhat	4	7	11	4%	6%	5%
Not at all satisfied	0	0	0	0%	0%	0%
Sub total (responders)	103	119	222			
Non respondent	21	343	364			
Total	124	462	586			
Response rate %	83%	25.76%	38%			

Most device loan users who provided feedback, and who were borrowing AT in order to make a purchase decision, went on to decide the AT met their needs. As the table below demonstrates, these were 83 of 153 responders (54%). 36 of 153 users (23.5%) reported the AT would not meet their needs. And 34 (22%) were undecided.

Table V: Device Loan Access Performance Measures

Performance Measure	Education		Employ.		Comm. Living		IT/ Telecom.		Totals		
	UCP	ES	UCP	ES	UCP	ES	UCP	ES	UCP	ES	Both
AT meets needs	15	35	0	5	8	20	0	0	23	60	83
AT won't meet needs	8	16	0	0	2	10	0	0	10	26	36
No decision	6	8	0	4	2	14	0	0	8	26	34
Sub total (responders)	29	59	0	9	12	44	0	0	41	112	153
Non respondent	7	96	0	32	0	108	0	9	7	245	252
Total	36	155	0	41	12	152	0	9	48	357	405
Response rate	81%	38%		22%	100%	29%		0%	85%	31%	38%

Device Loan Success Story: UCP-Berkshire



Communication on the Go for iPhone, iPod touch and iPad

"Mark" looks up to his older brother in college, and wants to be like his peers. But at school he had been trialing large and clunky communications devices for two years. The school was dragging its feet to make a decision for what to purchase and part of the problem was that nothing they tried had really worked. Mark, who has autism, required prompting to use the core communications or type-to-speak devices. Yet at home Mark used a computer and generally loved technology.

Frustrated, Mark's parents brought him to the ATRC where Center Coordinator Dawn Matthews saw at once that Mark needed a device that would engage him. Considering his dexterity and cognitive capacity, she recommended the iPod Touch with Proloquo2Go software. At school Mark was very interested in peers with iPod Touches, and she suspected he would be excited to have the same thing they had.

At first Mark's parents were intimidated by the Touch. They were not comfortable with new technology and they feared they would not be able to help make it work. During the device loan trial, however, they quickly came around.

With the iPod Touch Mark needed minimal prompting. He loved his new device. It was not only what his peers had, it also played games and his favorite music. For his parents this meant they could use the device as a reward. The time Mark spent communicating and learning meant time Mark earned for games and music. At school, too, Mark's Speech Language Pathologist saw advantages for this device that not only cost far less than the other options, but could be programmed with educational games in addition to a more engaging communication display.

The best part for Mark's parents, however, was the free tech support: their older son also has an iPod Touch and they realized they could just call him whenever they had questions! Today Mark has his own iPod Touch, just like his older brother.

Device Loan Success Story: Easter Seals-Boston



She's shy, but Danielle spoke right up when her doctor recently asked if she wanted to wear hearing aids. "I am NOT wearing hearing aids," she declared.

Danielle has difficulty hearing conversations when there is background noise. She had tried hearing aids when she was younger but they hurt her ears, and now, as a young adult, she also didn't want to be seen wearing them.

Danielle lives at the Charles River Center's Pine Lane group home in Westwood and works in their employment service. Amy Coran, Pine Lane's program director, had heard about an assistive listening device called a Pocketalker that might help Danielle's hearing challenge. Amy took her to the ATRC in Boston to learn more about the device, which looks like an MP3 player and uses headphones.

Danielle agreed to try it and found she really liked the Pocketalker. AT Specialist Meaghan Fitzgerald arranged for Danielle to borrow one from the Short-Term Device Loan Program so she could try it out at home and at work. She also gave Amy and Danielle information about the MassMATCH Long-Term Device Loan program which could help Danielle obtain a Pocketalker for long-term use if it turned out to be a good fit.

Happily, the Pocketalker worked well for Danielle; and just two weeks after Amy returned the original device to the center, Danielle received a Pocketalker through the Long-Term Device Loan program.

About the process: "It was very fast and convenient," reports Amy. "Both Meaghan at the Center and Jason Luciano [the former Long-Term Device Loan Program director] were very helpful. Both programs were great. I would recommend them to anyone."

As for Danielle, ask her how she likes her new Pocketalker and she's likely to give a big smile and say, "It's good!"

4. Device Demo: AT Regional Centers Device Demonstration Program

Device demonstration is the opportunity for an individual or group to see AT in action. It is an essential part of the MassMATCH AT Regional Centers’ holistic approach to AT services. Individuals with disabilities, their family members, teachers, human service providers and others come to the centers to learn about new AT products, see how they work, and find AT solutions appropriate to their or their clients’ needs, desires, and functional capabilities. Device demonstrations can be for a particular device or multiple device options. Device demonstrations may lead to a short-term device loan, and, perhaps, help with a Mass. AT Loan Program application.

In FFY10, the AT Regional Centers provided a total of 147 demonstrations. As the table below shows, these were primarily for Vision, Speech Communication, Learning/Cognition/Development, and Computers/Computer-related devices.

Table W: Demonstration by Device Category

Device Category	Demonstrations			
	UCP	ES	Combined	% Total
Speech Communication	12	18	30	20%
Vision	8	44	52	35%
Hearing	7	7	14	<10%
Computers and Computer-related	1	21	22	15%
Daily Living	4	3	7	5%
Learning, Cognition, and Developmental	4	17	21	14%
Environmental Adapt.	0	0	0	0%
Mobility, Seating	0	0	0	0%
Vehicle Modifications and Transportation	0	0	0	0%
Recreation, Sports and Leisure	1	0	1	<1%
Total	37	110	147	100%

Device Demonstration Customer Satisfaction and Performance Measures

349 individuals participated in device demonstrations in FFY10. Most were people with disabilities and their family members (a total of 198 individuals or 57%). Representatives of education were the next largest category, followed by health representatives, and representatives of community living.

Table X: Demonstration Participants by Category

Category of Participants	Demonstrations			
	UCP	ES	Combined	% Total
Individuals with disabilities	28	67	95	27%
Family members	58	45	103	<29%
Reps of Education	36	30	66	19%
Reps of Employment	0	2	2	<1%
Reps of Health, Allied Health, Rehab.	30	10	40	>11%
Reps of Community Living	26	1	27	8%
Reps of Technology	10	3	13	4%
Others	0	3	3	<1%
Total	188	161	349	100%

Of the 104 participants who provided feedback, 51 found AT that met their needs (49%).

Table Y: Device Demonstration Performance Measures

Performance Measure	Education		Employ.		Comm. Living		IT/ Telecom.		Totals		
	UCP	ES	UCP	ES	UCP	ES	UCP	ES	UCP	ES	Both
AT meets needs	8	19		3	3	17		1	11	40	51
AT won't meet needs	4	15		3	3	13		2	7	33	40
No decision	9	2		0	1	1		0	10	3	13
Sub total (responders)	21	36		6	7	31		3	28	76	104
Non respondent	5	9		13	4	11		1	9	34	43
Total	26	45		19	11	42		4	41	110	147
Response rate	81%	80%		32%	64%	74%		75%	68%	69%	71%

99% of device demonstration customers who provided feedback were at least satisfied; 69% were highly satisfied.

Table Z: Device Demonstration Customer Satisfaction

Customer Rating of Services	Consumers			Percentage of Responders		
	UCP	ES	Both	UCP	ES	Both
Highly satisfied	86	71	157	56%	93%	69%
Satisfied	65	4	69	42%	93%	30%
Satisfied somewhat	2	0	2	1%	0%	<1%
Not at all satisfied	0	1	1	0	1%	<1%
Sub total (responders)	153	76	229			
Non respondent	35	85	120			
Total	188	161	349			
Response rate %	81%	47%	66%			

Device Demonstration Success Story: UCP Berkshire

“Sarah,” a young single mother of a little girl, came to see ATRC Coordinator Dawn Matthews at the suggestion of the Massachusetts Commission for the Blind (MCB). She had recently been diagnosed with progressive vision loss and was discouraged for a lot of reasons. By the time she met with Dawn she was feeling desperate for a device to help her continue her education so she could better support her family.

Dawn met with Sarah to determine her goals and needs. She learned that Sarah was studying to be a massage therapist and that most of her classes were going fine, but there was one that required use of a text book and the ability to follow along to participate during class. Dawn suggested she try an Onyx magnifier, which is a portable flexible magnification camera that would allow Sarah to easily zoom in on text in the classroom. She also demonstrated a CCTV, which is a larger desktop device that magnifies any hard copy text put under its lens. Dawn considered the Onyx a more powerful device for Sarah as it has more features, but she quickly saw that Sarah was intimidated by the digital technology. The CCTV, on the other hand, was simpler, if more obtrusive. Sarah, however, wasn’t so concerned about having a desktop device.

Dawn and Sarah discussed the pros and cons of the devices and Sarah chose a 4 week trial of the CCTV. At the conclusion of the trial Sarah reported that the device “made all the difference in the world” for her and her ability to follow along with her class. She said that the hands-on time she had with the devices helped her consider what was the best fit and was grateful for the opportunity to trial it right away.

Today Sarah is pursuing continued services with MCB (which is providing a CCTV for her home use); and Dawn says she is glad she made a strong connection with Sarah so that she will know where to come as her vision and needs change.

Device Demonstration Success Story: Easter Seals-Boston



In March of 2010, Boston University graduate student, Joe G., suddenly had extreme pain in both wrists. For months he had been working in a lab, funded by grants, conducting cancer-related research in his field of bioinformatics. Now he found he couldn't even touch a keyboard.

A doctor initially diagnosed Joe with Carpel Tunnel Syndrome. Later that diagnoses would change to Repetitive Strain Injury. Regardless, it was an extreme case, and rare that it came on without warning. Joe was sent to an occupational therapist and began wearing wrist splints. Unable to work, he met with BU's Disability Services office which next referred him to the MassMATCH ATRC in Boston run by Easter Seals.

The onset of Joe's injury may be rare, but his disability is one that ATRC Coordinator Cathy Bly is seeing with increasing frequency among young adults who have grown up as "technology natives." She met with Joe to consider his goals and needs.

Joe needed to access his computer to keep his job and continue in his profession, but it was unclear what devices would work best. Would he be able to use an ergonomic keyboard? An alternative mouse? Would he need to go with voice recognition software? Or some combination? Joe didn't know, but with Cathy's help and the deep device resources of the ATRC demonstration and loan program, he began his journey.

On that first visit Cathy demonstrated various alternative computer access devices. Joe decided to borrow several to get an idea of what might work. He found that an ergonomic keyboard was better than a standard keyboard, but still didn't solve his problems. He tried and eventually purchased Dragon Naturally Speaking. Voice recognition seemed to be the best option for him, particularly as he experienced flare ups with his condition, and realized that he would likely never go back to just typing.

The journey, Joe emphasizes was a long one. In December he returned after another flare up. He needed a better mouse option, and confessed to Cathy that he was going hoarse using Dragon. Cathy demonstrated some alternatives: a head mouse, a foot mouse, as well as some switches and a touch screen. She also recommended upgrading to Dragon Professional for its verbal shortcuts.

Today Joe credits the ATRC's demonstration and loan services with saving his job. "I could never have learned about and tried all those products on my own. It would have been too

expensive.” He now says “zip” to switch windows (“I can say that 100 times a day!”) and uses a touch screen in addition to large switches for particular repetitive commands. Significantly, he is also using ergonomics software to remind him when to take breaks. Once he was sure of what would work, he purchased the equipment for himself (and was later reimbursed for much of it by his employer).

“There are times when I cannot type at all, but now it’s really not a problem. Either way, I can work at full speed. In fact for numbers, Dragon is actually a lot faster!”

State Leadership Accomplishments

1. Training

The National Information System for Assistive Technology (NISAT) defines training activities as “instructional events, usually planned in advance for a specific purpose or audience, that are designed to increase participants’ knowledge, skills, and competencies regarding AT” ([NISAT glossary](#)).

An example of a training activity conducted during FFY10 is the presentation provided by the Director of Assistive Technology and Community Support programs at the Mass. Executive Office of Health and Human Services. The topic was AT and Reasonable Accommodations for Employment, and the audience consisted of hiring/supervising managers within UMASS Medical School. During the presentation, the Director covered issues of policy, accountability, AT options, funding, and timing using Web links and handouts of further resources.

Training Topics

In FFY10, MassMATCH provided training to a total of 502 individuals statewide. Trainings funded by MassMATCH covered a blend of topics to best suit their intended audience.

Table AA: Number of Training Participants by Topic

Primary Topics of Trainings	Participants			
	UCP	ES	MRC	Combined
AT Products/Services	0	0	0	0
AT Funding/Policy/Practice	0	0	0	0
IT/Telecommunication Access	0	0	0	0
Combination of any/all of the above	166	194	130	490
Transition	0	0	0	0
Other Topic (specify)	0	0	0	12
Total	166	194	130	502

Transition

The AT Act of 2004 calls for a portion of each state’s training activities to be related to transition. “Transition related” means the trainings provided information to support individuals navigating the transition from school to work or post-secondary education, or from institutions into community living. In addition, trainings may provide AT information to help people remain in their communities.

An example of an FFY10 transition-related training is the meeting that took place at the ATRC in Pittsfield with a group of Special Education professionals from a single school district. Their purpose was to use their staff development day as a training and learning session on Assistive Technology and issues related to transition from school to college or the community. 25 professionals, including special education teachers, Speech Language Pathologists, and Occupational and Physical Therapists discussed strategies for working with students—including transitioning students—and test-drove devices for individuals with a wide range of disabilities. Participants learned about the ATRC’s services and about state and private programs available to schools and educators.

Training Participants

Representatives of Health, Allied Health and Rehabilitation were the most common participants of AT trainings in FFY10 and represent 38% of total attendees. They are followed by individuals with disabilities professionals (21%) and educators (14%).

Table BB: Number and Type of Training Participants

Category of Participants	Trainings				
	UCP	ES	MRC	Combined	% Total
Individuals with disabilities	85	18	3	106	21%
Family members	53	9	0	62	12%
Reps of Education	58	14	0	72	14%
Reps of Employment	0	0	0	0	0
Reps of Health, Allied Health, Rehab.	30	150	9	189	38%
Reps of Community Living	59	3	0	62	12%
Reps of Technology	11	0	0	11	2%
Others	0	0	0	0	0
Unable to Categorize	0	0	0	0	0
Total	296	194		502	100%

2. Technical Assistance

Technical assistance is a direct problem-solving service provided by the statewide AT program staff to public or private agencies, groups, or programs. TA helps improve services, management, policies and/or outcomes and may be a single meeting or involve multiple contacts over an extended duration ([NISAT glossary](#)).

An example of TA provided in FFY10 is the assistance provided to MRC’s Vocational Rehabilitation to advise on and identify the need for the creation of AT Toolkits for job placement specialists. Over the course of 9-12 months, MassMATCH convened job placement specialists to talk about barriers to employment and AT, wrote a proposal justifying the need for AT Toolkits and how they would be distributed and used within VR, wrote an RFR (soliciting providers to apply for the funds to carrying out the project), and then helped review responses to procure a provider.

Table CC shows a breakdown of the 55 TA service hours provided by MassMATCH over the course of FFY10.

Table CC: Technical Assistance Services Provided

Agency/Program Type	Product/Service areas expertise provided	Policy Expertise area addressed	Duration of TA provided	Hours TA provided
1. Community Living	Web training accessibility		<3 months	1
2. Community Living Agency	Transition-community living	Aging & Disability Resource Consortia Statewide referral system	<3 months	4
3. Employment	Specific AT device assistance/AT products for employment		9-12 months	12
4. Health, Allied Health, Rehab.	AT service delivery options		6-8 months	5
5. Employment	Specific AT device assistance/Adaptive van for evaluation/training		9-12 months	26
6. Technology/IT	Web accessibility		<3 months	7
Total Hours TA Provided				55

3. Information & Assistance

MassMATCH provides information and assistance (I & A) through its AT Regional Centers and directly from MassMATCH program staff at the Massachusetts Rehabilitation Commission. Generally I & A activities are responses to individual requests for AT information and assistance. This may be referral assistance to other agencies or entities that can provide the services, products or AT information needed. It may also be assistance with other related disability topics ([NISAT glossary](#)).

In FFY10 MassMATCH provided I & A to 1,018 recipients. 52% were individuals with disabilities and family member (528 recipients), 17% were representatives of education (177 recipients), 17% were representatives of health, allied health, and rehabilitation (171 recipients), and 10% were representatives of community living (99). Most requests for information were for an AT device or service (657). AT funding was the next most requested type of assistance (309).

Table DD: Combined I & A Recipients by Category and Types of Assistance Received

Information & Assistance Recipient Category	Recipients by Assistance Type			
	AT Device/ Service	AT Funding	Related Disability Topics	Total
Individuals with disabilities	175	72	13	260
Family members	166	92	10	268
Reps of Education	108	63	6	177
Reps of Employment	10	0	1	11
Reps of Health, Allied Health, Rehab.	104	57	10	171
Reps of Community Living	74	16	9	99
Reps of Technology	13	9	3	25
Others	7	0	0	7
Total	657	309	52	1,018

The following charts break down the I & A provided in FFY10 by each point of service (MRC, UCP, and ES).

Table EE: MRC I & A Recipients by Category and Types of Assistance Received

Information & Assistance Recipient Category	MRC Recipients by Assistance Type			
	AT Device/ Service	AT Funding	Related Disability Topics	Total
Individuals with disabilities	35	4	5	44
Family members	25	5	6	36
Reps of Education	9	0	0	9
Reps of Employment	3	0	0	3
Reps of Health, Allied Health, Rehab.	13	1	3	17
Reps of Community Living	21	1	1	23
Reps of Technology	3	0	2	5
Others	7	0	0	7
Total	116	11	17	144

Table FF: ES I & A Recipients by Category and Types of Assistance Received

Information & Assistance Recipient Category	ES Recipients by Assistance Type			
	AT Device/ Service	AT Funding	Related Disability Topics	Total
Individuals with disabilities	63	7	8	78
Family members	52	3	4	59
Reps of Education	26	0	6	32
Reps of Employment	7	0	1	8
Reps of Health, Allied Health, Rehab.	40	5	7	52
Reps of Community Living	20	1	8	29
Reps of Technology	10	1	1	12
Others				
Total	218	17	35	270

Table GG: UCP I & A Recipients by Category and Types of Assistance Received

Information & Assistance Recipient Category	UCP Recipients by Assistance Type		
	AT Device/Service	AT Funding	Combined
Individuals with disabilities	77	61	138
Family members	89	84	173
Reps of Education	73	63	136
Reps of Employment	0	0	0
Reps of Health, Allied Health, Rehab.	51	51	102
Reps of Community Living	33	14	47
Reps of Technology	0	8	8
Others	0	0	0
Total	323	281	604

4. Public Awareness

Public awareness activities are designed to reach large numbers of people. These can include public service announcements, radio talk shows and news reports, newspaper stories and columns, newsletters, brochures, and public forums ([NISAT glossary](#)). MassMATCH.org is also a public awareness initiative, and is treated separately below.

As Table HH demonstrates, in FFY10 MassMATCH reached 55,390 individuals through its public awareness activities (not including the MassMATCH website or other internet outreach). Public awareness was accomplished through a blend of outlets and activities.

Table HH: Individuals Reached by Public Awareness Activities

Public Awareness Activity	Number of Individuals Reached			
	UCP	ES	MRC	Combined
Newsletters	2,000	0	501	2,501
Other Print Materials	6,000	0	9,500	15,500
Listserv	0	5,762	501	6,263
PSA/radio/TV	22,400	0	0	22,400
Presentations/expos/conferences	1,138	1,909	5,212	8,259
Other	0	0	467	467
Sub Total	31,538	7,671	16,181	55,390
Internet Information	5,276	2,518	11,827	19,621
Total	36,814	10,189	28,008	75,011

Internet outreach accounted for an additional 19,621 individuals in FFY10, including more than 8,000 visitors to the MassMATCH website, an average of 741 each month.

Table II: FFY10 Website Usage

Total Unique Visitors	Average Pages Per Visit	Average Time On Site
8,038	3.96	2:54

Table JJ: FFY10 Website Monthly History

Month	Visitors*	Visits	Page Views
October 2009	859	1,093	4,413
November 2009	836	1,118	4,304
December 2009	683	939	4,124
January 2010	759	1,016	3,852
February 2010	729	980	3,701
March 2010	769	1,096	4,412
April 2010	716	968	3,598
May 2010	728	992	3,875
June 2010	655	905	3,620
July 2010	704	901	3,165
August 2010	711	856	3,601
September 2010	751	963	4,122
Average Monthly	741	986	3,899

*These are “unique” visitors as recorded monthly.

5. Coordination & Collaboration

“Coordination and collaboration involves working with other entities to improve access to AT devices and services...” ([NISAT glossary](#)). During FFY10, MassMATCH staff worked to improve access to AT services through the following collaborative efforts:

Creating AT Toolkits for Employment

Staff of MassMATCH collaborated with Easter Seals and staff of Massachusetts' Vocational Rehabilitation program to coordinate the creation of AT Toolkits for Employment. Using federal ARRA funds, 29 AT toolkits were assembled and distributed to all VR agency offices, and 6 trainings were held for VR staff throughout the state. The toolkits are designed to be used by employment specialists or job developers in their outreach work with potential employers to demonstrate the AT that can support the employment of individuals with disabilities. They include a range of devices and information tools related to a variety of disabilities.

Piloting the AT School Swap

MassMATCH received \$45,000 from the Shapiro Foundation for a collaborative project with Northeastern University to bring a minimum of 6-8 schools online with the AT School Swap initiative. The project is helping schools identify and upload their AT inventories to the ATSS database and work with a programmer to tailor the ATSS website to best meet the schools' needs. The ATSS is a MassMATCH initiative to encourage resource sharing among schools and school districts with AT devices.

Preserving and Improving Access to Unique AT Services for More Residents with Disabilities

In collaboration with the MICEO (Medicaid Infrastructure and Comprehensive Employment Opportunities) grant entities, including the Institute for Human Centered Design, MassMATCH helped coordinate the study of 6 state-run facility-based AT Centers to document the unique services they provide for children and individuals with complex medical and intellectual needs. The effort lays the groundwork necessary toward preserving and expanding services that focus on customized design and fabrication not funded by MassHealth and other insurance. These institutions have been slated for downsizing and closure, but these services are unique and have the potential to serve many more residents in the Commonwealth. A report including recommendations for improving services was completed and shared with staff at EOHHS and its partner agencies.

Partnering to Expand the Wheelchair Reuse Program

During FFY10, MassMATCH expanded the Wheelchair Reuse Program by collaborating with the Boston Center for Independent Living to repair and refurbish used power wheelchairs, power scooters, and power standers, and other durable medical equipment (DME) in eastern Massachusetts. Western Massachusetts continues to be served through the MassMATCH partnership with the Stavros Center for Independent Living for the same services. Donated DME is refurbished and then posted on the GetATStuff device exchange website.

Improving Access to High-Tech Driver Evaluations and Training

Until recently, individuals with severe disabilities in Massachusetts who wanted to drive had to travel out of state for the high-tech driving evaluations they needed. There was also nowhere in-state to train them with adaptive equipment until they had purchased and modified their own vehicle. To rectify the issue, MassMATCH collaborated with staff from the state Vocational Rehabilitation Adapted Driving program and the Central Mass. Safety Council to develop the specifications and process to procure and modify a van to be used for high-tech driving evaluations. Funded with federal ARRA (American Recovery and Reinvestment Act) funds, the van was completed in September 2010. It includes multiple electronic control systems for use in both evaluations and training with individuals with a wide range of disabilities.

Improving the Online Device Loan Program

This year, MassMATCH partnered with a web developer (AgoraNet) and two funded providers (Easter Seals and United Cerebral Palsy) to identify and execute improvements to the MassMATCH Short-Term Device Loan program website to make it more user-friendly. In

addition, the program began working with Northeastern University to create accessible video clips of AT in use so that people with disabilities, their family members, advocates, and service providers could browse devices more effectively. This project involved student interns along with members of the MassMATCH AT Advisory Committee.

Forward Thinking

MassMATCH continues to work on multiple fronts to promote awareness of and access to AT throughout the state human services delivery system, among public and private employers, within school systems, among advocacy groups, and directly to people with disabilities.

For example, MassMATCH is currently collaborating with the Executive Office of Health and Human Services, UMASS Medical School, and the Mass. Rehabilitation Commission—as well as key leaders within secondary education and the business sector—to design an AT/IT event for September, 2011. The combined expo/conference/summit is intended to showcase cutting-edge assistive technology, Universal Design principals, and inclusive information and communication technology through displays, workshops and hands-on opportunities. The venue will also host an AT Advancement Summit, convening state leaders from multiple sectors (DME vendors, policy experts, business and education leaders, and state-agency personnel) to brainstorm a statewide strategy and business model for promoting effective access to, as well as development and use of, AT.

MassMATCH is also working this year to expand its use of social media to connect people to information and resources regarding AT. A community blog page was recently added to the MassMATCH website where short articles and notices are posted by MassMATCH staff, consultants, and members of the AT Advisory Committee. Here readers can also post AT-related comments for public sharing. The blog has been linked to MassMATCH's Facebook page, and interested individuals are invited to participate.

Finally, as the state undertakes new initiatives to help people with disabilities move from institutions into their communities, MassMATCH staff will work with other state and private entities to ensure that consumers have access to a full range of AT products and services to facilitate their transitions to independent living.

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