



Shrewsbury Public Schools

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Special Education ~ Inclusion and Assistive Technology Report to the Shrewsbury School Committee April 11, 2012

Introduction

Inclusion:

The Individuals with Disabilities Education Act (IDEA) does not use the term "inclusion." However, IDEA does require school districts to place students in the least restrictive environment (LRE). LRE means that, to the maximum extent appropriate, school districts must educate students with disabilities in the regular classroom with appropriate aids and supports, referred to as "supplementary aids and services," along with their nondisabled peers in the school they would attend if not disabled, unless a student's individualized education program (IEP) requires some other arrangement. This requires an individualized inquiry into the unique educational needs of each disabled student in determining the possible range of aids and supports that are needed.

In implementing IDEA's LRE provisions, the regular classroom in the school the student would attend if not disabled is the first placement option considered for each disabled student before a more restrictive placement is considered. If a student with a disability can be educated satisfactorily with appropriate aids and supports in the regular classroom in the school the student would attend if not disabled, that placement is the LRE placement for that student.

A comprehensive definition of inclusion was developed by the National Center on Educational Restructuring and Inclusion (NCERI).

Providing to all students, including those with significant disabilities, equitable opportunities to receive effective educational services, with the needed supplementary aids and support services, in age appropriate classrooms in their neighborhood schools, in order to prepare students for productive lives as full members of society. (1995, p.99)

Assistive Technology:

Assistive technology devices and services were first defined in federal law in the Individuals with Disabilities Education Act of 1990 (Public Law 101-476). These definitions remained unchanged until 2004 with the passage of the Individuals with Disabilities Education Improvement Act (Public Law 108-446) when an exemption to the definition of an assistive technology device was added to clarify that a school system does not have the responsibility to provide surgically implanted technology such as cochlear implants.

IDEA Definition: Assistive technology device.--

(A) In general.--The term “assistive technology device” means 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 functional capabilities of a child with a disability.

(B) Exception.--The term does not include a medical device that is surgically implanted, or the replacement of such device.

Assistive technology devices are available in a variety of categories to address functional capabilities of students with disabilities. These categories include but are not limited to:

Academic and Learning Aids: Electronic and non-electronic aids such as calculators, spell checkers, portable word processors, and computer-based software solutions that are used by students who has difficulty achieving in the educational curriculum

Aids for Daily Living: Self-help aids for use in activities such as eating, bathing, cooking, dressing, toileting, and home maintenance

Assistive Listening Devices and Environmental Aids: Electronic and non-electronic aids such as amplification devices, closed captioning systems, and environmental alert systems that assist students who are hard of hearing or deaf with accessing information that is typically presented through an auditory modality

Augmentative Communication: Electronic and non-electronic devices and software solutions that provide a means for expressive and receptive communication for students with limited speech and language

Computer Access and Instruction: Input and output devices, alternative access aids, modified or alternative keyboards, switches, special software, and other devices and software solutions that enable students with a disabilities to use the classroom computer

Environmental Control: Electronic and non-electronic aids such as switches, environmental control units, and adapted appliances that are used by students with physical disabilities to increase their independence across all areas of the curriculum

Mobility Aids: Electronic and non-electronic aids such as wheelchairs (manual and electronic), walkers, scooters that are used to increase personal mobility

Pre-vocational and Vocational Aids: Electronic and non-electronic aids such as picture-based task analysis sheets, adapted knobs, and adapted timers and watches that are used to assist students in completing pre-vocational and vocational tasks

Recreation and Leisure Aids: Electronic and non-electronic aids such as adapted books, switch adapted toys, and leisure computer-based software applications that are used by students with disabilities to increase participation and independence in recreation and leisure activities

Seating and Positioning: Adaptive seating systems and positioning devices that provide students with optimal positioning to enhance participation and access to the curriculum

Visual Aids: Electronic and non-electronic aids such as magnifiers, talking calculators, Braille writers, adapted tape players, screen reading software applications for the computer, and Braille note-taking devices that assist students with visual impairments or blindness in accessing and producing information that is typically present in a visual (print) modality.

Inclusion Services

Parker Road Pre-School

The Shrewsbury Public School district provides preschool education, as required by IDEA, for children evaluated by the district and identified as having a disability and eligible for special education. IDEA requires that children with disabilities be educated with children who are not disabled to the “maximum extent possible”. To meet this requirement the district has integrated classrooms (includes children with and without disabilities) in which to provide special education. Some children, due to the severity of their disability, learn in substantially separate settings outside of the integrated classrooms for the majority of their school day.

Empirical research demonstrates that brain development occurs most rapidly during the first years of life and that with early identification and intervention deficits in development can be remediated in preschool years. Helen Charlupski and Mark McQuillan of the EDCO collaborative support early intervention because, as they say, *we know that high-quality early education helps special needs students prepare for a mainstream experience in such a way that their need for extra support is reduced in the long run, improving their education and reducing the likelihood of more expensive services in the upper grades.*

The majority of students receiving special education services and placement are referred from Early Intervention agencies prior to the child’s third birthday. As a result, the numbers of special education students increases throughout the school year as children turn three years old and “age out” of Early Intervention. Early Intervention agencies provide the district with the date of birth, areas of delay, and when available diagnosis of children residing in Shrewsbury and receiving early intervention, on a quarterly basis to assist with planning for evaluation and possible services and placement.

Integrated Preschool Classrooms provide specialized instruction and related services for students with mild to moderate disabilities. Currently eight teachers, certified in teaching young children with and without disabilities provide instruction for fourteen sessions of preschool (session=8:30-11:00 and 12:00-2:30). Each classroom session includes six to seven children with disabilities and eight to nine children without disabilities for a maximum of fifteen students per classroom (class size is regulated by DESE special education regulations). Teachers provide specialized instruction while speech, occupational and physical therapists provide related services within the classroom. Some children, depending on the therapy or need for a quiet environment, may receive therapy outside of their classroom. Paraprofessionals support the

learning and development of all children and facilitate carryover of specific teaching strategies to target IEP goals.

The school psychologist supports social and emotional development as part of the general preschool curriculum and when appropriate provides direct service based on IEP goals for some students. For example, she models lessons from the Second Step Curriculum for teachers and gradually releases responsibility to the teacher for implementation.

The specialized instruction, provided by the teacher, includes whole group, small group, and individual formats. Teachers provide accommodations and modifications to the curriculum to ensure all students access the curriculum and make effective progress toward IEP goals and preschool learning standards. Speech and language pathologists provide whole class language-based lessons, in addition to direct services for students with IEPs, to target IEP goals and provide intervention as part of the pre-referral process for students without an IEP.

Inclusion in all Elementary Schools

The purpose of the inclusionary support is to ensure that the child is able to demonstrate success using the strategies he/she is being taught within the natural classroom environment.

Students with disabilities are provided with a variety of special education services within the general education classroom. Students with mild-moderate academically based impairments may require direct instruction for learning and demonstrating understanding of classroom curriculum concepts. They are able to keep up with the pace of the classroom with some modifications, accommodations, and extra level of instruction for portions of instruction. Students with executive functioning (organizational and planning) weaknesses also benefit from this model, as an extra level of support can focus on organization skills to keep up with curriculum demands of the classroom. Students with this level of support may have disabilities in any area, but are most often found to have a Communication or Specific Learning Disability in Reading, Writing, and/or Math. Inclusion time can also be combined with pull out services if appropriate.

A child will typically require remediation in one or more of the following areas: math, reading, writing and/or organization. Special education teachers work within the classroom setting during the times of the day that the child will require the most support. While the special education teacher is within the classroom setting she may be working 1:1 with a child, small group, co-teaching or with a student who does not have a disability, but who has been identified as struggling with their learning (Response to Intervention).

In addition to the special education teacher, the school psychologist, speech pathologists, occupational therapist, and other related service providers also provide inclusionary support in all content areas. The providers consult with the classroom teacher to ensure carryover of skills. This instruction will look different based on the needs of each child. The service provider may be 1:1, small group, or co-teaching a lesson.

Although the classroom teacher is always supporting and carrying over IEP goals, aide support may be provided within the classroom during key times for students that require a higher level of support for carryover of learned strategies into the classroom.

The instructional practices of the special education teachers vary based upon the needs of the child. However they use research based instructional practices. The teacher provides modifications to the curriculum and assists the classroom teachers in accommodating their styles of teaching to best suit the child's learning needs.

Beal Early Learning Center

Beal School provides special education services to students in Grades Pre-K through first grade. The Pre-K teacher is a certified special education teacher who works with students with a variety of disabilities. She is consistently modifying the curriculum and providing accommodations throughout the school day so that the children can access the curriculum.

Beal has two special education teachers who service students with a variety of disabilities in the inclusion setting. Both teachers work in the half-day K, full-day K, and first grade classrooms. Typically these teachers work with students who are having difficulty with reading, writing, and/or math. The special education teachers modify the curriculum and assist the classroom teachers in accommodating their style of instruction to best suit the needs of the student. These teachers use research based instructional practices. In addition a special education teacher participates in the Early Intervening Team to provide instructional strategies to classroom teachers.

The Elementary Learning Center (ELC) program and intensive inclusion program offers opportunities for inclusion for our more significantly impaired students. Opportunities include academic activities as appropriate (i.e. science experiment, math game modified, etc) or social opportunities within the classroom (i.e. snack, morning meeting, etc). These opportunities are fully supported by paraprofessional staff to ensure prompting and scaffolding for learned skills in the environments.

Spring Street School

Spring Street School services students Grades K-4. There are two full time special education teachers that provide services to students in all grades. Typically one teacher works in K-2 and the other teacher works in grades 3 & 4. These teachers participate in the Early Intervening Team to provide instructional strategies to classroom teachers. These teachers work with students with a variety of disabilities.

In addition to the special education teachers, Spring has a school psychologist, speech pathologists, and an occupational therapist and an OT assistant. The related service provider may be 1:1, small group, or co-teaching a lesson. The providers consult with the classroom teacher to ensure carryover of skills.

The ELC program and intensive inclusion program offers opportunities for inclusion for our more significantly impaired students. Opportunities include academic activities as appropriate (i.e. science experiment, math game modified, etc) or social opportunities within the classroom

(i.e. snack, morning meeting, etc). These opportunities are fully supported by aide/tech staff to ensure prompting and scaffolding for learned skills in the environments.

Paton School

Paton provides special education services to students in grades 1-4. There are currently 45 students with disabilities at Paton, all of whom receive special education supports. All 45 students are included in their grade-level regular education curriculum. Many of the students receive some combination of language arts (structured reading, comprehension, written language) and/or math support from special education outside the classroom (typically in 30 or 45 minute sessions) as a supplement to the regular education curriculum.

One student receives substantially separate language arts and math instruction on a daily basis, but is also included in the regular education curriculum to the degree possible.

In addition to the special education teachers, Paton has a school psychologist, speech pathologist, and an occupational therapist and an OT assistant. The related service provider may be 1:1, small group, or co-teaching a lesson. The providers consult with the classroom teacher to ensure carryover of skills.

Floral Street School

Floral Street School provides special education services grade 1-4. Floral Street is the largest elementary school servicing approximately 90 students with disabilities. Of those 90 students, 48 students receive their special education services primarily in the general education classroom.

The Co-Teaching classroom provides inclusion support for students with language based disabilities in phonics or language comprehension. These disability areas do not impact one academic area, but impact across the school day. The Co-Teaching model provides additional adult support and direct teaching throughout the school day for all academic areas.

The ELC program and intensive inclusion program offers opportunities for inclusion for our more significantly impaired students. Opportunities include academic activities as appropriate (i.e. science experiment, math game modified, etc) or social opportunities within the classroom (i.e. snack, morning meeting, etc). These opportunities are fully supported by aide/tech staff to ensure prompting and scaffolding for learned skills in these environments.

In addition to the special education teachers, Floral has a school psychologist, speech pathologists, and an occupational therapist and an OT assistant. The related service provider may be 1:1, small group, or co-teaching a lesson. The providers consult with the classroom teacher to ensure carryover of skills.

Coolidge School

Coolidge provides special education services in grades K-4. Many of the students receive some combination of language arts (structured reading, comprehension, written language) and/or math support from special education outside the classroom (typically in 30 or 45 minute sessions) as a supplement to the regular education curriculum.

Each grade level is doing guided reading and Writer's and Reader's Workshop. In kindergarten through second grade, providers are assisting children with word work (phonics-based skills). Mathematically, work on pre-teaching, re-teaching and extra practice of skills that correspond to the curriculum. Teachers may break up the students into smaller differentiated groups for instruction and there are opportunities throughout the year to conduct co-teaching lessons.

There are three inclusion teachers currently at Coolidge who provide 32 students services in an inclusion setting.

Sherwood Middle School

Students participating in the inclusion program receive their educational instruction within the general education classroom setting for the entire or a substantial portion of their school day with the support of a special education teacher and an aide. All inclusion students participate in general education classes including Science, Social Studies, English Language Arts, and Math. Within these classrooms all members of the team, including general education teachers, special educators, and aides collaborate together to gear instruction towards each individual learner through varying levels of curriculum modifications and accommodations. These students receive an academic support block from their special education teacher four days out of the six-day cycle.

Sherwood has a Co-Teaching model in both fifth and sixth grade. This program includes a small cluster of students (no more than eight), who are participating in general education classes with the support of a special education teacher and aide. Students within this program are diagnosed with language-based learning disabilities. They begin the program reading at least 2-3 grades below grade level and all students receive integrated and individualized speech services, specialized structured reading programming and assistive technology support. The majority of curriculum based instruction takes place in an inclusive general education class. When significant curriculum modification is necessary, a substantially separate classroom is available for parallel curriculum lessons.

Oak Middle School

Special education services are provided in the inclusive setting for language arts, math science and social studies as well as for some allied arts such as health and computers that have a language component. Speech and language services are also provided in regular education classes particularly in areas that have extensive new vocabulary and higher-level language demands. Assistive technology is used throughout the day by 10 students who use school issued iPads and about eight other students who have their own iPads from home. Two students are using school issued laptops throughout their day. To maintain these students in an inclusive

setting, special education teachers consult regularly with the Assistive Technology Specialist to make sure that all reading material is either downloaded to “Read To Go” and/or language based assignments are scanned to allow them audio access to daily work.

There are seven special education teachers providing inclusion services, with four in Grade 7 servicing 54 students and three in Grade 8 servicing 47 students. These special education teachers all teach a co-taught language arts and math section daily for students with significant needs that are able to handle the curriculum on team with daily modifications. Depending on the lesson, special education teachers may also co-teach a science or social studies lesson as needed. All inclusion special education teachers attend a daily science and social studies class to provide in class modifications for our language based learning disability students; as well as providing teachers with a knowledge base to assist them with small group review, re-teaching and reinforcement that occurs during the daily skills classes that special education staff also teach.

Shrewsbury High School: A full report on high school special education services will be presented separately.

Inclusion Service Delivery and Caseload Information

Building	Total # of Students receiving Inclusion Support and Services
Parker Rd & Wesleyan Terrace	42
Beal	13
Coolidge	28
Floral	32
Paton	48
Spring	45
Sherwood	47
Oak	84
Total	101

Assistive Technology Role and Responsibilities

The Assistive Technology (AT) Specialist for Shrewsbury Public Schools provides services to all the special education staff and students across the district. In addition, the AT Specialist also conducts Assistive Technology Evaluations and services for our out-of-district students.

Assistive Technology Evaluations:

An Assistive Technology evaluation includes observing the student to see what problems he/she is encountering. The AT Specialist meets with the teacher and therapists to see what they have tried depending on the skill level. Finally, various AT Supports (low tech or high tech) are trialed to determine what provides the best level of support for the student to access the curriculum and educational program.

Software:

The AT Specialist is responsible for installing all the special education software and problem solving when the software is not working on the computer. This also requires that the AT Specialist become familiar with all the programs as well as understand how to individualize them for each student. The AT Specialist trains the special education staff on the software they need to use with their students as well as working with some of the students to teach them how to use the software.

The software used throughout the district includes the following:

1. **Boardmaker**- teachers can create picture supported materials both on and off the computer. With Boardmaker Plus the teachers can create interactive educational activities for their students.
2. **CoWriter**- is a "word prediction" software. As the student is typing, the program provides a list of possible words. Students use CoWriter to help with their writing. They are able to express their thoughts without struggling with the spelling.
3. **Kurzweil**- is a text-to-speech software. Students use this software to listen to the books that they are reading in class. Five of our middle school students also used this to take the MCAS this year.
4. **ReadOutLoud for Bookshare**- is also a text-to-speech software that many students are using. The books that we can use with ReadOutLoud are found on Bookshare.org. Bookshare provides accessible books and textbooks to any student with a qualifying print disability. These books are also available on the iPad with the Read2Go app.
5. **Kidspiration & Inspiration**- are graphic organizers/web builder. Some students benefit from creating a web of their ideas before they begin the writing process. This way they can make sure that they have all their ideas covered. Kidspiration and Inspiration allow the student to create a web and then transform it into an outline that will show them exactly how they are going to write their paper.
6. **Classroom Suite**- This software can be used to work on a wide variety of skills for students. The teachers can create activities to work on reading, writing, math, science and social studies. Teachers also have access to an on-line library of materials that other teachers nationwide have created.

7. **Clicker**- Students work on their writing skills using Clicker. Clicker offers picture and audio support to our students learning to write.
8. **Power Point**- used to create social stories for some of our students. These social stories can then be added to the iBooks library on their iPads.
9. **iTunes**- teachers have been learning how to create play lists on iTunes to go along with their curriculum. We have also learned how to convert a song to a .wav file so that we can use the song in Boardmaker.
10. **iPhoto**- teachers have been using iPhoto for their classroom pictures and for use in Boardmaker.
11. **Garage Band**- teachers are learning how to create audio files of their students speaking or reading a passage.
12. **Symbol Stix** (online)- offers a large library of pictures symbols to support students. These pictures can be downloaded and used in any program. Most pictures in Symbol Stix are easier to understand than Boardmaker. Symbol Stix libraries are updated every week for no additional cost. If a symbol is needed that they do not have we can simply request that they add it. However, we still need Boardmaker to have our interactive boards, communication device templates and Boardmaker's customizing abilities.
13. **Mac Speech Scribe**- This program is the Mac version of Dragon Naturally Speaking. A few students who are struggling with writing have used this program. The students work with the AT Specialist to train the program to recognize the student's voice. Once this is set the student can then record his/her story on a digital voice recorder. The recording is uploaded to Mac Speech Scribe to be turned into text. Its complex nature limits our ability to use this program on a regular basis.
14. **Dragon Naturally Speaking**- we have a student who is using a PC laptop and needs speech-to-text. This student has Dragon Naturally Speaking on his laptop and the AT Specialist worked with him to train his voice to the program. He can now write as he talks into a microphone connected to the laptop.
15. **Edmark**- this program works on building students' sight word recognition. This program also has a kit that offers multiple hands-on approaches to the learning experience.
16. **Picture it**- is a program for students needing the most basic writing support. The toolbar with pictures allows students to form ideas to create their sentences

iPads

The AT Specialist manages all the special education assigned iPads in the district. She also provides tech support to the iPads in the following ways: Set up each iPad when it arrives, keep an inventory of the iPads, purchase the apps with the Volume Purchase Program, use an online website (Casper) to manage the apps and assign them to various iPads, provide assistance to the special education teachers and aides on how to use the iPads, update the operating system, keep up with what apps are useful to the staff and let them know where the apps can be found. Some of the apps being used include:

1. **Read2Go**- a text-to-speech program that supports Bookshare.org books
2. **Pages**- similar to Microsoft word. Students are using this app to write their papers.
3. **Choiceboard Creator**- teachers can create multiple choice question boards.
4. **Proloquo2Go**- communication program for the iPad. This program can be customized to each user. Sometimes students may need to use the scroll feature to find their word.
5. **TouchChat**- a communication program for the iPad. This program can be customized for the user. TouchChat does not use the scroll feature. Instead the student presses a button

on the iPad and it takes them to the next page. This is good for students who do not understand how to scroll on the iPad.

6. **Dragon**- this app was designed for creating e-mails or text messages. Some students have been using it to write their papers. Unlike the computer software the Dragon App does not require any training.
7. **Everyday Math**- the Everyday Math apps occasionally are free and we have loaded them on the iPads. These apps have games that build on the skills in the Everyday math program.
8. **Little Spellers**- this app comes programmed with "CVC" consonant-vowel-consonant words that the students can practice spelling. The nice part is that the teacher can build their own spelling lists for the students to practice.
9. **Glow Draw**- some teachers are using this app to take a picture of a worksheet they want the student to do. The student can then write their answer on the picture of the worksheet. This is more meaningful and motivational to some students.
10. **Show Me**- students and teachers can create recordings of their work. As they are writing on the iPad, the app is recording what they are saying. This is being used in a variety of ways especially in the middle schools. A teacher can make a recording of how to solve a math problem. If the student does not remember what to do they can refer to the recording. Each student can create a recording of how to solve a math problem and share it with the class. This can also be used for story telling, group work and much more.

Communication Devices:

We currently have 12 device users in the district. The AT Specialist supports the Speech and Language Pathologist (SLP) to program the devices to fit each student's needs. For some of the students, the SLP provides a list of the vocabulary they want on the device and the AT Specialist will program it in. The AT Specialist arranges for representatives from the various companies to come in and provide training to the team when needed. The AT Specialist also trains the teachers and SLP how to use the software to customize the device.

Some of the devices being used in the district include the following:

1. Dynavox Maestro with Speaking Dynamically Pro
2. iPad with Proloquo2Go
3. Dynavox Express
4. Tobii C8 with Communicator software
5. PRC Springboard
6. Chat PC

Other Technology Devices

Students use a variety of technology equipment to support their learning. The AT Specialist responsibilities include training the students and staff on how to use the various tools.

Some of these tools include:

1. **Go Talk**- this is a mid-tech device. The teacher creates a page containing the vocabulary the students need to go along with the activity they are doing. The teacher then records a message for each of the boxes on the Go Talk and the student then participates in the activity.
2. **Step-by-Step**- some students are at the stage where they can only use one button at a time. With the step-by-step, the teacher/SLP can program multiple messages so that the student can have a scripted conversation with someone just by pressing the switch.

3. **Communication Builder**- like the Go Talk, this is a Mid-Tech communication device the teacher/SLP can create printed pages to be recorded on the device. The Communication Builder allows the teacher/SLP to choose how many boxes the student needs (1,2,4,8,16)
4. **LiveScribe Pulse Pen**- the Pulse is used for students who have a difficulty taking notes and remembering what was said. As the student is writing notes in the special notebook, the pen is recording everything that is being said in the class. At a later time, the student can review his/her notes and listen to the class to add more detail to the notes.
5. **Iris Scanning Pen**- we have a student who needs to type all of his answers in the computer. With the Iris Scanning pen the student can scan the question from the book right into his computer. He can then type his answer right next to the question. The Iris scanning pen is saving teachers on the amount of photo copying, scanning, and prep they have to do for this student. The Iris Scanning pen also offers a reading feature if needed.
6. **Scan Snap Scanner**- some students require a large amount of documents to be in a PDF format so they can access it either on the computer or iPad. The teachers are using the Scan Snap scanner to convert these documents from paper to PDF. This scanner can scan 8 pages a minute front and back and saves it as a PDF.
7. **LiDE Scanners**- to create some of our Kurzweil books and other computer activities our teachers have access to LiDE scanners.
8. **Touch Window**- some students cannot access the computer with a mouse and need to use a touch screen. We have touch screens that are mounted to the monitor and ready for the students to use.
9. **Joystick Mouse**- if the student cannot access a standard mouse, we try a joystick mouse. These work for some students since the joystick is stationary and the student does not require large muscle movements.
10. **Roller Trackball Mouse**- if the student cannot grip the joystick mouse, we try a roller trackball mouse. A roller trackball mouse is where the student can spin a ball to move the mouse around.
11. **Intellikeys**- this device can be used to create a keyboard to work with an activity in Classroom Suite.
12. **Digital Voice Recorder**- students who are using MacSpeech Scribe are using digital voice recorders.
13. **Battery interrupters**- for students who are still learning cause-and-effect, battery interrupters are a good teaching tool. The battery interrupter is placed in a toy that is motivating to the student. The battery interrupter is then connected to a switch. When the switch is pressed the toy starts to work. When the switch is released the toy stops working.
14. **Switches for access**- students who are working on cause and effect need the switches for the battery interrupters.
15. **Reading Pen**- students who are struggling with reading and need assistance on some of the words benefit from the Reading Pen. With this pen, the students can highlight the word; the pen then reads the word out loud. They can also get the definition, synonyms, syllables, and spelling. This is valuable for a few words not an entire passage.
16. **Perkins Tape Player**- we have an account with the Perkins Audio Lending Library where we can order books for our students use. These books have been recorded by volunteers reading them. Their books only play on the special tape players that they provide to us.

17. **Victor Reader Stream for Audio Books**- books from Learning Ally can be played on the Victor Stream. Any of the CDs that we have received from them in the past can be uploaded to the stream using their external CD drive.
18. **Victor Reader CD Player**- this CD Player will also play the Learning Ally CD books. The company is no longer making the CD players and is now using the stream.
19. **Ruby Magnifier**- For one of our visually impaired students we are using a Ruby Magnifier. This allows the student to zoom in to a size that is easier to read. The Ruby Magnifier is a portable, handheld magnifier, so is easy to access in the various classes this student attends.

Low-Tech Tools:

For some students, the AT Specialist has created low-tech tools to assist in their learning. Some of these include:

1. **Hat Pointer**- for a student that has limited use of his arms and is in need of alternative ways to access the computer and other classroom materials. The AT Specialist created a hat pointer using: a baseball hat, reusable rubber twist gear tie, 12 Gauge wire, grommets and zip ties. The student can wear this hat and use his head to direct the pointer to the keys on the keyboard.
1. **Weighted Pencil**- one of our students needed a weighted pencil to help with her writing skills. The AT Specialist taped 3 heavy washers in electrical tape to make the weight. She wrapped a hair elastic around the pencil and wrapped it in the same tape. This was to prevent the washer from sliding all the way down the pencil. The AT Specialist then added the washers to the end of the pencil. She added another hair elastic to the end of the pencil and she was good to go. Adding or removing washers could easily adjust the amount of weight on the pencil.
2. **Support for a key guard**- the key guard we got for our keyboard would not work without a little help. It needed to rest on top of the regular keyboard to prevent a student from hitting the wrong keys. However, with our Mac keyboards there were no edges to add Velcro and add the key guard. The AT Specialist built a wooden frame around the keyboard using balsa wood. It could then Velcro the key guard to the wooden frame and the student could use it.
3. **Pointer for communication device**- a student was using a Mid-Tech communication device and had difficulty pressing all the buttons. She was not able to point her finger to press one button at a time. Using shatter resistant Sculpey, The AT Specialist created a T-shaped pointer that she could hold in her hand. She could then use the pointer to press the button.
4. **Adapted Guess Who**- one of our students was learning how to play Guess Who but due to her limited motor abilities, she kept knocking down all the characters instead of just one or two. The AT Specialist scanned all the pictures from the Guess Who game and created a board of all the characters in Boardmaker. Then, using balsa wood, she built a frame around each character. She made magnetic chips that would fit in the frame. The board would be on a metal slant board with the frame around it for the student to play.
5. **Reusable drinking with lid and straw** - one of our students had a hard time drinking out of a juice box. She kept squeezing the box too hard and it would go all over the place. Using single serve Simply Lemonade container (made from hard plastic with a screw on cap) The AT Specialist created a drink box for her. She drilled a hole in the top of the lid

that a straw would fit in. Now the aide empties the juice box into the Simply Lemonade container and lets the student drink independently.

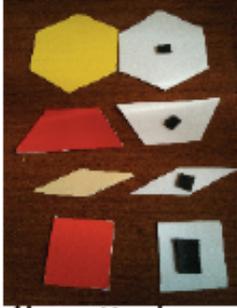
6. **Labels for the supply closet-** using Boardmaker, The AT Specialist created labels to put up on the shelves in the supply closet. Students who needed to fill the supply requests could match the label to one that their aide had to show them.
7. **A mouse box-** this was designed for a student who was learning how to use the mouse and kept accidentally clicking. The AT Specialist used foam board to create a box around the mouse with a small hole on the top for when he needed to click. The box allowed him to move the mouse without worrying about clicking until necessary.
8. **Cardholders tray-** designed much like a scrabble tray. This was designed to hold cards for a students who cannot do it themselves. This was useful for students who were using word cards to build a sentence, cards to play a game with their peers, number cards to create math problems and more.
9. **Shredder Box-** a job for some of our students is shredding papers in the office. One student had difficulties lining up the paper in the shredder without assistance from an aide. Using foam board and tape, The AT Specialist created a box that they could put the paper in and it would feed into the shredder. This allowed the students to be more independent in the task.
10. **Turn table game board-** this turntable is designed so that the student can always reach their game piece. This was built using wood, a 12"x12" sheet metal, a Lazy Susan, scrapbook paper for the game boards. The AT Specialist used Sculpey and magnets to create game board pieces that work on a pincer grasp. The game boards are placed on top of the sheet metal. The sheet metal holds the magnetic pieces in place when the board is spun.
11. **Slant board for keyboard-** a student was having a hard time accessing the keyboard when it was laying flat on the desk. Using foam board, a hot glue gun, nonslip surface mat and tape, The AT Specialist created a slant board on which the keyboard rests.

High Tech and Mid-Tech Tools

 <p>Go Talk</p>	 <p>Step-by-step</p>	 <p>Communication Builder</p>	 <p>LiveScribe Pulse Pen</p>
 <p>Iris Scanning Pen</p>	 <p>Scan Snap Scanner</p>	 <p>LiDE Scanner</p>	 <p>Touch Window</p>
 <p>Joystick Mouse</p>	 <p>Roller Trackball mouse</p>	 <p>Intellikeys</p>	 <p>Battery interrupters</p>
 <p>Switches</p>	 <p>Reading Pen</p>	 <p>Perkins Tape Player</p>	 <p>Victor Stream</p>

 <p>Victor CD Player</p>	 <p>Ruby Magnifier</p>	 <p>Dynavox Maestro</p>	 <p>Dynavox Express</p>
 <p>Tobii C8</p>	 <p>Chat PC</p>	 <p>Springboard</p>	 <p>iPad with Proloquo2Go</p>

Low-Tech Tools

 <p>Hat Pointer</p>	 <p>Hat Pointer</p>	 <p>Turn table game board</p>	 <p>Game pieces</p>
 <p>Adapted juice box</p>	 <p>Weighted pencil</p>	 <p>Slide Counter</p>	 <p>Magnetic shapes</p>



Keyboard
slant stand



Keyboard frame for
key guard



Keyboard
frame back



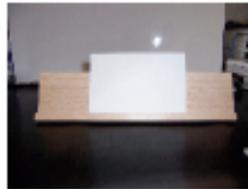
Mouse box



Paper shredder box
front



Paper shredder box
top & side



Card holder



schedule pecs



Zoom caps stickers