

W.A.T.I. Assessment Package

Assistive Technology

S S S S M E N

The WATI Assistive Technology Assessment is a process based, systematic approach to providing a functional evaluation of the student's need for assistive technology in their customary environment.

(Please note: This is <u>not</u> a test protocol. There is no scoring involved.)

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Overview of the Assessment and Planning Process

Penny Reed, Ph.D.

This WATI Assessment process provides an overview of the assistive technology consideration, assessment and planning process that has been implemented throughout Wisconsin and in hundreds of school districts across the country. The term "assessment" is being used rather than "evaluation," except when specifically quoting IDEA. IDEA states that one of the assistive technology services that a school district must provide is an "assistive technology evaluation". However, throughout this manual, we will use the term "assessment" rather than "evaluation", unless directly quoting the law. This is based on the following definition from the Federal Register (July 10, 1993).

Evaluation: A group of activities conducted to determine a child's *eligibility* for special education.

Assessment: A group of activities conducted to determine a child's *specific needs*. (Italics added for emphasis.)

We believe that assessment is a more accurate and descriptive term for what needs to occur. It has long been our philosophical belief that there is no "eligibility" criterion for assistive technology. IDEA '97 supports that philosophy with its requirement that each IEP team "consider" the student's need for assistive technology.

The first page in this section contains the definition of Assistive Technology devices and Assistive Technology Services from IDEA.

Following that is an explanation of the forms and process developed by the Wisconsin Assistive Technology Initiative for both "Consideration" and "Assessment". There are descriptions of the steps for information gathering, decision making, and trial use. In addition, there are directions on how to use the specific forms for each step of the process.



Assistive Technology Laws Affecting School Districts

As stated in 300.308, each school district is required to insure that assistive technology devices and services are provided if needed.

300.308 Assistive Technology

Each public agency shall ensure that assistive technology devices or assistive technology services or both, as those terms are defined in 300.5 - 300.6 are made available to a child with a disability if required as a part of the child's

- (a) Special education under 300.17;
- (b) Related services under 300.16; or
- (c) Supplementary aids and services under 300.550(b)(2).

Assistive technology devices and services are also defined.

300.5 Assistive Technology Device

As used in this part, "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 children with disabilities. 300.5 (Authority: 20 U.S.C. Chapter 33, Section 1401 (25))

300.6 Assistive technology services

Any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. Such term includes:

- (A) the evaluation of needs including a functional evaluation, in the child's customary environment;
- (B) purchasing, leasing or otherwise providing for the acquisition of assistive technology devices;
- (C) selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;
- (D) coordinating with other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- (E) training or technical assistance for a child with disabilities, or where appropriate that child's family; and
- (F) training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers or others(s) who provide services to employ, or are otherwise, substantially involved in the major life functions of children with disabilities. [Authority 20 U.S.C., Chapter 33, Section 1401(26)]



Consideration

IDEA '97 added the requirement that each IEP Team consider the need for assistive technology as part of the Consideration of Special Factors.

300.346 (a)(2) Consideration of Special Factors.

The IEP Team shall

(v) consider whether the child requires assistive technology devices and services.

Lack of Guidelines

Neither the law nor the regulations provided guidelines for school districts in the implementation of these requirements. This may be part of the reason that school districts still struggle to comply with the laws relating to assistive technology. One systematic approach to providing effective assistive technology services is Education Tech Points (Bowser & Reed, 1998). This approach uses key questions to help school district staff appropriately address assistive technology throughout the delivery of special education services. Education Tech Points provides questions about assistive technology to be addressed during: Initial Referral, Evaluation for Eligibility for Special Education, Extended Assessment, Plan Development, Implementation, and Periodic Review.



Assistive Technology Roles and Responsibilities

Although school districts have been required since 1990 to specifically provide assistive technology devices and services, we continue to find a range of situations across school districts from:

- No one responsible for AT
- One person responsible for AT struggling to find time because he or she has little or no reduction in other responsibilities
- One person responsible for AT with some reduction in other responsibilities
- A small team (often an SLP, an OT, and a teacher) at the district level responsible for AT with some reduction in other responsibilities.
- A larger, more complete team (usually adds vision and hearing as well at PT and some times different types of special education teachers) at district level with some building representation established.
- Well trained AT teams in each building with back up from a district level AT Resource team.

Looking at that list as a continuum, it is easy to understand that educators would struggle to comply with the law in those situations described first. It is nearly impossible to be in compliance in school districts where little or no effort has been made to assign responsibility, honor that responsibility by providing time to carry out duties, and providing training to all who require it.

However, even in the districts where effort has been made to assign responsibility and provide training, there can still be difficulties. What we really must have in every school district is:

A knowledgeable, supportive network of people working together to help every IEP Team choose and provide appropriate AT devices and services.

What does that mean? It means:

- 1. Every school district employee who works with children with disabilities (including general education teachers) has at least awareness level knowledge about what assistive technology is and what it does.
- 2. Every employee who works with children with disabilities and has contact with parents of those children, knows the law about assistive technology, knows district procedures for obtaining assistive technology and assistive technology evaluations, and how to initiate those procedures.
- 3. All administrators understand and comply with the laws related to assistive technology.
- 4. Specific individuals at both the building and district level have been designated with specific responsibilities related to assistive technology and provided the necessary training, resources, and support to carry out those responsibilities.



Even in a small school district, it is possible to identify and train at least one individual in each building to have basic knowledge about assistive technology. That individual can then participate in a network within the district so that he or she is aware of others who have knowledge. It also allows that network of people to collaborate to insure that someone develops greater expertise in specific areas (e.g. augmentative communication, voice recognition, or adapted computer access) and that all know who those individuals are and how to contact them for assistance.

Because IDEA '97 specifically requires each IEP Team to consider the student's need for assistive technology, each IEP Team must have at least one member with sufficient knowledge to appropriately consider that need. In addition to knowing about the assistive technology devices, that individual must also know where to turn for greater expertise when difficult questions arise. This can only happen when there is a district wide effort to create knowledgeable people who are interconnected with each other.

Action Steps

School districts that have not yet done so, must:

- 1. Provide awareness level training to all employees who work with children with disabilities in any capacity.
- 2. Provide training on the law to all administrators and monitor their compliance.
- 3. Designate individuals at the central office and building level to work together to gain more in-depth knowledge.
- 4. Provide resources to keep them knowledgeable including catalogs, print materials, equipment and software to use, training opportunities, and access to on line resources.
- 5. Designate specific responsibilities as needed so that everyone clearly understands their role.

It is not so important that a district follow a certain model, but rather that they undertake a systematic course of action, designed to meet the needs of their students with disabilities.



Considering the Need for Assistive Technology

Every IEP Team is now required to "consider" the child's need for assistive technology. When you do "consider" assistive technology, that process should involve some discussion and examination of potential assistive technology. It should not be ignored or skipped over. It should not be someone saying, "Assistive technology? No, he doesn't need that." with no real discussion. Consideration is defined in the American Heritage Dictionary as "to think carefully about, to form an opinion about, or to look at thoughtfully." We believe that Congress did not choose that word by accident, but clearly intended that there would be some thought about whether assistive technology may be needed by this child.

This "thoughtful look" should certainly include at least a brief discussion of which assistive technology might be useful and whether it is needed. In order to do that, someone on the IEP team will need to be sufficiently knowledgeable about assistive technology to help lead the discussion. That person may bring along specific resource information about assistive technology to help all team members focus on what assistive technology exists for the tasks that are challenging to the student. That information might be books, catalogs, printouts from a website, or actual hardware or software to see. Whether resources are brought along or not, there should be a brief discussion of assistive technology during which at least one person displays some knowledge about relevant assistive technology.

Because this discussion should be brief, it should last at least a minute or two, but no more than 15 to 20 minutes. Congress intended that we could do this within the confines of an IEP meeting, so it should not add appreciably to the length of that meeting. If understanding and agreement cannot be reached in twenty minutes, then it is possible that there are questions that need to be addressed in another forum such as an assistive technology evaluation.

In addition to talking about the assistive technology itself, there should be a discussion about assistive technology services. School districts are required to provide both the devices and the services, and the "consideration" requirement also includes assistive technology services. Specific assistive technology services may include: an evaluation of the student's need for assistive technology; training of the student, members of the family or staff on how to use the assistive technology; technical assistance about its operation or use; modification or customization of the assistive technology; and other supports to the school personnel that might be necessary for the assistive technology to be appropriately used. What these other supports might be is not specified in the law. It could include anything that is needed, for example, training on how to add new vocabulary to an augmentative communication device or scan new materials into a software program that reads the text, or time for planning about how and when these things will happen and who is responsible.



Using the AT Consideration Guide

- ♦ Consideration is a brief process, one that can take place within every IEP meeting without unduly extending it.
- It is more than someone saying, "Oh that doesn't apply to my students."
- ♦ At least one person on the IEP Team must have some knowledge about assistive technology, because you cannot "consider" something about which you know nothing.
- In order to think about whether assistive technology would be helpful or not, the IEP team would have to have already developed the bulk of the IEP in order for them to know what it is they expect the child to be able to do twelve months from now.
- ♦ The annual goals that the child is expected to accomplish will be the focus of the discussion about what assistive technology, if any, might assist or allow the child to accomplish them.

Some of the problems that a child might experience which would lead the IEP team to consider assistive technology as a solution include, but are not limited to:

- ✓ Print size is too small
- ✓ A student is unable to hear all that is being said
- ✓ Manipulatives are too difficult to utilize
- ✓ The child often needs text read to him in order to complete an assignment
- ✓ Handwriting is so illegible that the meaning is impossible to decipher
- ✓ The effort of writing is so slow or so exhausting that it is counterproductive
- ✓ Current modifications are not working
- ✓ The child is "stuck"
- ✓ The effort of decoding reading assignments is so difficult that the child loses track of the meaning

When considering a child's need for assistive technology, there are only four general types of conclusions that can be reached:

- 1. The first is that current interventions (what ever they may be) are working and nothing new is needed, including assistive technology. This might be true if the child's progress in the curriculum seems to be commiserating with his abilities.
- 2. The second possibility is that assistive technology is already being used either permanently or as part of a trial to determine applicability, so that we know that it does work. In that case the IEP team should write the specific assistive technology into the IEP to insure that it continues to be available for the child.
- 3. The third possibility is that the IEP team may conclude that new assistive technology should be tried. In that case, the IEP team will need to describe in the IEP the type of assistive technology to be tried, including the features they think may help, such as "having the computer speak the text as the student writes". The IEP team may not know at this point a specific brand or model, and should not attempt to include a product by name, since they do not know if it will perform as expected. Describing the features is the key step for the IEP team in this situation.



4. Finally, the last possibility is that the IEP Team will find that they simply do not know enough to make a decision. In this case, they will need to gather more information. That could be a simple process of calling someone for help, or going to get some print, disk, or online resources to help them better "consider" what AT might be useful. It could also be an indication that they need to schedule (or refer for) an evaluation or assessment of the child's need for assistive technology.

Many state education agencies have developed a worksheet or form to help IEP Teams insure that they address all of the Special Factors during the IEP meeting. This Special Factors worksheet or form requires the IEP Team to respond to a series of questions, including this one about assistive technology:

Does the student need assistive technology services or devices? ☐ Yes	\square No
If yes, specify particular device(s) that were considered.	

Because some IEP teams need more guidance than that single question provides, the Wisconsin Assistive Technology Initiative has also developed a tool to further guide the IEP team at this point. It is called the AT Consideration Guide. The AT Consideration Guide leads the IEP Team through a series of questions designed to help them determine whether the student does or does not "need" assistive technology devices or services. Those questions are:

- 1. What task is it that we want this student to do, that s/he is unable to do at a level that reflects his/her skills/abilities (writing, reading, communicating, seeing, hearing)? On the AT Consideration Guide, document by checking each relevant task below. Tasks which are not relevant to the student's IEP are left blank.
- **2.** Is the student currently able to complete tasks with special strategies or accommodations? If the answer is yes, strategies and accommodations are described in column A for each checked task.
- **3.** Is there currently assistive technology (either devices, tools, hardware, or software) used to address this task? (If none are known, review WATI's AT Checklist.) If any assistive technology tools are currently being used (or were tried in the past, including recent assessment), they are described in column B.
- 4. Would the use of assistive technology help the student perform this skill more easily or efficiently, in the least restrictive environment, or perform successfully with less personal assistance? If yes, column C is completed.

Column C can also be used to explain briefly why something is not going to be tried, even though it is being considered. For instance, the child may recently have begun receiving new direct intervention through therapy services and the IEP team wants to wait and see what the outcome is or the student has made recent improvements and they feel nothing different is needed. Documenting what was discussed and why it is not being implemented is often important here for review in the future, if someone does not remember clearly what was "considered."



If it is decided to try assistive technology which has not previously been used by the student, column C provides the place to describe what will be tried. It is important here to plan one or more formal trials. Only a well designed trial will actually determine what assistive technology will work for a specific student. Only after successful trial use, should the permanent use of assistive technology be written into the IEP.

As noted earlier, one of the outcomes of "consideration" may be the determination that some kind of assessment or evaluation of the child's need for assistive technology is needed.

The Assistive Technology Consideration Guide can be used to document each of these situations for future reference.

student's IEP.

Student's Name_____ School____



WATI Assistive Technology Consideration Guide

What task is it that we want this student to do, that s/he is unable to do at a level that reflects his/her skills/abilities (writing, reading,
communicating, seeing, hearing)? Document by checking each relevant task below. Please leave blank any tasks that are not relevant to the

- 2. Is the student currently able to complete tasks with special strategies or accommodations? If yes, describe in Column A for each checked task.
- 3. Is there available assistive technology (either devices, tools, hardware, or software) that could be used to address this task? (If none are known, review WATI's AT Checklist.) If any assistive technology tools are currently being used (or were tried in the past), describe in Column B.
- 4. Would the use of assistive technology help the student perform this skill more easily or efficiently, in the least restrictive environment, or perform successfully with less personal assistance? If yes, complete Column C.

Task	A. If currently completes task with special strategies / accommodations, describe.	B. If currently completes task with assistive technology tools, describe.	C. Describe new or additional assistive technology to be tried.
☐ Motor Aspects of Writing			
☐ Computer Access			
☐ Composing Written Material			
☐ Communication			
☐ Reading			
☐ Learning/ Studying			

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Task	A. If currently completes task with special strategies / accommodations, describe.	B. If currently completes task with assistive technology tools, describe.	C. Describe new or additional assistive technology to be tried.
☐ Math			
☐ Recreation and Leisure			
☐ Activities of Daily Living ADLs)			
☐ Mobility			
☐ Environmental Control			
☐ Positioning and Seating			
□ Vision			
☐ Hearing			
	al assistance on its operation or use, or tr	aluation of need for assistive technology, adaraining of student, staff, or family) that this s	
Persons Present:		Date:	



ASSISTIVE TECHNOLOGY ASSESSMENT

Since the 1990 reauthorization of IDEA with its definition of assistive technology services, which included "the evaluation of needs including a functional evaluation, in the child's customary environment;" there has been a nationwide trend to identify and train staff within each school district to be more knowledgeable about assistive technology. This trend incorporates the following components:

- ♦ A Change in the **view** of assistive technology assessment: From a one shot, separate event to an **ongoing, continual part of educational planning**.
- ♦ A change in **who** conducts the assistive technology assessment: From an expert based at a center to the **local team in the natural setting**.
- ♦ Change in the **scheduling** of an assistive technology assessment: From an isolated, one time event to an **ongoing, continual process,** which includes trials with potential assistive technology.
- ◆ As a result, there are changes in **support and follow through**: From limited support and poor follow through to **meaningful follow through involving all team members**.

These changes are significant because the research on abandonment of assistive technology indicates that student's feelings about the assistive technology and the support of family, peers, and teachers are critical factors that determine successful use versus abandonment. Other factors that affect abandonment include having the training necessary to use the devices, being able to use it with little or no pain, fatigue, discomfort, or stress, and having it compatible with other tools and technologies used by the student (American Medical Association, 1996).

This change has created a tremendous need for inservice training for service providers in local school districts across the nation. The changes in the 1997 reauthorization of IDEA which require every IEP team to "consider" the need for assistive technology, has created an even greater need for training, so that all IEP teams will have the needed expertise.

What is the difference between "Consideration" and "Assessment"

The most obvious differences between Consideration and Assessment are those of depth and duration. Consideration is a short discussion that takes place during the IEP meeting using known information and results in the decision to continue something already being used or to try or not to try assistive technology. Assessment goes into much more detail, looking closely at the students abilities and difficulties and the demands of the environments and tasks. Assessment also includes the acquisition of new information

We believe that assessment has three parts:

- Information Gathering
- Decision Making
- Trial Use

Information gathering may require specific tests to determine a student's functional level on a given task, observation in customary environments to document performance as well as environmental demands, and careful review of what has already been tried. The decision making requires the use of a clearly defined decision making process understood by everyone. If assistive technology appears to be a viable tool, trials to determine exactly what will work are needed.



Who provides an Assistive Technology Assessment

When there is a specific request for an assistive technology assessment or the IEP Team determines that one is needed, an assessment of the student's need for assistive technology must be completed. While school districts may vary in their specific procedures, it is essential that a team of people be involved in any AT assessment.

There are **five basic components** that **must** be represented on every team making decisions about assistive technology. They are:

- ♦ A person knowledgeable about the student. That may be **the student** and/or **parents** or other family members.
- A person knowledgeable in the area of **curriculum**, usually a Special Education teacher.
- ♦ A person knowledgeable in the area of **language**, usually a Speech/Language Pathologist.
- A person knowledgeable in the area of **motor**, often an Occupational or Physical Therapist.
- ◆ A person who can commit the district's resources, not only for purchase of devices, but to authorize staff training and guarantee implementation in various educational settings, usually an administrator.

There can be any number of additional team members from such backgrounds as:

Audiologist Computer Specialist

Counselor Early Intervention Specialist

Instructional Assistant Nurse

Physician Rehabilitation Engineer
Social Worker Teacher of Hearing Impaired

Teacher of Visually Impaired Vocational Counselor

This is not an exhaustive list. Each student's team should be unique, customized to reflect the student's unique needs. Anyone who has the potential to contribute to the decision making or implementation can be invited to participate on the team.

Procedures Required

Each school district must have in place a procedure for providing assistive technology assessment. This procedure should include the identification of team members to provide the needed expertise to make an informed decision about assistive technology to meet the student's identified needs.

On the following pages information will be provided about the three step process of Information Gathering, Decision Making, and Trial Use that comprise the AT Assessment process developed by the Wisconsin Assistive Technology Initiative.

The need for an assistive technology (AT) assessment may occur at any time during the provision of services to children with disabilities. It may come up during the official "consideration" during the IEP meeting, or at any time while a child is receiving special education and related services. Generally the need for an AT assessment is brought up by either the parents or the service providers. (We'll use this term to mean any of the therapists, teachers, assistants, or other individuals paid to provide services in the school). It may be a formal request for an "Assistive Technology Evaluation" or more of a specific question and something more is needed.



The question may be broad such as, "Sally struggles with trying to do all of the required reading and writing in sixth grade. She understands the concepts, but decoding the printed word and trying to spell what she wants to write are so difficult that she is feeling overwhelmed and frustrated. Is there any assistive technology that could help with this?" Or it can be very specific, "Bob is not able to understand the graphics in the social studies book due to his vision."

In Sally's case there may be a whole range of hardware (from low tech to computer based) and software that will need to be tried for specific reading and writing tasks in her various classes. In Bob's case only one or two things may need to be tried before a workable solution will be found. In either situation, the team of service providers who work with that child need to have a systematic approach to begin to answer the question.

We have found that people who are new to assistive technology or teams new to the role of "assessing" a student's need for assistive technology often flounder. They struggle to figure out where to start, what questions to ask, what commercial tests, if any, they might need to use, etc. The Wisconsin Assistive Technology Initiative developed a set of forms to help the team through these difficulties and to help them focus on the specific issues that need to be addressed. The forms that we use include:

- ♦ The WATI Student Information Guide
- ◆ The WATI Environmental Observation Guide
- ◆ The WATI Assistive Technology Decision Making Guide
- ◆ The WATI Assistive Technology Checklist



Assessing A Child's Need for Assistive Technology, Where to Start?

When the question of a child's need for AT leads to an assessment, the first action is to identify a team of people to address that question. If the school district already has an identified team, then a request for their assistance is made. If no one is designated to function as an AT Assessment team, or only one person has been designated, then a team of people with sufficient knowledge to make an appropriate and useful decision must be assembled.

While the number of the team members and their specific expertise will vary with the magnitude and complexity of the question to be answered, there are some specific considerations in selecting the members of the team. It is important that someone on the team understands curriculum. This is often a special education teacher or the regular classroom teacher. If the question involves speech or language, then someone with expertise in language development is needed. This is most typically a Speech/Language Pathologist, but might also be a teacher of the hearing impaired, if that would be appropriate based upon the child's unique needs. Often there are questions about positioning or motor ability. In this case a Physical or Occupational Therapist is needed. And, of course, one or more of these individuals must have knowledge about specific assistive technology that might be appropriate to address the child's needs. There may be any number of other individuals, as needed. For instance if the child has a vision impairment, there would need to be a Vision Specialist involved. If the child has Autism, someone with a background in Autism will be needed. While there may be a core group of people in a school district who routinely address questions about assistive technology, the specific team working together to determine an assistive technology solution will be made up of individuals who collectively can address all of the child's unique needs.

Finally, one or both of the parents, and when appropriate, the child must be active participants in the information gathering and decision making. If the child can contribute and understand information, then he should participate in meetings along with his parent or parents. Typically a group of three to six or seven individuals will meet to begin the information gathering and decision making stages of the AT Assessment Process. The AT Assessment Directions/Procedure Guide is a basic outline of the steps that need to take place.



W.A.T.I. Assistive Technology Assessment Directions/Procedure Guide

School District/Agency	School		
Student	Grade		
Team Members			
		Date Completed	Comments

Gathering Information:

Step 1: Team Members Gather Information

Review existing information regarding child's abilities, difficulties, environment, and tasks. If there is missing information, you will need to gather the information by completing formal tests, completing informal tests, and/or observing the child in various settings. The WATI Student Information Guide and Environmental Observation Guide are used to assist with gathering information. Remember, the team gathering this information should include parents, and if appropriate, the student.

Step 2: Schedule Meeting

Schedule a meeting with the team. Team includes: parents, student (if appropriate), service providers (e.g. spec. ed. teacher, general ed. teacher, SLP, OT, PT, administrator), and any others directly involved or with required knowledge and expertise.

Decision Making:

Step 3: Team Completes Problem Identification Portion of AT Planning Guide at the Meeting.

(Choose someone to write all topics where everyone participating can see them.)

The team should move quickly through:

Listing the student's **abilities/difficulties** related to tasks (5-10 minutes).

Listing key aspects of the **environment** in which the student functions and the student's location and positioning within the environment (5-10 minutes).

Identifying the **tasks** the student needs to be able to do is important because the team cannot generate AT solutions until the tasks are identified (5-10 minutes).

(Note: The emphasis in problem identification is identifying tasks the student needs to be able to do and the relationship of the student's abilities/difficulties and characteristics of the environment of the child's performance of the tasks.)

Date Completed

Comments

Step 4: Prioritize the List of Tasks for Solution Generation

Identify critical task for which the team will generate potential solutions. This may require a redefining or reframing of the original referral question, but is necessary so that you hone in on the most critical task

Step 5: Solution Generation

Brainstorm all possible solutions.

Note: The specificity of the solutions will vary depending on the knowledge and experience of the team members; some teams may generate names of specific devices with features that will meet the child's needs, other teams may simply talk about features that are important, e.g. "needs voice output," "needs to be portable," "needs few (or many) messages," "needs input method other than hands," etc. Teams may want to use specific resources to assist with solution generation. These resources include, but are not limited to: the AT Checklist, the ASNAT Manual, the Tool Box in Computer and Web Resources for People with Disabilities, Closing the Gap Resource Directory, and/or AT Consultant.

Step 6: Solution Selection

Discuss the solutions listed, thinking about which are most effective for the student. It may help to group solutions that can be implemented 1) immediately, 2) in the next few months, and 3) in the future. At this point list names of specific devices, hardware, software, etc. If the team does not know the names of devices, etc., use resources noted in Step 5 or schedule a consultation with a knowledgeable resource person (that is the part of the decisionmaking that should require the most time. Plan on 20-30 minutes here).

Step 7: Implementation Plan

Develop implementation plan (including trials with equipment) – being sure to assign specific names and dates, and determine meeting date to review progress (follow-up Plan).

Reminder: Steps 3-7 occur in a meeting with all topics written where all participants can see them. Use a flip chart, board or overhead during the meeting, because visual memory is an important supplement to auditory memory. Following the meeting, ensure that someone transfers the information to paper for the child's file for future reference.

Trial Use:

Step 8: Implement Planned Trials

Step 9: Follow Up on Planned Date

Review trial use. Make any needed decisions about permanent use. Plan for permanent use.



Gathering Information about the Student

The process for assistive technology assessment developed by the Wisconsin Assistive Technology Initiative incorporates the SETT framework (Zabala, 1994) to help organize the often complex task of assistive technology decision making. SETT stands for Student, Environment, Tasks, Tools. By grouping the information into these categories, the task of selecting assistive technology becomes much more logical.

Without the SETT Framework, trying to gather and sort out all of the information necessary for assistive technology decision making can be an overwhelming task. With it, the simplicity of gathering and grouping information allows the team to effectively use that information for competent decision making.

Using the Student Information Guide

As you read through the Student Information Guide, the first thing you note is the questions about what assistive technology is currently being used and what has been used in the past. These are important questions. Unfortunately in our busy lives, it is possible for one service provider to be using assistive technology without others being aware of it. For example the Language Arts teacher may have discovered that Samantha writes much better with voice output on the computer. This may occur because all of the computers in her classroom are equipped with speech cards and talking word processing. Students can choose to use it or not. She observes over the course of several months that Samantha regularly chooses to work with talking word processing and that it has improved both the spelling and grammar in her written assignments. The other teachers and therapists may not be aware of this. Both the documenting and the sharing of that kind of information are essential.

The next section requires a file review to determine what assistive technology, if any, has been tried in the past and what the outcome of that use was. Turn over in staff can cause us to lose track of assistive technology use. Perhaps the most extreme example of this is the case of a team who spent several weeks trying to determine what augmentative communication device might work for a non speaking student. They were all new and neglected to thoroughly review the file until early October, when they were startled to learn that a \$6000 dynamic display, voice output communication aide had been purchased for the student two years earlier. It was in a box, at the back of the classroom closet, safely stored away. Had someone not reviewed the file, they would have spent money on another device, when they already had a very powerful one available. The parent had told them on several occasions that there "used to be something that talked for him," but they had not tracked down the critical information.

Now at the bottom of page 21, the team selects the sections that they feel they will need to complete. It is recommended that a team new to assistive technology assessment concentrate on only one area of concern at a time. So if the child has a learning disability and they are most concerned about writing. They would proceed to the section on Writing and answer the questions in that section. If they are concerned about more than one task, they may decide to complete more than one section of the Student Information Guide. It is up to the team to determine how many and which sections of the Guide will be helpful to them.



Each of the 13 content sections of the Student Information Guide contain questions relevant to determining the type of assistive technology and the features that might be necessary for a child to utilize assistive technology in the completion of the task. On pages 22 and 23 there are a series of questions about the child's abilities related to computer access. These two pages are not necessary to complete if the child has normal fine motor ability, but are critical if the child has a physical disability that includes fine motor difficulties that would impact his ability to keyboard. In the Section on Writing, the first questions address the child's current writing ability. The next question is about any assistive technology currently used. Because much of the assistive technology used to address writing difficulties involves keyboarding, the next question is about the child's current keyboarding ability. Numbers four and five on pages 24 and 25 concern computer use and computer availability. At the bottom of page 25 there is a place to summarize the child's abilities and the concerns related to writing.

Once the desired sections of the Student Information Guide are completed, the team moves on to page 41. The questions on this page are general and apply to every child. They include questions about behaviors that might impact the child's use of assistive technology any other significant factors that should be noted such as learning style, coping strategies, or interest that the team should remember and consider as they move on with the assessment process.



Referral/Question Identification Guide

Student's Name		Date of Birt	th	Age
School	Grade			
School Contact Person	I	Phone		
Persons Completing Guide				
Date				_
Parent(s) Name			Phone	
Address				
Student's Primary Language				
Disability (Check all that apply.)				
☐ Speech/Language	☐ Significant Developme	ntal Delay	☐ Specific Lea	arning Disability
☐ Cognitive Disability	☐ Other Health Impairme	-	☐ Hearing Imp	-
☐ Traumatic Brain Injury	☐ Autism		☐ Vision Impa	
☐ Emotional/Behavioral Disability			_	
☐ Orthopedic Impairment – Type				
Current Age Group				
☐ Birth to Three	☐ Early Childhood		☐ Elementary	
☐ Middle School	☐ Secondary			
Classroom Setting				
☐ Regular Education Classroom	☐ Resource Room		☐ Self-contain	ed
☐ Home	☐ Other			
Current Service Providers				
☐ Occupational Therapy	☐ Physical Therapy		☐ Speech Lang	guage
☐ Other(s)				
Medical Considerations (Check a	all that apply.)			
☐ History of seizures	□ Fati	igues easily		
☐ Has degenerative medical conditi	on \square Has	s frequent pa	in	
☐ Has multiple health problems	☐ Has	frequent up	per respiratory i	nfections
☐ Has frequent ear infections	☐ Has	digestive pr	oblems	
Has allergies toCurrently taking medication for				
☐ Other – Describe briefly				

Other Issues of Concern____



Assistive Technology Currently Used (Check all	that apply.)			
□ None	☐ Low Tech Writing Aids			
☐ Manual Communication Board	☐ Augmentative Communication System			
☐ Low Tech Vision Aids	☐ Amplification System			
☐ Environmental Control Unit/EADL	☐ Manual Wheelchair			
☐ Power Wheelchair	☐ Computer – Type (platform)			
☐ Voice Recognition	☐ Word Prediction			
☐ Adaptive Input - Describe				
☐ Adaptive Output - Describe				
☐ Other				
Assistive Technology Tried				
Please describe any other assistive technology pre	viously tried, length of trial, and outcome (how did it			
work or why didn't it work.)				
Assistive Technology Number and I	Potos of Trial(s)			
Assistive reclinology Number and I	Dates of Trial(s)			
Outcome				
Outcome				
Assistive Technology Number and I	Dates of Trial(s)			
Outcome				
Assistive Technology Number and I	Dates of Trial(s)			
Outcome				
REFERRAL QUESTION	1 1:00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
What task(s) does the student need to do that is a	currently difficult or impossible, and for which			
assistive technology may be an option?				
Based on the referral question, select the section	ns of the Student Information Guide to be			
completed. (Check all that apply.)				
☐ Section 1 Fine Motor Related to Computer or Device Access	☐ Section 8 Recreation and Leisure			
☐ Section 2 Motor Aspects of Writing	☐ Section 9 Seating and Positioning			
☐ Section 3 Composing Written Material	☐ Section 10 Mobility			
☐ Section 4 Communication	☐ Section 11 Vision			
☐ Section 5 Reading	☐ Section 12 Hearing			
☐ Section 6 Learning and Studying	☐ Section 13 General			
☐ Section 7 Math				



as

WATI Student Information Guide SECTION 1 Fine Motor Related to Computer (or Device) Access

1. Current Fine Motor	r Abilities					
Observe the student using well as the activities and using the following? (C	d situations. Does the student have ve	puter, switch, etc. Look at the movement oluntary, isolated, controlled movement				
☐ Left hand	☐ Right hand	\square Eye(s)				
☐ Left arm						
☐ Left leg ☐ Right leg ☐ Mouth						
☐ Left foot	☐ Right foot	Tongue				
\square Finger(s)						
Describe briefly the acti	vities/situations observed					
•	itations to range. □Yes □No					
Describe the specific ran	nge in which the student has the mos	st motor control				
Describe briefly any about	eflexes or abnormal muscle tone. Ormal reflex patterns or patterns of	low or high muscle tone that may interfe				
with the student's volun	tary motor control.					
4 Accuracy						

Describe how accurate, reliable and consistent the student is in performing a particular fine motor task.

Student has difficulty with accuracy. □Yes □No



Student fatigues easily.		_ 1	
Describe how easily the	e student becomes fatigu	ed	
6. Assisted Direct Sele	ection		
		been tried? (Check all tha	t apply.)
☐ Keyguard		☐ Head pointer/head	
☐ Pointers, hand grips, s Other:		☐ Light beam/laser	
		hy	
7. Size of Grid Studen	at Is Able to Access		
		urately access? □ 1" □ 2	2" 🗆 3" 🗆 4"
What is the optimal siz			
-		es across	
		es down	
8. Scanning			
If student cannot direct	select, does the student	use scanning?	
□ No			
☐ Yes, if yes ☐ St	ep	c □ Inverse □	Other
Preferred control site	(body site)		
Other possible control	l sites		
9. Type of Switch			
The following switches work the best.)	s have been tried. (Check	all that apply. Circle the	one or two that seemed
,, 6111 4114 6 654.)	☐ Light touch	□ Wobble	☐ Rocker
,	Light touch		Moroury (tilt)
☐ Touch (jellybean)	☐ Lever	Head switch	☐ Mercury (tilt)
☐ Touch (jellybean) ☐ Joystick ☐ Arm slot	C	Head switchTongue	☐ Sip/puff



WATI Student Information Guide SECTION 2 Motor Aspects of Writing

1.	Current Writing Ability (Chec	k al	l that apply.)			
	Holds pencil, but does not write			☐ Pretend writes		
	Scribbles with a few recognizable	lette	ers		Uses regular per	ncil
	Uses pencil adapted with				Copies simple sl	napes
	Copies from book (near point)				Copies from boa	ard (far point)
	Prints a few words				Writes on 1" line	es
	Prints name				Writes on narrov	w lines
	Writes cursive				Uses space corre	ectly
	Writing is limited due to fatigue				Sizes writing to	fit spaces
	Writing is slow and arduous				Writes independ	ently and legibly
2	Assistive Technology Used (Ch	aalr	all that apply			
	Assistive Technology Used (Ch			.41	inas	Danail arin
	•		Paper with raise			☐ Pencil grip ☐ Typewriter
	Special pencil or marker Computer		Splint or pencil		iuei	7.1
	Computer	J	Other			<u></u> _
3.	Current Keyboarding Ability	(Ch	eck all that appl	y.)		
	Does not currently type				Activates desire	d key on command
	Types slowly, with one finger				Types slowly, w	vith more than one finger
	Accidentally hits unwanted keys				Performs 10 fing	ger typing
	Requires arm or wrist support to ty	pe			Accesses keybo	ard with head or mouth stick
	Uses mini keyboard to reduce fatig	ue			Uses switch to a	ccess computer
	Uses Touch Window				Uses alternative	keyboard
	Uses access software				Uses Morse cod	e to access computer
	Uses adapted or alternate keyboard	l, su	ch as			
	Other					
4.	Computer Use (Check all that ap	ply	.)			
	Has never used a computer		Uses computer			☐ Uses computer at home
	Uses computer for games		Uses computer	for	word processing	
	Uses computer's spell checker					
	Uses computer for a variety of purp					
	Has potential to use computer but l	nas i	not used a comp	ute	r because	

WISCONSIN	ASSISTIVE
X/A	
TECHNOLOGY	INITIATIVI

5. Computer Availa The student has access	ability and Use s to the following computer(s	s)	
□ PC	Macintosh	Other	
☐ Desktop	Laptop		
Location:			
, ,	ntly		☐ Every day, all day
Summary of Stude	nt's Admues and Concer	ns Related to Writing	



WATI Student Information Guide SECTION 3 Composing Written Material

1. Typical of Student's Present	0 (ii mat appiy.)	_	
☐ Short words	☐ Sentences			Multi-paragraph reports
☐ Short phrases	☐ Paragraphs o	f 2-5 sentences		Other
☐ Complex phrases	☐ Longer parag	raphs	-	
2. Difficulties Currently Experi	enced by Studen	t (Check all that a	pply.)	
☐ Answering questions		☐ Generating i	ideas	
☐ Getting started on a sentence or s	tory	☐ Working w/	peers t	o generate ideas and information
☐ Adding information to a topic		☐ Planning con	ntent	
☐ Sequencing information		Using a vari	ety of	vocabulary
☐ Integrating information from two	or more sources	Summarizin	g infor	rmation
☐ Relating information to specific to	opics	Other		
☐ Determining when to begin a new	v paragraph			
3. Strategies for Composing Wi	ritten Materials S	Student Current	lv Hii	lizes (Check all that annly)
☐ Story starters	itten materials t	□ Webbing/co	-	
☐ Preset choices or plot twists		☐ Outlines	псери	парріпд
☐ Templates to provide the format	or structure			
(both paper and electronic)	or structure			
4. Aids/Assistive Technology for (Check all that apply.)	r Composing Wr	itten Materials \	Utilize	ed by Student
☐ Word cards ☐ Wo	rd book	☐ Word wall/v	word lis	sts
☐ Prewritten words on cards or labe	els			
☐ Dictionary ☐ Elec	etronic dictionary/s	pell checker		
☐ Whole words using software or h	ardware (e.g. Intell	iKeys)		
☐ Symbol-based software for writing	ng (e.g. Writing wit	h Symbols 2000 or	r Pix W	Vriter)
☐ Word processing with spell check	ker/grammar check	er		
☐ Talking word processing		☐ Abbreviation	n/expa	nsion
☐ Word processing with writing su	pport			
☐ Multimedia software		☐ Voice recog	nition	software
☐ Other				
Summary of Student's Abilities	and Concerns R	elated to Comp	uter/D	Device Access



WATI Student Information Guide SECTION 4 Communication

1. Student's Presen (Check all that a:		ommunication the primary method the	student uses.)	
☐ Changes in breathi	ng patterns	☐ Body position changes	☐ Eye-gaze/e	eye movement
☐ Facial expressions			Pointing	
☐ Sign language appr	roximations	☐ Sign language (Type		# signs
		# combinations	# signs in a comb	ination)
☐ Vocalizations, list	examples			
☐ Vowels, vowel co	mbinations, list	examples		
		rox. #		
☐ Reliable no		•		
☐ 2-word utterances				
		% intelligible:		
	_	oles	-	
		device)		Intelligible speech
☐ Writing	☐ Other		<u> </u>	
2. Those Who Unde	erstand Stude	nt's Communication Att	empts (Check best descr	riptor.)
	Most of the t	ime Part of the time	Rarely	Not Applicable
Strangers				
Teachers/therapists				
Peers				
Siblings				
Parent/Guardian				
3. Current Level of	Receptive La	nguage		
Age approximation				
If formal tests used, na	ame and scores_			
		ve an approximate age or dev		
_			•	
4. Current Level of	Expressive L	anguage		
Age approximation: _				
		e an approximate age or dev		
_		e an approximate age of dev	veropinentai ievei oi iunci	noning. Expiani your
rationale for this estim	ate.			



5. Communication Interaction	Skills					
Desires to communicate	□ No					
To indicate yes and no the student						
☐ Shakes head ☐ Signs	□ Voca	alizes	☐ Gestu	ires [☐ Eye gaze	es
☐ Points to board ☐ Uses wo	ord approximations		Does	not respond co	nsistently	
Can a person unfamiliar with the st	udent understand th	e response?	?	□ No		
		Always	Frequently	Occasionally	Seldom	Never
Turns toward speaker						
Interacts with peers						
Aware of listener's attention						
Initiates interaction						
Asks questions						
Responds to communication interaction	etion					
Requests clarification from commu	nication partner					
Repairs communication breakdown						
Requires frequent verbal prompts						
Requires frequent physical prompts	l .					
Maintains communication exchang	e					
Terminates communication						
Describe techniques student uses for				,, points to 11150		<u>-</u>
6. Student's Needs Related to I ☐ Walks ☐ U	ses wheelchair	,		vice under 2 por	unde	
☐ Drops or throws things frequent		_		tized (human) s		
☐ Needs device w/large number o	•		J Necus digi	tized (ildinaii) s	Бресси	
Other	words and pinuses	,				
7. Pre-Reading and Reading S	Skills Related to C	Communic	cation (Che	ck all that apply	v.)	
☐ Yes ☐ No Object/picture re	cognition					
☐ Yes ☐ No Symbol recognit	on (tactile, Mayer-J	Johnson, Re	ebus, etc.)			
•	ination of sounds					
☐ Yes ☐ No Auditory discrim	ination of words, pl	nrases				
☐ Yes ☐ No Selecting initial	etter of word					
☐ Yes ☐ No Following simple						
☐ Yes ☐ No Sight word recog						
☐ Yes ☐ No Putting two syml	ools or words togeth	er to expres	ss an idea			



8. Visual Abilities Related to Communication	(Check all that apply.)
☐ Maintains fixation on stationary object	☐ Looks to right and left without moving head
☐ Scans line of symbols left to right	☐ Scans matrix of symbols in a grid
☐ Visually recognizes people	☐ Visually recognizes common objects
☐ Visually recognizes photographs	☐ Visually recognizes symbols or pictures
☐ Needs additional space around symbol	☐ Visually shifts horizontally
☐ Visually shifts vertically	☐ Recognizes line drawings
Is a specific type (brand) of symbols or pictures pref	ferred?
What size symbols or pictures are preferred?	
What line thickness of symbols is preferred?	inches
	or white on black, or a specific color combination for
figure/ground discrimination?	
	the responses the student currently uses or his/her need for e if necessary)
augmenting communication (Ose an auditional page	in necessary)
Summary of Student's Abilities and Concern	as Related to Communication
Summary of Student 3 Montres and Concern	is related to communication



WATI Student Information Guide SECTION 5 Reading

1.	The Student Demonstrates the Following Litera	acy	Skills. (Check all that apply.)
	Engages in joint attention with adult caregiver to active	itie	s (e.g. songs, stories, games and/or toys)
	Shows an interest in books and stories with adult		
	Shows and interest in looking at books independently		
	Associates pictures with spoken words when being rea	id to)
	Realizes text conveys meaning when being read to		
	Recognizes connection between spoken words and spe	ecif	ic text when being read to
	Pretend writes and "reads" what he or she has written,		_
	When asked to spell a word, gets first consonant corre		
	Demonstrates sound manipulation skills including:	,	
		l le	tter names/sounds
П	Recognizes, names and prints the alphabet (if motor sl		
_	printing to demonstrate knowledge of the alphabet)		Table in the income in the inc
	When asked to spell a word, gets first and last sounds	cor	rect
	Applies phonics rules when attempting to decode prin	ted	words
	Sound blends words		
	Reads and understands words in context		
	Spells words using conventional spelling in situations	oth	er than memorized spelling tests
	Reads and understands sentences		
	Composes sentences using nouns and verbs		
	Reads fluently with expression		
	Reads and understands paragraphs		
	Composes meaningful paragraphs using correct syntax	c an	d punctuation
2.	Student's Performance Is Improved by (Check a	ll tł	nat apply.)
	Smaller amount of text on page		Enlarged print
	Word wall to refer to		Pre-teaching concepts
	Graphics to communicate ideas		Text rewritten at lower reading level
	Bold type for main ideas		Reduced length of assignment
	Additional time		Being placed where there are few distractions
	Spoken text to accompany print		Color overlay (List color)
	Other		
3.	Reading Assistance Used		
	ease describe the non-technology based strategies and a	cco	mmodations that have been used with this student
1 10	case describe the non-technology based strategies and a		minodations that have been used with this student



4. Assistive Technology Used
The following have been tried. (Check all that apply.)
☐ Highlighter, marker, template, or other self-help aid in visual tracking
☐ Colored overlay to change contrast between text and background
☐ Tape recorder, taped text, or talking books to "read along" with text
☐ Talking dictionary or talking spell checker to pronounce single words
☐ Hand held scanner to pronounce difficult words or phrases
☐ Computer with text to speech software to
☐ Speak single words ☐ Speak sentences ☐ Speak paragraphs ☐ Read entire document
Explain what seemed to work about any of the above assistive technology that has been tried.
5. Approximate Age or Grade Level of Reading Skills
6. Cognitive Ability in General
☐ Significantly below average ☐ Below average
☐ Average ☐ Above average
7. Difficulty
Student has difficulty decoding the following. (Check all that apply.)
☐ Worksheets ☐ Reading Textbook ☐ Subject Area Textbooks ☐ Tests
Student has difficulty comprehending the following. (Check all that apply.)
☐ Worksheets ☐ Reading Textbook ☐ Subject Area Textbooks ☐ Tests
8. Computer Availability and Use
The student has access to the following computer(s):
□ PC □ Macintosh
9. The Student Uses a Computer:
☐ Rarely ☐ Frequently ☐ Daily for one or more subjects or periods ☐ Every day, most of the day For the following purposes
Summary of Student's Abilities and Concerns Related to Reading



WATI Student Information Guide SECTION 6 Learning and Studying

	Difficulties Student Has Learning New Mater		
	Remembering assignments		Organizing information/notes
	Remembering steps of tasks or assignments		Organizing materials for a report or paper
	Finding place in textbooks		Turning in assignments
	Taking notes during lectures		Other
	Reviewing notes from lectures		
2.	Assistive Technology Tried (Check all that apply	.)	
	Print or picture schedule		
	Low tech aids to find materials (e.g. index tabs, color	cc	oded folders)
	Highlighting text (e.g. markers, highlight tape, ruler)		
	Recorded material		
	Voice output reminders for assignments, steps of task	κ, ε	etc.
	Electronic organizers		
	Pagers/electronic reminders		
	Hand held scanner to read words or phrases		
	Software for manipulation of objects/concept develop	pm	ent
	Software for organization of ideas and studying		
	Palm computers		
	Other		
	Strategies Used ease describe any adaptations or strategies that have be	en	used to help this student with learning and studying.
Su	mmary of Student's Abilities and Concerns in	th	e Area of Learning and Studying



WATI Student Information Guide SECTION 7 Math

1. Difficulties Student has with Math (Check all that ap	ply.)
☐ Legibly writing numerals	☐ Understanding math related language
☐ Understanding meaning of numbers	☐ Understanding place values
☐ Understanding money concepts	☐ Completing simple addition and subtraction
☐ Completing multiplication and division	☐ Completing complex addition and subtraction
☐ Understanding units of measurement	☐ Understanding tables and graphs
☐ Creating graphs and tables	☐ Understanding time concepts
☐ Understanding fractions	☐ Working with fractions
☐ Converting to mixed numbers	☐ Understanding decimals /percents
☐ Solving story problems	☐ Understanding geometry
☐ Graphing	☐ Understanding the use of formulas
☐ Understanding and use of trigonometry functions	☐ Checking work
□ Other	
2. Assistive Technology Tried	
☐ Abacus	☐ Talking calculator
☐ Math line	☐ Braille calculator
☐ Enlarged math worksheets	☐ Alternative keyboards (e.g., IntelliKeys)
☐ Low-tech alternatives for answering	☐ Math "Smart Chart"
☐ Recorded material	☐ Tactile math devices (ruler, clock, etc.)
☐ Voice output reminders for assignments, steps of task, etc.	☐ Electronic organizers
☐ Pagers/electronic reminders	☐ Single word scanners
☐ Software for manipulation of objects/concept development	☐ On screen scanning calculator
☐ Talking or Braille watch	☐ Software for organization of ideas and studying
☐ Palm computers	
□ Other	
3. Strategies Used	
Please describe any strategies that have been used to help)
Summary of Student's Abilities and Concerns Related	l to Math



WATI Student Information Guide SECTION 8 Recreation and Leisure

ing complex directions unicating with others g others equipment or materials ing TV, VCR, etc. ing computer on and Leisure
g others equipment or materials ing TV, VCR, etc. ing computer on and Leisure
equipment or materials ing TV, VCR, etc. ing computer on and Leisure
on and Leisure
on and Leisure
on and Leisure
on and Leisure
on and Leisure
on the computer



WATI Student Information Guide SECTION 9 Seating and Positioning

1.	Current Seating and Positioning of Student (Check all that apply.)
	Sits in regular chair w/ feet on floor
	Sits in regular chair w/ pelvic belt or foot rest
	Sits in adapted chair
	Sits in seat with adaptive cushion that allows needed movement
	Sits in wheelchair part of day
	a a second of the second of th
	Spends part of day out of chair due to discomfort
	Has few opportunities for other positions
	Uses regular desk
	Uses desk with height adjusted
	Uses tray on wheelchair for desktop
u	Uses adapted table
2.	Description of Seating (Check all that apply.)
	Seating provides trunk stability
	Seating allows feet to be on floor or foot rest
	Seating facilitates readiness to perform task
	There are questions or concerns about the student's seating
	Student dislikes some positions, often indicates discomfort in the following positions
	How is the discomfort communicated?
	Student has difficulty using table or desk
	There are concerns or questions about current wheelchair.
	Student has difficulty achieving and maintaining head control, best position for head control is
	Where are their hips?
	Can maintain head control for minutes in this position.
	ımmary of Student's Abilities and Concerns Related to Seating and Positioning
~•	The second of th



WATI Student Information Guide SECTION 10 Mobility

1.	Mobility (Check all that apply.)
	Crawls, rolls, or creeps independently
	Is pushed in manual wheelchair
	Uses wheelchair for long distances only
	Uses manual wheelchair independently
	Is learning to use power wheelchair
	Uses power wheelchair
	Needs help to transfer in and out of wheelchair
	Transfers independently
	Has difficulty walking
	Walks with assistance
	Has difficulty walking up stairs
	Has difficulty walking down stairs
	Needs extra time to reach destination
	Walks independently
	Walks with appliance
	Uses elevator key independently
2.	Concerns About Mobility (Check all that apply.)
	Student seems extremely tired after walking, requires a long time to recover
	Student seems to be having more difficulty than in the past
	Student complains about pain or discomfort
	Changes in schedule require more time for travel
	Changes in class location or building are making it more challenging to get around
	Transition to new school will require consideration of mobility needs
	Other
Su	mmary of Student's Abilities and Concerns Related to Mobility



WATI Student Information Guide Section 11 Vision

A vision specialist should be consulted to complete this section.

1. Date of Last Vision Report				
2. Visual Abilities (Check all that apply.)				
☐ Read standard textbook print				
☐ Read text if enlarged to (indicate size in inches)				
☐ Requires specialized lighting such as				
☐ Requires materials tilted at a certain angle (indicate angle)				
☐ Can read using optical aids, list:				
☐ Currently uses the following screen enlargement device				
☐ Currently uses the following screen enlargement software				
☐ Recognizes letters enlarged to pt. type on computer screen				
☐ Recognizes letters enlarged to pt. type for minutes without eye fatigue.				
☐ Prefers ☐ Black letters on white ☐ White on black ☐(color) on				
☐ Tilts head when reading				
☐ Uses only one eye: ☐ Right eye ☐ Left eye				
☐ Uses screen reader:				
☐ Requires recorded material, text to speech, or Braille materials				
3 Alternative Output				
Currently uses (Check all that apply.)				
☐ Slate and stylus				
☐ Talking calculator				
☐ Braille calculator				
☐ Braille notetaker				
☐ Electric Brailler				
☐ Refreshable Braille display				
☐ Tactile images				
☐ Screen reader				
☐ Braille translation software:				

WATI Assessment Package



Level of proficiency (Check the one that mo ☐ Requires frequent physical prompts	ost closely describes the student.) Requires frequent verbal cues				
☐ Needs only intermittent cues	☐ Uses device to complete tasks independently				
☐ Trouble-shoots problems related to device	Oses device to complete tasks independently				
4. Writing/Handwritten Materials (check	x all that apply)				
☐ Writes using space correctly	☐ Writes on line				
☐ Writes appropriate size	☐ Reads own handwriting				
☐ Reads someone else's writing	☐ Reads hand printing				
☐ Reads cursive	☐ Skips letters when copying				
☐ Requires bold or raised-line paper	☐ Requires softer lead pencils				
☐ Requires colored pencils, pens, or paper	☐ Requires felt tip pen ☐ Thin point ☐ Thick point				
Summary of Student's Abilities and Con	acerns Related to Vision				



WATI Student Information Guide SECTION 12 Hearing

A hearing specialist should be consulted to complete this section.

1. Audiological Inf	formation			
Date of last audiologic	ical exam			
Hearing loss identifie	ed			
Right Ear Left Ear	☐ Mild ☐ Mild	☐ Moderate☐ Moderate		ProfoundProfound
Onset of hearing loss		Etiology		
2. Unaided Audito	ry Abilities (Check	k all that apply.)		
☐ Attends to sounds ☐ Discriminates env ☐ Turns toward soun ☐ Hears some speed ☐ Understands syntle	rironmental vs. non-e nd h sounds			ees Background noise
3. Student's Eye C	ontact and Attent	ion to Commun	ication (Check best des	scriptor.)
□ Poor	☐ Inconsistent	☐ Limited	□ Good	☐ Excellent
4. Communication Indicate the form (Check all that ap	of communication g	generally used by o	thers in each of the followhere	wing environments. Community
☐ Body language				
☐ Tangible symbols				
☐ Gestures				
☐ Speech				
☐ Cued speech				
☐ Picture cues				
☐ Written messages				
☐ Signs and speech	together			
☐ Signed English				
☐ Contact (Pidgin) s	sign language			
☐ American Sign La	anguage (ASL)			
5. Level of Recepti	ve Proficiency in	Each Environm School	ent Home	Community
☐ Understands singl	e words			
☐ Understands short				
☐ Understands major communications	•			

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6. Student Communicates with ☐ Speech	Others Using (Ch		☐ Body la	anguage
☐ Signs and speech together	_	ii Lunguuge	-	n messages
☐ Signed English ☐ Other	☐ Picture cues			t (Pidgin) sign language
Level of expressive communication	1 :			
☐ Single words	☐ Combination	of words	□ Profici	ent
7. Is There a Discrepancy Between The State of the There a Discrepancy Between There are the There	-	-		
If yes, describe further.				
8. Services Currently Used (Che Audiology Educational interpreter using:	□ Note taker	1 Transliterating	□ PSE	□ Oral
9. Equipment Currently Used (11.2			
☐ Hearing aids	☐ Cochlear impl		•	ption decoder
☐ Vibrotactile devices		plification system	☐ TTY/T	
☐ FM system	☐ Other			
10. Present Concerns for Commu	nication, Writing	, and/or Educatio	nal Materi	als
☐ Cannot hear teacher/other studen	ts	☐ Cannot respond	d to emergen	cy alarm
☐ Cannot participate in class discus	sions	☐ Cannot benefit from educational videos/programs		
☐ Displays rec./exp. language delay	/S	☐ Cannot use tele	phone to con	mmunicate
11. Current communication funct ☐ Desires to communicate ☐ Initiates interaction ☐ Responds to communication requ ☐ Reads lips ☐ Appears frustrated with current of the communication from communication breakdown. ☐ Requests clarification from communication breakdown. ☐ Repairs communication breakdown.	ommunication function function partners (wn (Keeps trying, co	tioning ("Would you please thanges message)		
Summary of Hearing Abilities a				



WATI Student Information Guide Section 13 General

Are there any behaviors (both positive and negative) that significantly impact the student's performance?
Are there significant factors about the student's strengths, learning style, coping strategies or interests that the team should consider?
Are there any other significant factors about the student that the team should consider?
Does student fatigue easily or experience a change in performance at different times of the day?



Gathering Information about Environments and Tasks

Effective, appropriate decisions about assistive technology can only be made when teams are well informed about the unique characteristics of the environments in which the student spends time and the tasks that are being done in those environments (Zabala, 1994). The Wisconsin Assistive Technology Initiative strongly encourages observing the student in several environments with a specific focus on describing the environment and the activities/tasks in which the target student and other students are engaged. The WATI Environmental Observation Guide is a tool for that purpose.

Consider all customary environments, including the classroom and other school environments, such as the lunchroom, playground, assemblies, etc., the home, and any relevant community sites such as shopping malls, restaurants, church, scouts or other groups. Information to be gathered can be guided by specific questions such as these:

- What equipment and materials are available in each environment?
- Who are the primary people interacting with the student?
- How is instruction or direction delivered?
- What modifications are typically made in various environments?
- What is the student's position and location in room?
- Where are the things the student needs to see, such as chalkboard, overhead, etc.?
- What is the lighting and sound like in the setting?
- How are transitions accomplished? Are there concerns?

Teams may modify or add to these questions, they are provided only as a starting place.

Using the Environmental Observation Guide

The Environmental Observation Guide instructions was developed by the National Assistive Technology Research Institute (2001), modified and used with permission.

The Environmental Observation Guide forms draw the observer's attention to what is going on in the activity and setting. Teams may modify or add to these questions. They are provided only as a starting place.

Prior to the observation:

Clarify the purpose of the observation:

- Record successful assistive technology use in educational environments
- Observe a child using assistive technology in educational environments
- Record characteristics of the educational environments

Select a time and place:

- Review the student's IEP for specifics about the student's AT use
- First preference Schedule the observation for the place and time indicated in the IEP as to when AT is supposed to be used during the day
- Second preference If it is not specified in the IEP, talk to teacher to schedule a time and place when the student uses AT the most during the day

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• Third preference – If the student uses the AT across the entire day, observe in the setting where he spends the most amount of his instructional day

Meet with the teacher(s), therapists, and assistants to determine:

- What will happen in the class that day; Is it a typical day?
- What the student using assistive technology will be doing that day
- Inform them what you will be doing during the observation

During the observation:

Record observations:

- Complete the environmental assessment checklist
- Record direct student observation field notes
- Record impressions and comments
- Record time markers in the observation notes to determine length of activities
- Participate in the class only if invited to do so

After the observation:

Thank the teacher for allowing you to observe.

If time allows in the teacher's schedule

- Probe for additional information directly related to your observations for clarity
- Share a brief summary of what you saw

Provide the teacher with a copy of the observation summary when completed.

Conduct the teacher interview at a mutually agreed upon time.

The observer's role is to capture what is occurring, not to make decisions or even formal recommendations, that comes later in the decision making part of the assessment process. During the observation(s), the observers are simply gathering information.



Environmental Observation Guide

Student's name:	
School:	
Observer:	
Date of Observation:	
Type of class:	
Directions : Complete this Environmental Assessment Ch	6 6
Describe the environment: Record short responses in the	space provided.
Special or general education classroom?	
Specialty classroom (Specify: e.g., P.E., computer lab)	
Therapy room? (Specify)	
Number of teachers in class?	
Number of aides in class?	
Number of volunteers in class?	
Number of students in the class?	
How many days per week is the program?	
How many hours/day?	
Is the atmosphere busy or quiet?	
Are there large open areas or small divided sections?	
How are the desks arranged?	
Is the furniture sized for children?	
Are materials accessible, appropriate, varied, interesting?	
Is special equipment available (i.e., chairs with arm supports)?	
Where is the classroom located in relationship to the	
cafeteria, therapy, outdoor play areas, etc.?	
Are bathrooms located in or outside the classroom?	
	1

Sensory Stimulation: Judge the level of sensory stimulation and record it with a check in the corresponding box. Enter comments or notes that clarify your responses if needed.

	Excessive	Balanced	Reduced	N/A	Comments
Auditory					
Hallway					
Street					
Other classrooms					
Other students					
Instructional media					
Teacher aides/volunteers					
Other (specify):					



Sensory Stimulation: continued

	Excessive	Balanced	Reduced	Comments
Visual				
Color				
Clutter/busy				
Art/decorations				
Visual information				
Lighting				
Other (specify):				

Persons Present During Observation: For each person on the list, put a check in the appropriate column indicating their level of participation.

Persons	Participating	Observing	Not Present
Student			
Special Educator			
General Educator			
Peer Tutors (How many?)			
Instructional Assistant #1			
Instructional Assistant #2			
Instructional Assistant #3			
Personal Attendant			
Speech-Language Pathologist			
Occupational Therapist			
Physical Therapist			
School Psychologist			
Parent			
Volunteer			
Administrator			
AT Specialist			
Other (specify):			

Notes:



Access to Assistive Technology: Record the presence or absence of **EACH TYPE** of assistive technology by placing a check in the corresponding box. Record the AT found in the classroom as a whole, not just the AT used by the target student.

Types	Present-Not Used	Present-Used	Not Present
Communication cards/boards			
Digitally recorded communication			
devices			
Electronic communication devices			
AT for activities of daily living			
Adjustable seating (not a wheelchair)			
Positioning equipment			
Amplification			
Visual signaling devices			
Brailler/brailled materials			
Magnifiers			
Notetaking devices/keyboards			
Speech output devices/computers			
Handwriting aids			
Alternate/adapted keyboards			
Alternate/adapted mouse			
Computer switch interface			
Touch window			
Talking word processor/word			
prediction/abbreviation & expansion			
Transfer aids - Hoists/lifts			
Mobility aids (not wheelchairs)			
Adapted environment (e.g., doors,			
fixtures, furniture)			
Electronic equipment for instruction			
(calculator, e-books)			
Adapted instructional materials			
Instructional software			
Computer stations			
Adapted art/craft materials			
Adapted sports/recreation equipment			
Adapted toys			
Other (specify):			



Environmental Observation Summary

Activity/Task(s) observed:
Ways that typical students participated:
Ways the target student participated:
Barriers to target student's participation:

Adapted from:

Wirkus-Pallaske, M., Reed, P., & Stokes, S. (2000). Wisconsin Assistive Technology Initiative. Oshkosh, WI: Wisconsin Assistive Technology Initiative.

Center for Instructional Development and Research. (1998). Classroom observation. *CIDR Teaching and Learning Bulletin*, 1(4), Available online: http://depts.washington.edu/ObsTools.htm

Pearson, L. (no date). *Apraxia guide: Classroom observation checklist*. Available online: http://hometown.aol.com/lynetteprs/myhomepage/profile.html



Using the AT Decision Making Guide

When the members of the team who have been assigned to gather information have completed their tasks, the team is ready to come together for the next step. The information gathering may have included reviewing the files, contacting previous service providers, completing a specific test that someone felt would provide important information, or observing. In decision making this information will be used to guide the direction and content of the decision.

Decision making takes place at a meeting. The tool to be used is the AT Decision Making Guide. This guide is a single page that leads the team through a five step decision making process. Using an effective decision making process requires team members to acquire and use a variety of skills that are separate from the technical skills they may have needed during the data gathering stage. These include communication skills and group process skills. The communication skills include, but are not limited to active listening, negotiation, providing non-threatening feedback, and accepting criticism without becoming defensive. The last skill area is group process. It includes following a schedule, reaching consensus, and a variety of tasks that become important when working as part of a team, one of the most important being the effective use of a formal group decision making process.

The key elements or steps of an effective decision making process include:

- **1. Problem Identification:** The identification and definition of a specific problem
- **2. Solution Generation:** The suggestion of possible solutions
- **3. Solution Selection:** The evaluation of suggestions and choosing of a solution to create an action plan
- **4. Implementation:** The carrying out of the plan
- **5. Follow up:** Meeting again to evaluate the solution

It may sound strange to suggest that various members of the team might be on different steps of the process. However, it is not unusual for team meetings to be conducted in an informal manner with information presented verbally and with little attention paid to focusing on the specific steps of the decision making process. When this occurs, individual styles of thinking and communicating can lead to one team member seeking very specific and minute details of the problem. At the same time another team member may be thinking of great solutions and still another is wondering how soon the meeting will be over or what to serve for dinner that night. There are several very simple, but effective strategies for improving and formalizing the decision making process being used by a team when making assistive technology decisions. The AT Planning Guide provides a structure for doing so.

Throughout the Decision Making Process:

Present information in written as well as spoken format where everyone on the team can see it.

This requires that the key facts be written on a board, flip chart, overhead projector or butcher paper in large print that is visible to all participants. Some team members may feel that this takes unnecessary effort to write every idea up on a board, but it is an extremely effective way to keep each person focused on which step the team is addressing. As information is shared, it is written on the board or chart visible to all. If one of the team members is distracted by something they have forgotten to do, or is called out



of the meeting for a telephone call, they can quickly "catch up" on what was said when they are able to refocus on the discussion. At the same time, if a group member contributes a solution before the team has finished contributing all the information necessary to identify the problem, the recorder can quickly note the "suggested solution" over under **Solution Generation**, and redirect the entire group back to completing **Problem Identification**.

Create a shared group memory. Recording what is being said where it is visible to all, adds visual memory to auditory memory and doubles the likelihood that everyone will remember, in the same way, the information that was discussed. This helps create a shared group memory, one that is very similar across all members of the group. It greatly increases the likelihood of follow through from team members.

Share roles and responsibilities. Team members may be hesitant to take a leadership role in conducting team meetings. Rotating roles from one meeting to the next is an effective way to share this responsibility. At each meeting one team member can serve as **facilitator**, while another is **recorder**, and still another acts as **timekeeper** to keep the group moving through the discussion. It is important that the team move at a pace that will allow the most time at the most important discussion points and keep the team from getting side tracked or bogged down (Fox & Williams, 1991). In addition, this rotation of roles helps insure that each team member recognizes and respects the contribution each of these participants makes to effective decision making.

During Problem Identification:

Address not only the characteristics of the student, but also of the environments in which the student functions, and the tasks that need to be done. Many times when technology is abandoned, it is because only the physical, psychological, and social characteristics of the child are addressed, with little or no attention paid to the settings which the device will be used or the specific tasks that the child really needs to address (Cook & Hussey, 1995). The SETT framework (Zabala, 1994) helps team members to focus on the student (his/her personal characteristics and interests), the environment (including physical characteristics of the setting as well as instructional activities and arrangements), and the task (which are the specific activities that the target student needs to be able to do in each environment). This focus is helpful in clearly identifying and defining the problem so that the team has a clear focus to guide them as they generate appropriate alternatives and solutions.

During Solution Generation:

When generating solutions, use brainstorming rules to create a climate of trust. An important factor in generating a variety of useful alternatives during Solution Generation is to create a climate of trust by following brain storming rules. This means that all suggestions are written on the board or chart, no comments are allowed and no judgments are passed. The goal is to generate as many ideas as possible. As the flow of ideas slows, it is a good idea to persevere a little longer. Often the second wave of ideas are the most innovative. If everyone is feeling sluggish and suggestions are few, energy may be increased by putting a two minute time limit in place to get things started. This short time limit combined with writing everything where it can be seen increases the creativity and allows the group to



explore as many options as possible. Additional time can be added if the group agrees, but the short time period helps bring that creative, right side of the brain into action.

If the solutions generated by the team do not include assistive technology, or include only a very few items, the team may need to utilize additional resources. Additional resources can provide an overview of the types of assistive technology solutions that would be appropriate for the child and task for which they are problem solving. Resources may include a person, as mentioned earlier or print, disk, or online resources. In the next section **Using the AT Checklist and other Resources**; several resources that might be helpful are discussed.

During Solution Selection:

During Solution Selection, encourage combining, sequencing and prioritizing. As alternatives are discussed and evaluated, it may become apparent that some items are the same thing in different words or that others make an excellent sequence of steps. New suggestions may be added at any time. This is the place for the team to really discuss the value and relationship of the many suggestions. As individual suggestions are discussed, it is often helpful to group them into "Things we can do tomorrow," "Things we can do in a month," and "Things we may want to consider later." The Action Plan is then created to include a time line and persons responsible for each of the solutions or steps that were selected.

Obtain consensus from all participants before adjourning meeting. When several people work together to reach a decision, there will be many different ideas presented. In ideal situations, the Solution Selection will result in a unanimous agreement about what specific suggestions should be selected for the action plan. However, life is far from ideal. When unanimous agreement is not reached, it is critical that the team arrive at consensus about the action plan that will be implemented. In order to assure consensus, the facilitator must poll individual team members, asking them if they will support this plan even though they may have personally preferred another solution. When the facilitator fails to poll members for consensus, they may believe they have unanimous agreement, but actually have majority rule (a few team members dominating the discussion, while others strongly disagree, but do not speak up), minority rule (one team member dominating the discussion, while others disagree and do not speak up), or authority rule (no one questioning what the administrator suggested, even though they disagree). When one of these occurs, the chances of successful implementation are decreased.

During Implementation:

When implementation takes place, follow the plan completely. For that to happen, everyone on the team needs to be aware of the plan and his/her role in it (Prentice & Spencer, 1985). Unfortunately this does not always happen if teams do not utilize the strategy of writing down important information during each step of the process. Without that "group memory" important details and key responsibilities are easily forgotten or overlooked while meeting the myriad demands of work in school districts. Implementation is the step of the decision making process that tells us whether the solutions we selected are good ones.

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For Follow up:

Follow up on a planned schedule. At a set interval after implementation, follow-up or monitoring must take place. This is another area where school teams frequently fail. The school year can slip quickly by while one team member waits on another to do something or bad weather, illnesses, and absenteeism take their toll. If monitoring does not take place according to the original plan, a variety of problems can crop up and be overlooked as each team member focuses on their own assignment, but does not have the opportunity to get the "big picture" that comes from a team discussion.

Using AT Decision Making Guide will guide the team through the steps of the process. Following these simple, but effective steps can be extremely useful to teams in the schools as they strive to make appropriate and effective assistive technology decisions for the students they serve.



WATI Assistive Technology Decision Making Guide

Referral Question_		
_		

PROBLEM IDENTIFICATION

Student's	Environmental	Tasks
Abilities/Difficulties	Considerations	
Writing/Use of Hands Communication Reading/Academics Mobility Vision Hearing Behavior Other	e.g. Classroom Playground Lunch Room Home, etc. In Each: Technology Equipment Available Room Arrangement, Lighting Sound Activities, etc.	e.g. Produce legible written material Produce audible speech Read text Complete math problems Participate in recreation/leisure Move independently in the school environment
		Reframed Question
		i.e. Specific task identified for solution generation
SOLUTION GENERATION	Solution Selection	Implementation Plan
Brainstorming Only No Decision	Discuss & Select Idea from Solution Generation	AT Trials/Services Needed: Date Length Person Responsible
		Follow-Up Plan
		Who & When Set specific date now.

Important: It is intended that you use this as a guide. Each topic should be written in large print where everyone can see them, i.e. on a flip chart or board. Information should then be transferred to paper for distribution, file, and future reference.



Using the AT Checklist

In some cases team members are not fully aware of all the assistive technology that might be available to assist with the task that is of concern. In that case there are several tools and resources that can be used to assist them. One of those tools is the AT Checklist. The AT Checklist is a concise two page listing of assistive technology arranged by the task for which it would be utilized. Categories are: Computer Access; Writing, including the Motor Aspects of Writing and Composing Written Material; Communication; Reading; Learning/Studying, Math; Recreation & Leisure; Activities of Daily Living, which also includes Mobility and Environmental Control; Positioning & Seating; Vision; and Hearing.

Within each of these categories suggested assistive technology is arranged in a hierarchy from the simplest, low tech alternatives to more complex or high tech items. They are arranged this way because the developers shared a belief that we want to select the simplest alternative that successfully assists the child. Many years ago we had a number of experiences where service providers immediately jumped to the most complex solution without first trying other alternatives. The hierarchical arrangement of the items in the AT Checklist is in response to this type of thinking. For example, just because a student has difficulty with writing, does not mean that the first thing we try would be voice recognition. While voice recognition is cool and very appealing, there are other, simpler tools that should be tried first to see if they work.

You will note that each section also includes a space to write in new assistive technology. Since many new products are introduced each year, it is important to be able to add new items. The final section of the AT Checklist is a place to write comments that the team has as they utilize the Checklist. These may include something that has been tried or a plan to try a sequence of items. It is always important to capture in writing the discussions that take place as team members works together to arrive at an assistive technology decision.



WATI Assistive Technology Assessment Technology Checklist

COMPUTER ACCESS	READING, STUDYING, AND MATH
 ☐ Keyboard using accessibility options ☐ Word prediction, abbreviation/expansion to reduce keystrokes ☐ Keyguard ☐ Arm support ☐ Track ball/track pad/joystick with on-screen keyboard ☐ Alternate keyboard ☐ Mouth stick/head mouse with on-screen keyboard ☐ Switch with Morse code ☐ Switch with scanning ☐ Voice recognition software ☐ Other: WRITING	Reading Standard text Predictable books Changes in text size, spacing, color, background color Book adapted for page turning (e.g. page fluffers, 3-ring binder) Use of pictures/symbols with text Talking electronic device/software to pronounce challenging words Single word scanners Scanner w/OCR and text to speech software Software to read websites and emails Other:
Motor Aspects of Writing	Learning/Studying
☐ Regular pencil/pen ☐ Pencil/pen with adaptive grip ☐ Adapted paper (e.g. raised line, highlighted lines) ☐ Slantboard ☐ Use of prewritten words/phrases ☐ Portable word processor to keyboard instead of write ☐ Computer with word processing software ☐ Portable scanner with word processing software ☐ Voice recognition software to word process ☐ Other:	 □ Print or picture schedule □ Low tech aids to find materials (e.g. index tabs, color coded folders) □ Highlight text (e.g. markers, highlight tape, ruler, etc.) □ Recorded material (books on tape, taped lectures with number coded index, etc.) □ Voice output reminders for assignments, steps of task, etc. □ Electronic organizers □ Pagers/electronic reminders □ Single word scanners
Composing Written Material	☐ Hand-held scanners
 □ Word cards/word book/word wall □ Pocket dictionary/thesaurus □ Writing templates □ Electronic/talking electronic dictionary/thesaurus/spell checker 	☐ Software for concept development/manipulation of objects – may use alternate input device, e.g. switch, Touch Window ☐ Software for organization of ideas and studying ☐ Palm computers ☐ Other:
☐ Word processing with spell checker/grammar checker	Other:
☐ Talking word processing	Math
☐ Abbreviation/expansion ☐ Word processing with writing supports ☐ Multimedia software ☐ Voice recognition software ☐ Other:	☐ Abacus/Math Line ☐ Enlarged math worksheets ☐ Low tech alternatives for answering ☐ Math "Smart Chart" ☐ Money calculator and Coinulator
COMMUNICATION	☐ Tactile/voice output measuring devices
□ Communication board/book with pictures/objects/ letters/words □ Eye gaze board/frame communication system □ Simple voice output device □ Voice output device w/levels □ Voice output device w/icon sequencing □ Voice output device w/dynamic display □ Device w/speech synthesis for typing □ Other:	☐ Talking watches/clocks ☐ Calculator/calculator with printout ☐ Calculator with large keys and/or large display ☐ Talking calculator ☐ Calculator with special features (e.g. fraction translation) ☐ On-screen/scanning calculator ☐ Alternative keyboard ☐ Software with cueing for math computation (may use adapted input methods) ☐ Voice recognition software



RECREATION AND LEISURE	VISION
☐ Toys adapted with Velcro, magnets, handles, etc.	☐ Eye glasses
☐ Toys adapted for single switch operation	☐ Optical aids
☐ Adaptive sporting equipment (e.g. lighted or beeping	☐ Large print materials
ball)	☐ Auditory materials
☐ Universal cuff/strap to hold crayons, markers, etc.	☐ Dictation software (voice input)
☐ Modified utensils (e.g. rubber stamps, brushes, etc.)	☐ CCTV (closed circuit television)
☐ Ergo Rest or other arm support for drawing/painting	☐ Screen magnifier (mounted over screen)
☐ Electronic aids to control/operate TV, VCR, CD player,	☐ Screen magnification software
etc.	☐ Screen color contrast
☐ Software	☐ Screen reader, text reader
☐ Completion of art activities	☐ Braille notetaker
☐ Games on the computer	☐ Braille translation software
☐ Other computer software	☐ Braille embosser
☐ Other:	☐ Enlarged or Braille/tactile labels for keyboard
	☐ Alternate keyboard
ACTIVITIES OF DAILY LIVING (ADLS)	☐ Other:
☐ Non slip materials to hold things in place	
Universal cuff/strap to hold items in hand	HEARING
☐ Color coded items for easier locating and identifying	☐ Pen and paper
☐ Adaptive eating utensils (e.g. foam handles, deep sides)	☐ Computer/portable word processor
☐ Adaptive drinking devices (e.g. cup with cut-out rim)	☐ TDD for phone access with or without relay
☐ Adaptive dressing equipment (e.g. button hook, elastic	☐ Signaling device (e.g. flashing light or vibrating pager)
shoelaces, Velcro instead of buttons, etc.)	☐ Closed captioning
☐ Adaptive devices for hygiene (e.g. adapted toothbrush,	☐ Real Time captioning
raised toilet seat, etc.)	☐ Computer aided note taking
☐ Adaptive bathing devices	☐ Screen flash for alert signals on computer
☐ Adaptive equipment for cooking	☐ Phone amplifier
☐ Other:	☐ Personal amplification system/hearing aid
	☐ FM or loop system
MOBILITY	☐ Infrared system
= w. 0	
Walker	Other:
☐ Grab bars and rails	
☐ Manual wheelchair including sports chair	COMMENTS
Powered mobility toy (e.g. Cooper Car, GoBot)	COMMENTS
☐ Powered scooter or cart	
☐ Powered wheelchair w/ joystick or other control	
☐ Adapted vehicle for driving	
□ Other:	
POSITIONING AND SEATING	
☐ Non-slip surface on chair to prevent slipping (e.g.	
Dycem)	
☐ Bolster, rolled towel, blocks for feet	
☐ Adapted/alternate chair, sidelyer, stander	
☐ Custom fitted wheelchair or insert	
☐ Other:	



Additional Tools for the Team as They Select Appropriate Assistive Technology

Technology Toolbox

Another useful tool for school teams is the Technology Toolbox from the book *Computer and Web Resources for People with Disabilities (Third Edition)* (Alliance for Technology Access, 2000). The Technology Toolbox is especially useful for teams that are just getting started with assistive technology. It contains a series of charts that address the following questions,

- ♦ How Effectively Can I See the Computer Screen?
- ♦ How Effectively Can I Use the Keyboard?
- ♦ How Effectively Can I Use the Mouse?
- ♦ How Effectively Can I Interact with Information?
- ♦ How Effectively Can I Read (Comprehend)?
- ♦ How Effectively Can I Write (Compose)?
- ♦ How Effectively Can I Handle Computer Equipment?

Under each of these questions there is a chart is used to describe what assistive technology tools re available to assist students with different abilities and difficulties related to this task. Following the WATI AT Checklist, you can find a copy of the chart for "How Effectively Can I Read?" (and other pages from *Computer and Web Resources of People with Disabilities* which you can use to follow along with this example.) Look at it as it is now and read across the first row for ideas that can help if a student reads at a lower than expected level. You will see that one approach might be to "Have computer speak text". This has a symbol "●" next to it. Then by looking at the items listed under "Tool" that have the ● symbol, it states that the needed tools are a speech synthesizer and talking word processor. Each item listed under the "Tool" column has a page number in parentheses. The page number refers to the page in the next section of the book, the Product Descriptions.

In the Product Description Section there are descriptions of each of the items listed under the "Tool" column in the Technology Toolbox. Each description includes a list of potential users, features to consider, cost, and common vendors.

Closing the Gap Resource Directory

Once the common vendors are known, the next useful tool is the *Closing the Gap Resource Directory*. The Resource Directory is published each spring as the February/March issue of the Closing the Gap newsletter. It is an excellent tool for school teams. The first step in using the Directory is to go to the Producers Section, which is near the back of the directory. In the Producers Section, team members can look at each of the vendors obtained from the Product Description Section of Resource Directory.

In our example, Don Johnston Incorporated was one of the common vendors listed for talking word processors. Looking up Don Johnston Incorporated, reveals a long list of products. Scanning that list reveals *Write:OutLoud®*, which sounds like it might be a talking word processing. Turning to the Software section of the Resource Directory provides a description of this talking word processing software, including price, type of computer it runs on, system requirements, and other valuable information.



Closing the Gap also has a searchable database on its website http://www.closingthegap.com. Annual subscriptions are required to use the online version but it makes the search process so much easier. The same type of information is included there. So that once the name of a product or the type of product is known, more information can be obtained from the website.

ABLEDATA http://www.abledata.com

ABLEDATA's website is another excellent resource tool for teams. It houses the ABLEDATA database which lists over 20,000 currently available assistive technology devices from over 2000 different companies. Each record contains a detailed description of the product as well as price, manufacturer, and distributor information. It is updated frequently and also contains pictures of many of the products

Software Tools

There are two software programs that can be useful tools, *AAC Feature Match* http://www.dougdodgen.com is a software program that teams can use to help determine which augmentative communication devices might work for a specific child. It asks the team to enter specific information about the student's needs, such as size of button the student can activate, number of responses needed, whether the student needs to be able to create new messages, or can choose from preprogrammed ones, etc. It then provides a list of augmentative communication devices that have several of the features that would be necessary to meet the child's needs as described in the information entered. This information allows the team to consider devices that they do not currently own or that they have never tried. It greatly increases the likelihood that the team will, in fact, consider the full range of appropriate devices that are available. The tool is very empowering for school district teams.

Another product, $EvaluWare^{TM}$, is designed to make assessment easier for both AAC and computer access. This software leads the team through specific tasks that help determine the child's ability to look at objects, listen, use the keyboard and mouse, and other alternatives. After information is entered, it creates a model screen with the level of representation, target size and number of targets to try with the child to see if it will be effective. Information on $EvaluWare^{TM}$ is available at http://www.assistivetech.com.



Implementing Trials with Assistive Technology

In order to determine which assistive technology will work effectively for a student, that student must have an opportunity to try the assistive technology. In some cases, a brief trial during a short visit with one of the team members reveals an effective solution. More typically, a longer trial of several days, weeks, or in some cases, months is necessary. Whether the trial is short or long, documenting the student's performance while he or she tries the assistive technology is critical.

Included are two planning tools which can help the team as they prepare for a more extensive trial with one or more assistive technology devices. The Assistive Technology Trial Use Guide is a form that guides the team through a sequence of important questions that must be addressed prior to implementing trial use of assistive technology and after the trial.



WATI Assistive Technology Trial Use Guide

AT to be tried:					
Student's Name:		DOB:	Age:	_Meeting Date	ð:
School/Agency:			Grade/I	Placement:	
Contact Person(s):					
School/Agency Phone:		Address:			
Persons Completing Guide:					
Parent(s) Name:		Phone:		_	
Parent(s) Address:					
Goal for AT use:					
- ACQUISITION					
Source(s)		Person Responsible	Date(s) Available	Date Received	Date Returned
Person primarily responsible to	o learr	to operate this AT:			
Person(s) to be trained	Tra	nining Required		Date Begun	Date Completed



MANAGEMENT/SUPPORT

Location(s)	Support to be provided (e.g. set up, trouble shoot, recharge, program, etc.)	Person Responsible

Student Use

Date	Time Used	Location	Task(s)	Outcome(s)



WATI Assistive Technology Trial Use Summary

ent's Name:			Age:	Date Completed:
on(s) Completin	g Summary:			
Being Addres	sed During	Trial		
AT Twind	Dates	Criteria		antages, disadvantages,
AT Tried	Used	Met?	preferences	, performance)
mmendations	for IEP:			



Resources

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