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Module 4- Models of Assessment

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Course Outline

- Learning Objectives / Outcomes
- AT Assessment
 - o AT consideration vs AT Assessment in the education setting
 - o What is AT assessment?
 - o AT Consideration and Assessment Process
- Learning activities/ Instructional strategies
- Assessment Methods
- Resources and additional materials

Learning Objectives / Outcomes

- A. Define AT consideration and Assessment
- B. Describe the process of AT assessment
- C. Apply the SETT (Student Environment Task Tools) and WATI (Wisconsin Assistive Technology Initiative) assessment framework for AT assessment
- D. Build capacity with AT team for AT services
- E. Identify resources for the identification and selection of AT options

AT Assessment

AT consideration vs AT Assessment in the education setting

Consideration of AT is a straightforward process to determine whether a person with a disability is required to access assistive technology (AT) to increase or maintain an individual's functional capabilities.

In education settings, the IEP team participates in a decision-making process to facilitate students' access and progress in the curriculum by clearly identifying the unique needs of the student and identifying the tasks to be performed in the educational program.

AT consideration can result in 3 ways: (a) AT is not needed, which means the concerns or student's needs are not related to the AT solution, (b) AT is needed and it is clear what, when, and where the AT can be used, and (c) AT is needed but more information is needed to making the AT decision. If the AT consideration falls into the (c) category, the AT assessment can be initiated.

AT assessment is to identify specific AT solutions that will accommodate the needs of a person with a disability in the customary environment settings. The purpose of the AT assessment is to benefit individuals with disabilities to experience greater control of independent lives, increase participation in home, school, work, and/or community, and access to the environment around them.

What is AT assessment?

The definition of AT services (IDEA, 1990) includes "the evaluation of needs including a functional evaluation, in the student's customary environment".

AT assessment is an ongoing and continual part of the educational setting to support the students with disabilities with the use of assistive technology.

According to WATI, the assessment has three parts: information gathering, decision making, and trial use (See #3 for the detailed AT assessment procedures).

Although each school and organization have its specific procedures for AT assessment, it is essential to know that AT assessment is a team approach. Each team member can contribute to the AT assessment process to find the appropriate AT solutions. For example, the student himself/herself and/or parents are the most knowledgeable about the student to gather valuable information for the process. Specialists such as speech and language pathologists, occupational and physical therapists may be included in the assessment to gather information in the area of speech/language and motor aspects if applicable. Teachers are the content and curriculum specialists to review the student's academic level. In addition, administrators should be part of the assessment procedures for administrative support such as authorizing and purchasing devices, allocating staff to support the plans. Anyone who can

contribute to the decision-making or implementation can be part of the AT assessment.

AT Consideration and Assessment Process

WATI assessment framework

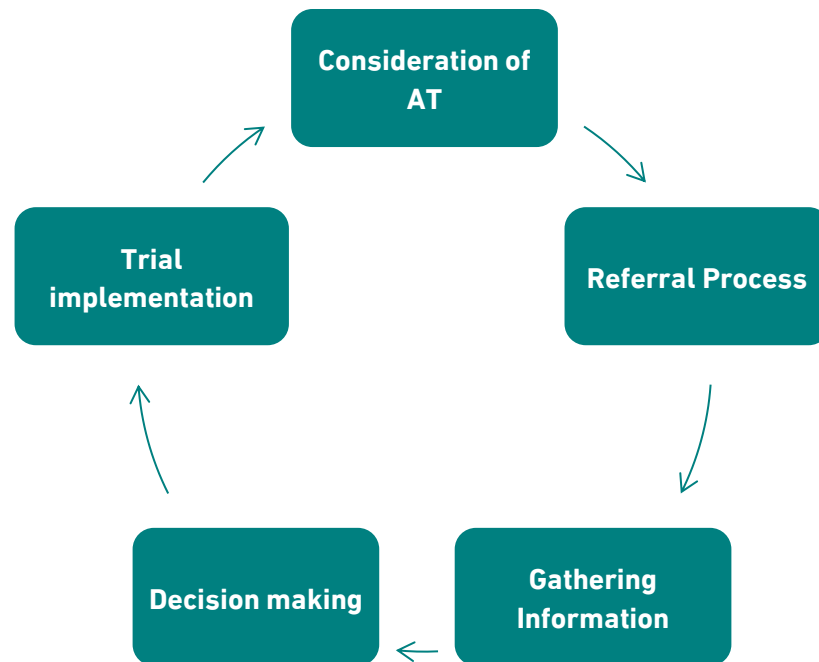


Figure 1 Process of AT Consideration & Assessment

○ Consideration of AT

- The IEP team is required to consider the need for AT devices or services during each IEP meeting. The process starts with a brief discussion to determine if the use of AT would enhance the student's functional capability in their settings.
- AT consideration can be documented to develop and review it during the meeting. (reference: WATI Consideration Guide Form: <http://www.wati.org/free-publications/assistive-technology-consideration-to-assessment/>)
- AT resource guide can assist the IEP team in considering AT following the relevant tasks for the individual. (Reference: https://atnetwork.ttaonline.org/Content/docs/AT_Resource_Guide_book_let.pdf)

○ **Referral Process**

- During the AT consideration process, if the IEP team determines that the student needs to access the AT devices and services but requires additional information for the selection of AT, a referral for an assessment may be necessary. The referral process is to request the AT assessment by containing background information and outline specific areas in which the student is having difficulty and strategies that are currently in place.
- WATI Student Info Guide form can be used for referral:
<http://www.wati.org/free-publications/assistive-technology-consideration-to-assessment/page/2/>

○ **Information Gathering**

- After a referral is made, the first step for the AT assessors is to gather information about the student, the customary environments in which the student spends time, and the tasks that are required for the student to be an active participant in the teaching and learning processes. Information gathering can be made through observation in the customary environments, interviews with the student, parents, or staff who work with the student. WATI forms can be used to document the gathered information.
- <http://www.wati.org/free-publications/wati-student-information-guide-process-forms/>

○ **Decision Making**

- The decision-making process is to discuss strategies, tools, devices, or services that are needed to help the student based on the gathered information. During this phase, the SETT Framework can guide the AT assessors to generate possible AT solutions.
- WATI Decision Making Guide form is available for the AT assessors to us (<http://www.wati.org/free-publications/assistive-technology-consideration-to-assessment/>)

- **Trial and Implementation**
 - The trial implementation process is to find the answers to the questions, “what specific AT solutions actually work for the student’s need?” and “Which AT solutions from the trials were most effective to meet the student’s goal?” The trial plan should be developed that includes the AT options that are to be tried, the goal and timelines of each trial, how the trial(s) will be implemented, and from where the AT will be acquired. The trialed data will assist to make an informed decision of the assessment.

- WATI Trial use guide for the reference: <http://www.wati.org/free-publications/wati-student-information-guide-process-forms/page/3/>

SETT Framework (<https://www.joyzabala.com/>)

A. What is SETT?

The SETT Framework is a tool that helps teams gather and organize information that can be used to guide collaborative decisions about services that foster the educational success of students with disabilities. Originally developed to support assistive technology selection and use in educational settings by Joy Zabala, the principles of the SETT Framework have been used to guide decisions about a much broader range of educational services, and also, with adjustments, can be used in non-educational environments and service plans.

SETT is an acronym for **Student, Environments, Tasks, and Tools**. The SETT Framework is based on the premise that in order to develop an appropriate system of Tools (supports –devices, services, strategies, accommodations, modifications, etc.) teams must first develop a shared understanding of the student, the customary environments in which the student spends time, and the tasks that are required for the student to be able to do or learn to do to be an active participant in the teaching/learning processes that lead to educational success. When the needs, abilities, and interests of the Student,

the details of the Environments, and the specific Tasks required of students in those environments are fully explored, teams are able to consider what needs to be included in a system of tools that is Student-centered, Environmentally useful, and Tasks focused (Joy Zabala, 2005).

(All SETT Articles and Forms are available at <https://www.joyzabala.com/>)

B. How does SETT Framework work?

- a. Shared Knowledge: One of the major premises of the SETT Framework is that decisions about Tools—the devices and actions that are needed for the student and others to succeed—are most valid when they are made based not on the knowledge that one person has (or believes that they have) but based on an agreed-upon, mutually valid shared knowledge of the student, the environments, and the task.
- b. Collaboration: The SETT Framework is a tool that both requires and supports the collaboration of the people who will be involved in the decision-making and those who will be impacted by the decisions. Collaboration is not only critical for the SETT Framework, it is also critical to gaining the buy-in necessary for effective implementation of any decisions.
- c. Communication: The SETT Framework requires that people communicate actively and respectfully. Shared knowledge can only be developed if the opinions, ideas, observations, and suggestions are respected and respectful.
- d. Multiple Perspectives: Everyone involved brings different knowledge, skills, experience, and ideas to the table. Although multiple perspectives can be challenging at times, they are critical to the development of the accurate, complete development of shared knowledge. Not only are the multiple professional perspectives important to include, but also those of the student and the parents. This can make the difference between success and lack thereof.
- e. Pertinent information: Although there is much information that is pertinent to decision-making, there is other information that is not relevant. Knowing where to draw the line is important, but that line may well be a moving target.
- f. Flexibility and Patience: When working through the SETT Framework or using any other means of concerns-identification and solution-seeking, there

is a tremendous human tendency to suggest possible solutions before the concerns have been adequately identified. When a solution springs to mind, collaborators are urged NOT to voice it until it is time to talk about the Tools because when a solution is mentioned, the conversation shifts immediately from concern-identification to determining the worth or lack of worth of the suggested solution. Even when a team member thinks of the “perfect” solution, silent patience is urged. It might not look quite so perfect when all crucial factors are discussed.

- g. On-going Processes: Decision-making in educational settings involves ongoing processes. Whatever conclusions are reached at any point are only as valid as the evidence shows they have been successful in lowering barriers to student achievement. It is expected that the SETT Framework will be useful during all phases of assistive technology service delivery. With that in mind, it is important to revisit the SETT Framework information periodically to determine if the information that is guiding decision-making and implementation is accurate, up to date, and reflects the shared knowledge of all involved.

C. SETT Scaffolding for Data Gathering

https://f9ab9d45-0285-4848-bfe4-24f68ce1fd58.filesusr.com/ugd/70c4a3_3365497509924c368e45088e6b99dec7.pdf

The Student

- What is(are) the functional area(s) of concern?
- What does the student need to be able to do that is difficult or impossible to do independently at this time?
- Special needs (related to area of concern)
- Current abilities (related to area of concern)
- Expectations and concerns
- Interests and preferences

The Environment

- Arrangement (instructional, physical)

- Support (available to both the student and the staff)
- Materials and Equipment (commonly used by others in the environments)
- Access Issues (technological, physical, instructional)
- Attitudes and Expectations (staff, family, other)

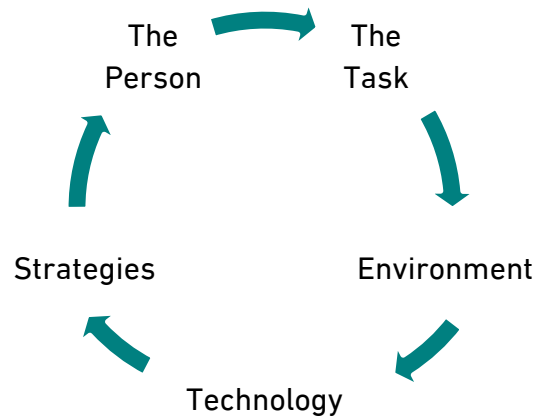
The Tasks

- What SPECIFIC tasks occur in the student's natural environments that enable progress toward mastery of IEP goals and objectives?
- What SPECIFIC tasks are required for active involvement in identified environments? (related to communication, instruction, participation, productivity, environmental control)

The Tools

- Is it expected that the student will not be able to make reasonable progress toward educational goals without assistive technology devices and services?
- If yes, describe what a useful system of assistive technology devices and services for the student would be like
- Brainstorm Tools that could be included in a system that addresses student needs
- Select the most promising Tools for trials in natural environments.
- Plan the specifics of the trial (expected changes, when/how tools will be used, cues, etc.)
- Collect data on the effectiveness

Model of Mada AT assessment



- ***The Person:*** Describes the person with a disability in terms of their abilities and disabilities, their interests, and preferences. Their experience of using technology and their expectation of technology
- ***The Task(s):*** Describes the tasks or activities the person wants to perform but is unable as a result of his/her disability
- ***The Environment:*** Describes the environment within which the person has to or wants to perform their desired task. Describes the environment in physical, human, social and cultural dimensions
- ***The Technology:*** describes the technology, assistive or otherwise that the person uses and what they use it for and describes how it changes the way in which they perform their desired tasks.
- ***Strategies:*** describes the additional factors that contribute to the success or otherwise of using technology to perform a desired task, this could be seating, literacy skills, regular Therapy, school placement etc.

Additional AT assessment tools

In order to find the appropriate AT solutions, various tools are available for the AT assessors to utilize the quantitative data to inform the decision-making process.

1. **Protocol for Accommodations in Reading (Par)** – This tool assists to find the best way for a student to comprehend reading among

three reading accommodations: Self-reading, human audio reading, and text-to-speech reading. Based on the results of the Par, appropriate reading accommodations can be provided.

Free download is available:

<https://learningtools.donjohnston.com/product/upar/request-1/>

Also, a paid version of uPar can be utilized.

2. DeCoste Writing Protocol

The DeCoste Writing Protocol is a formative assessment tool that helps educators identify factors affecting an individual student's ability to produce writing. The Writing Protocol compares a child's individual performance across handwriting and keyboarding tasks. It examines spelling performance and writing skills, so educators make more informed decisions about instructional strategies and the appropriate use of technology to meet classroom demands.

Free 2004 version of DeCoste download:

<https://sites.google.com/a/ntdse.org/assistivetechology/home/at-resources/high-incidence-at-supports/tools-to-determine-need/decoste-writing-protocol>

DeCoste Writing Protocol can be purchased from Don Johnston

<https://donjohnston.solunes7.site/product/decoste-writing-protocol/>

3. AAC (Augmentative and Alternative Communication) Evaluation Genie

AAC Evaluation Genie is an informal diagnostic tool that is intended to assist speech-language pathologists and others with identifying skill areas that relate specifically to the language representation methods commonly found on augmentative communication

systems.

The purpose of AAC Evaluation Genie is not to identify a particular speech-generating device (SGD), but rather to build a framework for selecting an appropriate augmentative communication device for ongoing evaluation and / or device trial. There are 13 subtests that can be administered with screening options available for each subtest. English and Spanish administration options are included. Download AAC Genie: <https://humpsoftware.com/aacgenie.html>

4. Scanning Wizard

Scanning Wizard helps scanning users set up their switch and scanning software to maximize communication rate. The wizard guides you through a series of carefully designed tasks and generates individually tailored recommendations to meet your needs.

Free access to Scanning Wizard:

<https://www.scanningwizard.com/>

AT team approach – Build capacity for better AT services

- a. Multidisciplinary team efforts – It is beneficial to develop an AT team to serve a wide range of purposes, such as developing AT policies and procedures, managing AT inventory, providing AT training, and AT provision of AT assessment and services. The collaborative team approach would work better as no one expert knows everything that is needed to effectively implement assistive technology with the diverse needs of people with disabilities.

In the school settings, the multidisciplinary team may include special and general education teachers, administrators, speech, occupational and physical therapists, vision and hearing service specialists, and family members.

- b. Shared responsibilities – successful implementation of AT may require collaborative efforts. For example, acquisition of AT, training staff and AT users, monitoring its effectiveness, and troubleshooting and repair are all part of AT implementation, and this can be done better by shared responsibilities with each members' knowledge and skills.
- c. Ongoing process to build a team capacity with AT – working as a team for AT services is an ongoing process starting from setting up the team to the delivery of the AT services. For an effective team process, the team may develop the shared goals, and the AT service policies and procedures based on the nature of the setting. Also, the AT inventory may help the team to better utilize the available AT resources. The goals and process can be updated on an ongoing basis to meet the needs of the team and serve better.

Learning activities/ Instructional strategies

- Lecture: Either in-person or online session will provide the lecture and discussion about the AT assessment process.
- Group discussion: during the lecture, active participation is required for learners to contribute to the group discussion regarding the AT assessment topics.
- Hands-on exploration of the WATI forms: Learners will explore the WATI forms and learn how the forms can be used.
- Video case studies: watching the videos to identify individual's challenges and the AT solutions

- Group presentation project: each team will investigate the examples of the AT assessment protocol. The group will present the protocol details to the whole group.

Assessment Methods

Group presentation project: each team will investigate the examples of the AT assessment protocol. The group will present the protocol details to the whole group.

Resources and additional materials

- A. SETT Framework by Joy Zabala - <https://www.joyzabala.com/>
- B. WATI Assessment Guide: <http://www.wati.org/>
- C. Free access to Scanning Wizard: <https://www.scanningwizard.com/>
- D. Download AAC Genie: <https://humpsoftware.com/aacgenie.html>
- E. Free 2004 version of DeCoste download:
<https://sites.google.com/a/ntdse.org/assistivetechology/home/at-resources/high-incidence-at-supports/tools-to-determine-need/decoste-writing-protocol>
- F. Free download is available:
<https://learningtools.donjohnston.com/product/upar/request-1/>
- G. NATE Network: <https://www.natenetwork.org/>
- H. Tech Matrix: <https://techmatrix.org/>
- I. Pacer Center - Assistive Technology in Action:
<https://www.pacer.org/students/transition-to-life/assistive-technology.asp>
- J. Reference for the AT team approach: [Frequently Asked Questions \(FAQs\) for AT Teams - Virginia's Assistive Technology Priority Project \(ttaconline.org\)](https://www.ttaconline.org/)

