



Introduction to AT Assessment Models

HAAT Model, SETT Framework

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Presenter

- RESNA Certified ATP
- M.S. in Rehabilitation Science and Technology
- Taught undergraduate and graduate level assistive technology courses at East Carolina University
- Developed an online graduate certificate program in AT for East Carolina University
- Director of Assistive Technology at Westminster Technologies



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Objectives

- Understand parts of the AT Cycle as it relates to conducting AT Evaluations
- Explore the components of the HAAT Model
- Understand the four principles of SETT
- Learn how they are used together to facilitate the AT decision-making process.



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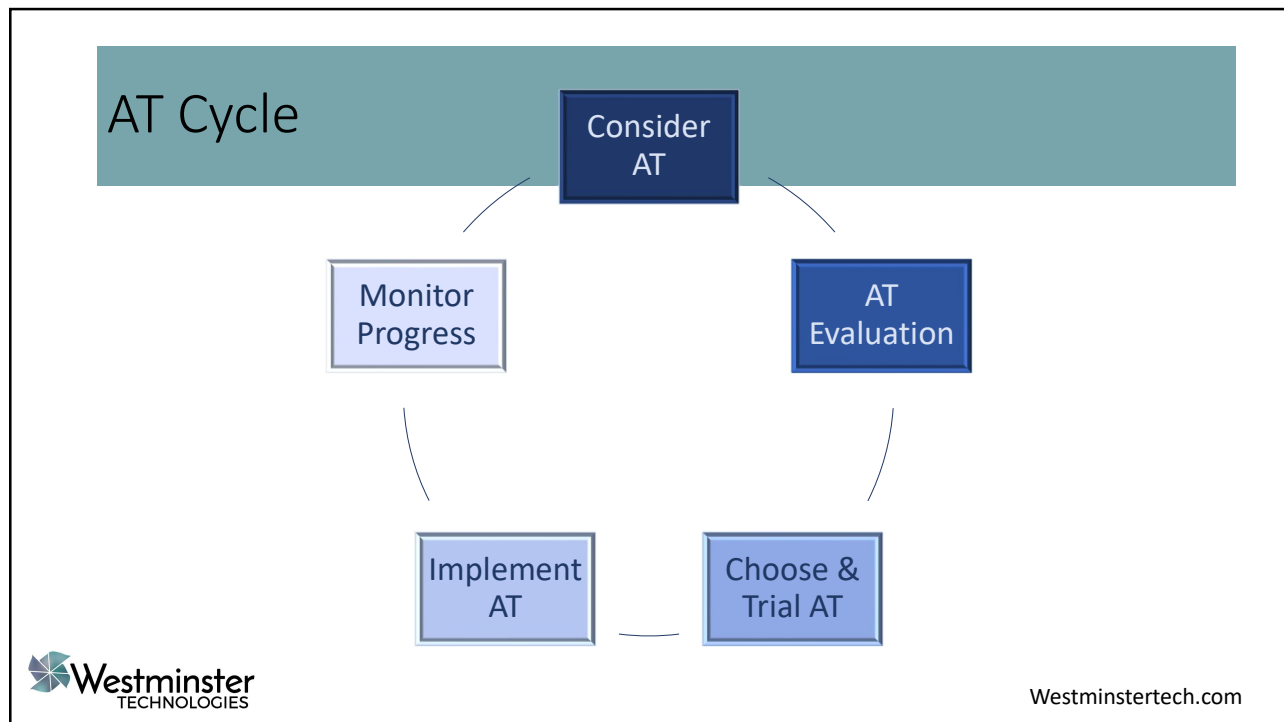
AT Cycle

AT from Start to Finish



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AT Cycle

- **Consider Assistive Technology**
 - IDEA: § 300.324 Development, review, and revision of IEP.
 - (2) Consideration of special factors. The IEP Team must –
 - (v) Consider whether the child needs assistive technology devices and services.
- **Write/Review of IEP/IFSP/IPE**
 - Consideration is a quick conversation
 - Yes/No conclusion

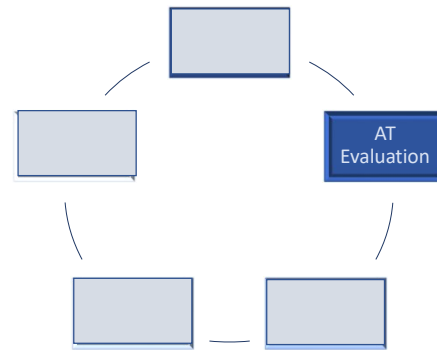
The diagram shows the 'Consider AT' step (dark blue box) at the top, with arrows pointing down to two empty light blue boxes, representing the continuation of the cycle.

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AT Cycle

- **Assistive Technology Evaluation**
 - Evaluation is scheduled when the team deems the individual may need AT
 - Perform evaluation as a team (when possible)
- **Review**
 - Review of IEP/Other Information
 - Observation of person in multiple environments
 - Discussion with all teachers/therapists/rehab counselors
 - Collection of data

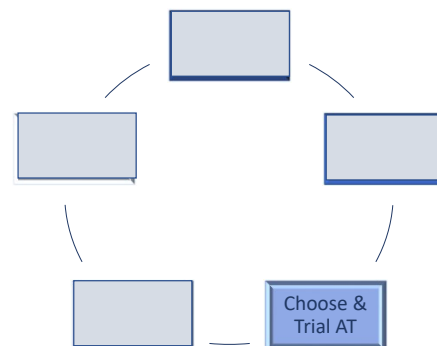


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AT Cycle

- **Choose AT to trial**
 - Match person's skills/abilities/needs to features of different AT
 - Find loaners or free demos
 - Try the technology for as long as possible
- **Collect data with and without the use of the technology**
- **Make decision based on trials, data, observations, client preferences**



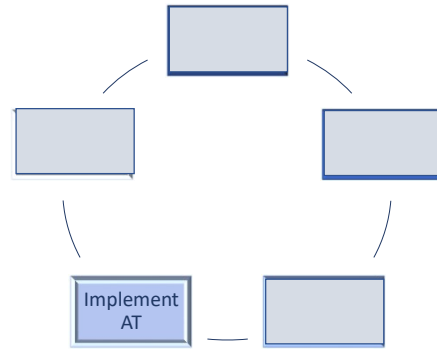
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AT Cycle

• Implement AT

- After decision has been made
- Started implementation process during trials
- Training of all teachers, therapists, counselors, the AT user, and parents/guardians/caregivers is crucial
 - Full training on how to use the technology
 - On-going training
- School/IT Support and policies
- Develop plan
- Adapt lessons
- AT needs to be accessible in classroom



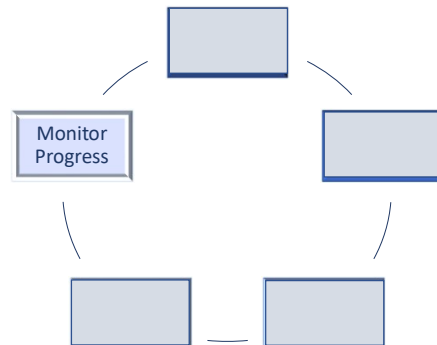
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AT Cycle

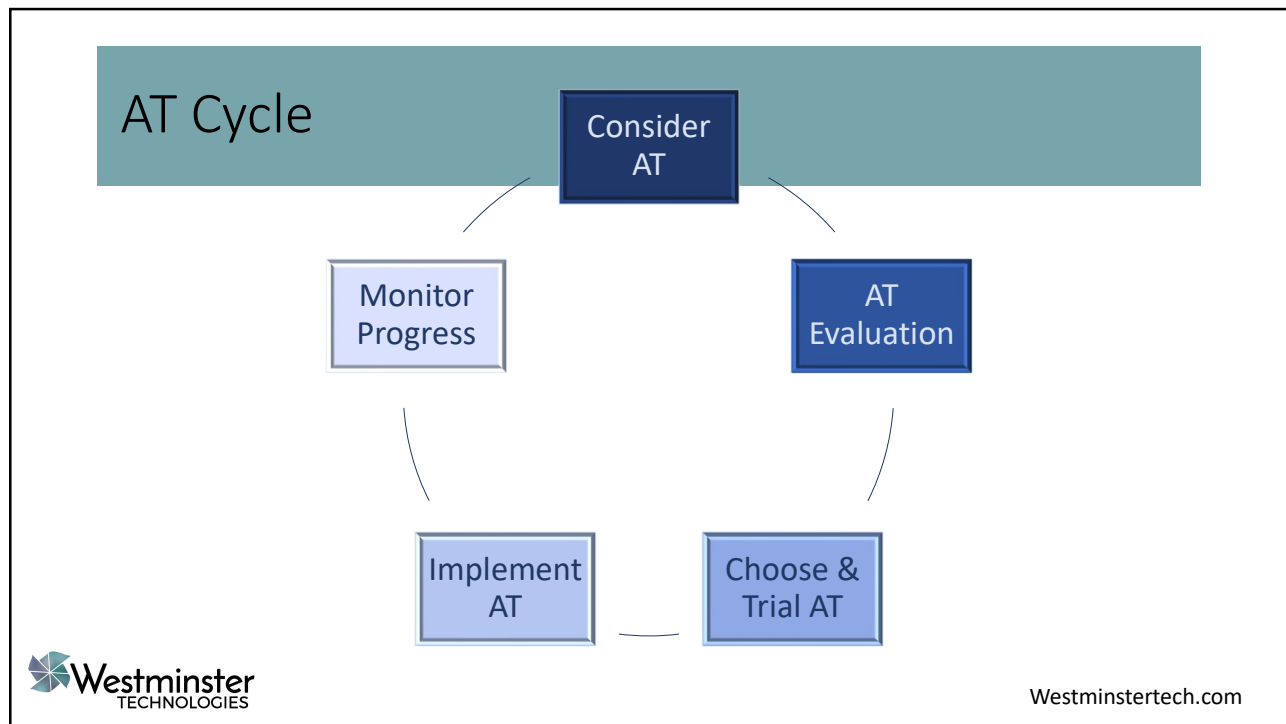
• Monitor Progress

- Along with monitoring goals/progress, monitor AT usage
- Make sure the student, staff, and family have all been properly trained
- Determine what changes, if any, need to be made
- Re-evaluate whether technology is still providing necessary support

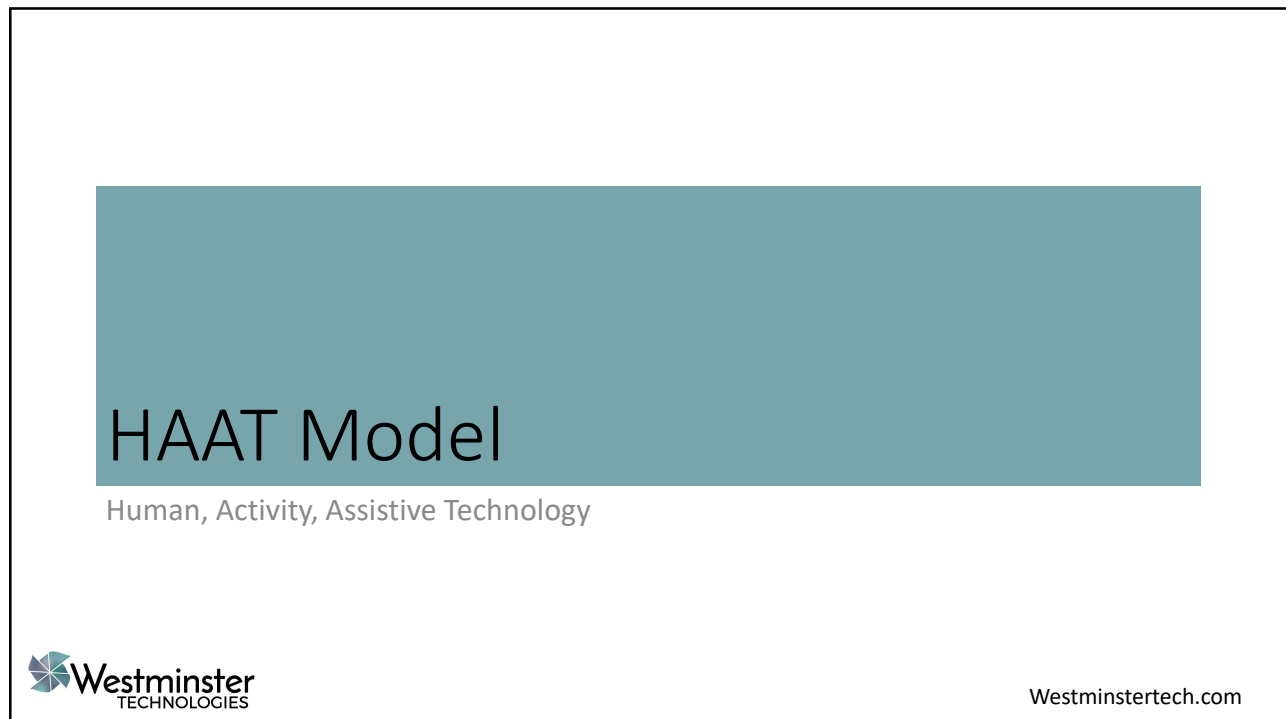


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HAAT Model

- Human Activity – Assistive Technology Model

- “System” of human and AT
- Interaction between the different components
- Add in Context of Environment
- AT
 - Human/Technology Interface
 - Processor
 - Environmental Interface
 - Activity Output

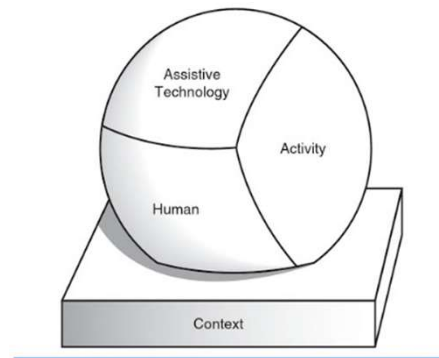


Figure 2-1 HAAT model.

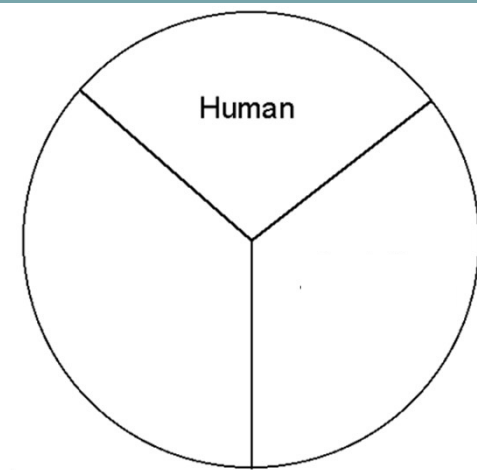


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HAAT Model - Human

- Human
 - Human Performance
 - Behavior
 - Assessment
 - Physical
 - Cognitive
 - Emotional
- Ability vs Skill
- Novice vs. Expert

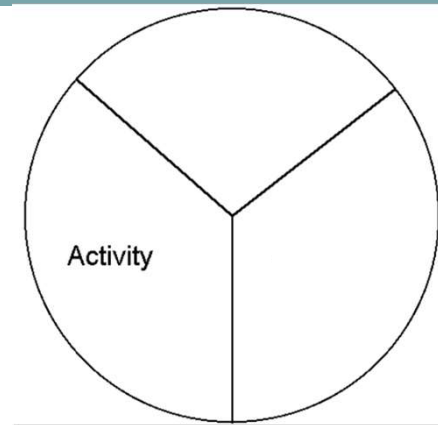


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HAAT Model - Activity

- Activity
 - Functional result of human performance
 - Determined/related to life roles
 - Self Care
 - Productivity
 - Leisure
 - Completion of tasks
 - Within a context



HAAT Model - Context

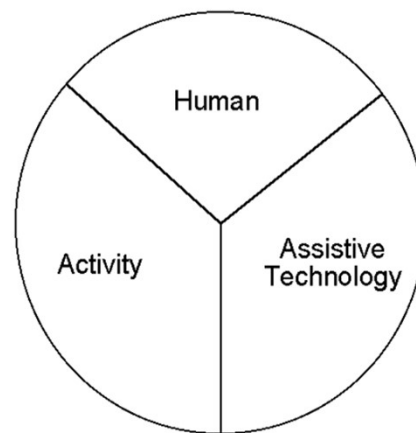
- Context
 - Social
 - Setting/Location
 - Physical
 - Cultural

Context

Social Contexts
 Familiar Peers
 Familiar Non-Peers
 Strangers
 Alone

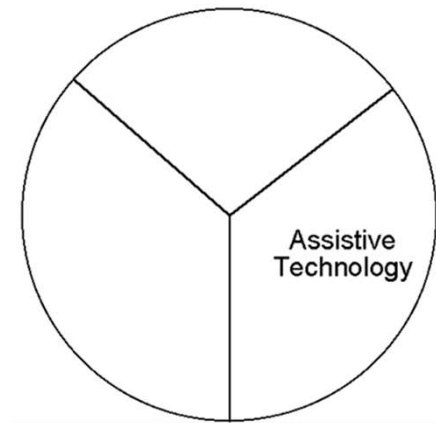
Setting
 Home (Individual)
 Group Home
 Employment
 School
 Community

Physical Contexts
 Light
 Sound
 Heat



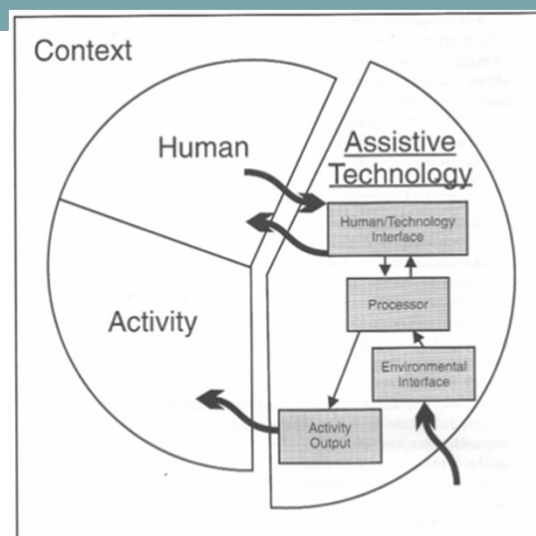
HAAT Model – Assistive Technology

- Assistive Technology
 - HTI
 - Activity Output
 - Processor
 - Environmental Interface

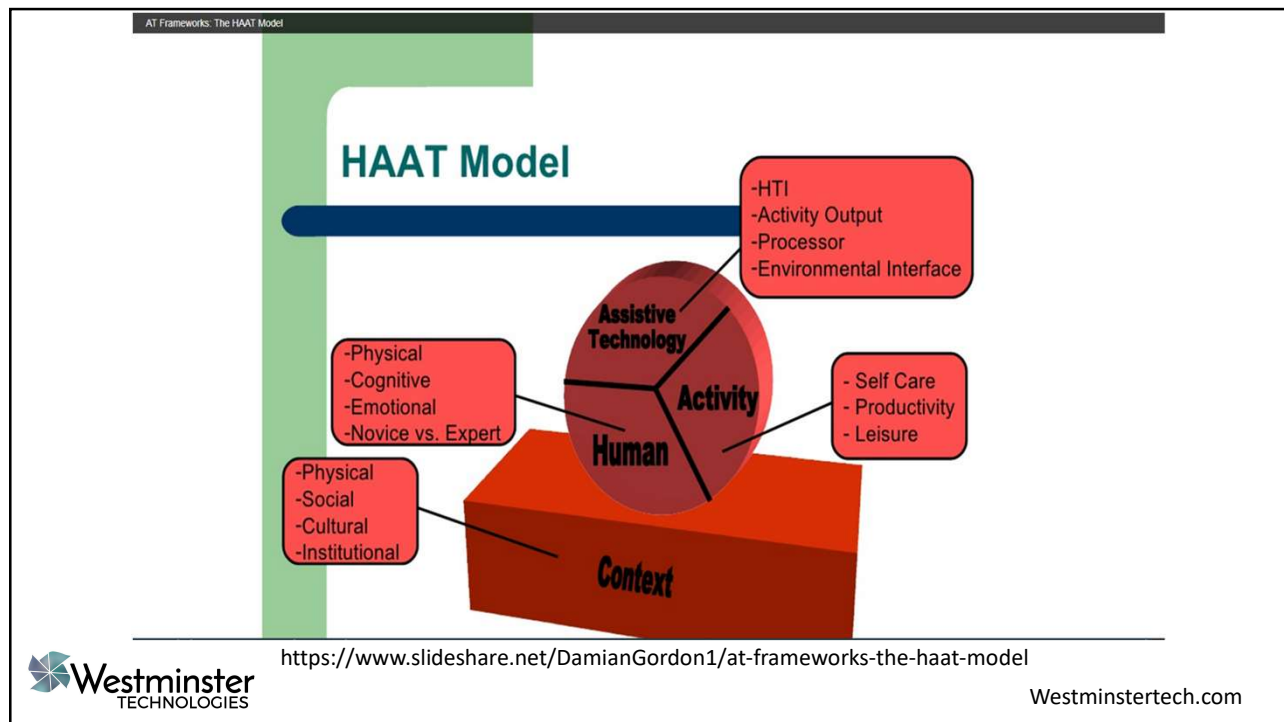


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HAAT Model - HTI



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SETT Basis

- The SETT Framework was developed by educator Joy Zabala, Ed.D. as:
 - "a four-part model intended to promote collaborative decision-making in all phases of assistive technology service design and delivery from consideration through implementation and evaluation of effectiveness."
 - It is used in schools throughout the country.

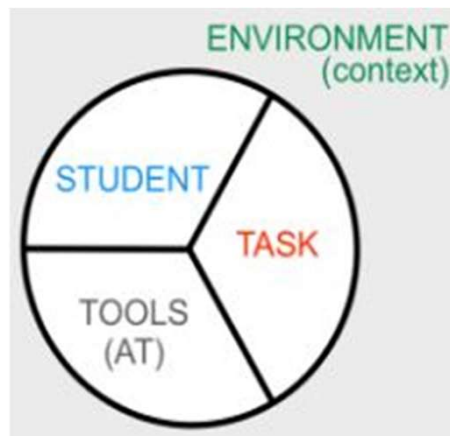


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SETT

SETT is an acronym for Student, Environment, Tasks, and Tools



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SETT Framework

- Used to assist teams in collecting information about the student:
 - Skills
 - Strengths
 - Challenges
- All information needs to be collected BEFORE specific technologies are identified.



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SETT Framework

- Student
- Environment
- Tasks
- Tools

The SETT Framework by Joy Zabala
For Considering Assistive Technology

S Student	
E Environment	
T Tasks	
T Tools	

The SETT Framework
A Collaborative Planning and Decision-Making Tool

Student _____ Date _____

	Student	Environment	Tasks	Tools
What we know				Things we have tried
What we need to know				Things we want to try

Developed by Joy Zabala, Educational Specialist, joy@joyzabala.com



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SETT Framework

- Student
- Environment
- Tasks
- Tools

The SETT Framework by Joy Zabala
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T Tools	

Assistive Technology Assessment: Student, Environment, Tasks and Tools (SETT)

School: _____ Student: _____ Date: _____
 Team participants: _____
 IEP Goal area being addressed: _____

	STUDENT: What are the student's strengths and needs?	ENVIRONMENT: Classes and situations where help is needed?	TASKS: What are the tasks that the student needs to be able to accomplish to meet IEP goals?	TOOLS: What AT or services will address these tasks?
What we know				
What we need to know				

Trial Period recommended? No _____ Yes _____ If yes, complete and attach Trial Period Plan form.
 MCP5, 9/2003, HIAT 1
 This form adapted from the SETT Framework by J. Zabala, www.idonline.org



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SETT - Student

- What is the area of instructional concern?
- What are the student's current abilities?
- What are the student's areas of need?



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SETT - Environment

- What are the significant characteristics of the student learning environment?
- What is the physical arrangement of the learning environment?



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SETT – Environment (cont.)

- What are the significant characteristics What is the instructional arrangement in the learning environment, e.g. classroom, small group, or learning stations
- What materials and equipment are students and teachers using?



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SETT - Tasks

- What are the instructional expectations for all students in the learning environment?
- What specific learning tasks are essential in the student's achievement in this instructional environment(s)?
- Where are the gaps between student performance and instructional expectations?



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SETT - Tools (Both Devices & Services)

- What tools (low and high tech) are being used currently to support the student(s)?
- What additional tools does this student require to perform in this environment?



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SETT – Tools (cont.)

- What strategies might be used to motivate the student's performance?
- How will these tools provide an equitable learning environment for the student(s) in meeting learning outcomes?



Nate is a **fifth grader** who has been identified with **learning disabilities in the areas of language arts**. His **reading ability is at the second-grade level**. His writing is legible, but immature, with **simple sentences of three or four words**. He attempts to write words phonetically, but becomes easily frustrated. He does well in fifth-grade science and social studies, which involves discussion, lectures, and **text material read aloud by other students**. The teacher **administers tests to Nate orally**. Nate is eager to **respond verbally** in science and social studies. **Concern has been expressed about sixth grade, which will require lots of independent reading and writing.**

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easy
disc
test
bee

The Student

- **Learning disabilities in language arts (special needs)**
- **Fifth-grade student who reads at the second-grade level (functional area of concern)**
- **Writes in simple sentences of three to four words (current ability)**
- **Responds verbally (current ability)**



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The Environment

- **Text material read aloud by other students (support by students)**
- **Tests administered orally (support by staff)**
- **Concerns about independent reading and writing (attitudes and expectations)**

Nate is a **fifth**
arts. His read

simple sentences of three or four words. He attempts to write words phonetically, but becomes easily frustrated. He does well in fifth-grade science and social studies, which involves discussion, lectures, and **text material read aloud by other students**. The teacher **administers tests to Nate orally**. Nate is eager to **respond verbally** in science and social studies. **Concern has been expressed about sixth grade**, which will require lots of **independent reading and writing**.



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Nate is a fifth grader who struggles with reading. His reading ability is limited to simple sentences of three words. He is easily frustrated. He does well in fifth-grade science and social studies, which involves discussion, lectures, and text material read aloud by other students. The teacher administers tests to Nate orally. Nate is eager to respond verbally in science and social studies. Concern has been expressed about sixth grade, which will require lots of independent reading and writing.

The Task


- To read at grade level
- Independent reading and writing (specific task for active involvement)


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Why?

Why use an assessment procedure?


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Why HAAT or SETT?

- Encourages collaboration
- Promotes team building
- Receive input from all perspectives
- Consensus-building tool



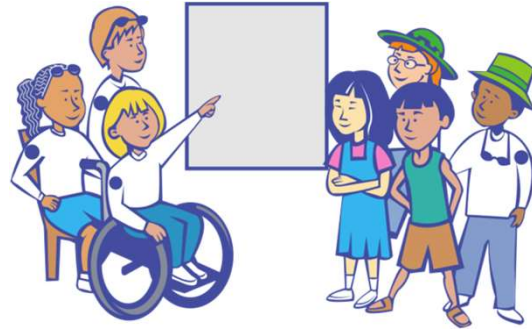
Why HAAT or SETT?

- Links between assessment and intervention become clear
- Develop a system of tools to enhance student abilities for addressing tasks
- Relevancy of technology



Why HAAT or SETT?

- Improved inclusion
- Reduced device abandonment
- Increased opportunities for success



Questions

Resources

- “Assistive Technology Internet Modules.” *Assistive Technology Internet Modules / Welcome*, OCALI, www.atinternetmodules.org/.
- “Chapter 2.” *Assistive Technologies: Principles and Practice*, by Albert M. Cook and Jan Miller Polgar, Elsevier/Mosby, 2015.
- Edutopia: <https://www.edutopia.org/article/assistive-technology-resources>
- Gordon, Damian. “AT Frameworks: The HAAT Model.” LinkedIn SlideShare, 2 Jan. 2011, www.slideshare.net/DamianGordon1/at-frameworks-the-haat-model.



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Resources

- “Quality Indicators.” QIAT - Quality Indicators for Assistive Technology - Indicators, www.qiat.org/indicators.html.
- “SETT Framework.” *Assistive Technology*, assistedtechnology.weebly.com/sett-framework.html.
- Zabala, Joy. “SETT Documents.” Joyzabala, www.joyzabala.com/Documents.html.



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Any Questions after Webinar

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