



Division of Accountability
Office of Regional Services
Assistive Technology Services

Collaborative Assistive Technology Assessment: SETT Framework

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Assistive Technology

- Includes a broad range of possible devices and services
- Enhances capabilities and removes barriers to achievement
- Is related to function, rather than to a specific disability category
- May be applicable to all disability groups and in all phases of education, rehabilitation, and life – as opposed to ‘being ready’ for AT
- Must be individually specific and task-focused to be effective

Assistive Technology Devices

“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 the functional capabilities of children with disabilities.” (Section 300.5)

The Individuals with Disabilities Education Act (Public Law 105-17)

Assistive Technology Services

“...any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device.”

Assistive Technology Act of 1998 as amended (P.L. 108-364)

Assistive Technology Services

1. a functional evaluation in the individual's customary environment;
2. purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices for individuals with disabilities;
3. selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices;
4. coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
5. assistive technology training or technical assistance with assistive technology for an individual with a disability, or, where appropriate, the family of an individual with disabilities;
6. training or technical assistance for professionals, employers, or other individuals who provide services to, employ, or otherwise are substantially involved in the major life functions of individuals with disabilities.

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 student’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.

AT Abandonment Rate

30% - AT
50% - AAC

Abandonment

- 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).

Who provides an AT Assessment?

5 basic components that must be represented on every team making decisions about AT.

- ✓ 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.

Team members may include other professions such as:

- Audiologist
- Technology Coordinator
- Counselor
- Early Intervention Specialist
- Instructional Assistant Nurse
- Physician Rehabilitation Engineer
- Social Worker
- Teacher of Hearing Impaired
- Teacher of Visually Impaired
- Vocational Counselor

Anyone who has the potential to contribute to the decision-making or implementation can be invited to participate on the team.

Assessment

- Information Gathering
- Decision Making
- Trial Use

AT Assessment Process

- Step 1: Team Members Gather Information
 Step 2: Schedule Meeting
 Step 3: Team Completes Problem Identification Portion (or SETT) of [AT Decision Making Guide](#) at the meeting.

PROBLEM IDENTIFICATION-(SAMPLE)		
Student's Abilities/Difficulties	Environmental Considerations	Tasks
<ul style="list-style-type: none"> • Writing/use of hands • Communication • Reading/academics • Mobility • Vision • Hearing • Behavior • Other 	<ul style="list-style-type: none"> • Classroom • Playground • Lunch room • Home, etc. <p>In each:</p> <ul style="list-style-type: none"> • Technology equipment available • Room arrangement, lighting • Sound • Activities, etc 	<ul style="list-style-type: none"> • Produce legible written material • Produce audible speech • Read text • Complete math problems • Participate in recreation/leisure • Move independently in the school environment

AT Assessment Process

- Step 4: Prioritize the List of Tasks for Solution Generation
 Step 5: Solution Generation
 Step 6: Solution Selection
 Step 7: Implementation Plan

AT Assessment Process

- Trial Use:
 Step 8: Implement Planned Trials
 Step 9: Follow Up on Planned Date

[QIAT AT ASSESSMENT PROCESS PLANNER](#)

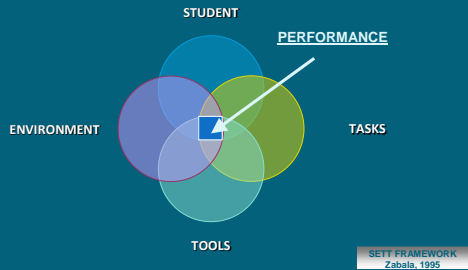
What should the process look like in the School System?

1. IEP Team/School Based Team proceeds through beginning stages of the AT Assessment Process for gathering information and problem solving.
2. Call in additional members and/or identified AT Team when IEP/School Based Team needs additional support
3. AT process/referral/procedure paperwork should align with existing procedures

Examples of Referral Forms

- AT Referral
- AT Checklists
- WATI Classroom Observation Guide

SETT Framework for AT Assessment



The SETT Framework

The SETT Framework : Student, Environment, Tasks, & Tools

The Student / Self

- The person who is the central focus of the process and for whom everyone involved in any substantial life activity is an advocate

The Environments

- The customary environments in which the person is expected to live, learn and grow

The Tasks

- The specific things that the person needs to be able to do or learn to do to reach high levels of participation and achievement

Student (Self)



- What is 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)
- Strengths and abilities (related to area of concern)
- Present levels of achievement
- Expectations (student's)
- Evaluation information

Environments

Conditions within customary environments

- Supports
- Barriers
- 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)



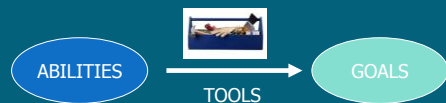
Tasks



- The specific things that the student needs to be able to do to reach expectations and make progress
- The functional things that are a part of being actively involved in learning environments
 - Communication
 - Instruction
 - Participation
 - Productivity
 - Environmental Control

Tools

Whatever is needed by the student and others for the student to do the tasks in the environments in order to meet expectations



Tools for the Student /Self

• Whatever is needed to enable the student to do (or learn to do) the tasks that lead to high levels of participation and achievement

- Accommodations
- Modifications
- Technology
- Diversified support or instructional strategies
- Accessible Materials
- Supports and Services
- Training
- Documentation
- Etc.



Tools for Others

• Whatever is needed by others for the person to do the tasks in the environments in order to meet expectations

- Support for Family and Staff
- Training and support on:
 - Decision-making
 - Diversified strategies
 - Accommodations and Modifications
 - Device integration and operation
 - Environmental management
 - Service delivery
 - Etc.



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SETT SCAFFOLD FOR GATHERING DATA-ANNOTATED
Collaboratively Gather and Analyze Information from a Variety of Sources

Student: _____ Date: _____ Perspective: _____

EXAMINING CURRENT CONDITIONS TO ESTABLISH EDUCATIONAL NEED		
STUDENT	ENVIRONMENTS	TASKS
<p>INFORMATION RELATED SPECIFICALLY TO THE STUDENT, INCLUDING SPECIFIC AREAS OF CONCERN, SPECIAL NEEDS, CURRENT ACHIEVEMENT, INTERESTS, GOALS, ETC.</p> <ul style="list-style-type: none"> • Build shared knowledge about the student that can be used to identify needs, guide decisions about tools, and assist in planning implementation and evaluation of effectiveness. • Determine what still needs to be known and how it can be found out. • Add additional information as it becomes available through evaluation, implementation, or discussion. 	<p>INFORMATION RELATED TO ANYONE WHO IS AROUND THE STUDENT OR ANYTHING THAT IS PROVIDED TO THE STUDENT.</p> <ul style="list-style-type: none"> • Build shared knowledge about the environments in which the student is, or can be, expected to learn and grow. This information can be used to identify need for environmental supports and training, and assist in planning implementation and evaluation of effectiveness. • Determine what still needs to be known and how it can be found out. • Add additional information as it becomes available through evaluation, implementation or discussion. 	<p>INFORMATION SPECIFICALLY RELATED TO THE DETAILS OF THE TASKS THAT ARE CURRENTLY REQUIRED OF THE STUDENT OR WILL BE REQUIRED IN THE NEAR FUTURE.</p> <ul style="list-style-type: none"> • Build shared knowledge about the tasks that the student needs to do or learn to do that are currently difficult or impossible for the student to do at the expected level of independence. • This information can be used to identify the type of tools needed, but will also play a critical role in planning implementation and evaluation of effectiveness. • Determine what still needs to be known and how it can be found out. • Add additional information as it becomes available through evaluation, implementation, discussion.
<p>• CIRCLE FUNCTIONAL AREAS OF CONCERN</p> <p>• UNDERLINE BARRIERS TO STUDENT PROGRESS</p> <p>• STAR SUPPORTS FOR STUDENT PROGRESS</p>		

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SETT Form and additional resources are available for download at <http://www.setttools.com>. Please provide feedback on effectiveness and suggestions for modifications/revisions by email to joz@settools.com

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SETT SCAFFOLD FOR GATHERING DATA
Collaboratively Gather and Analyze Information from a Variety of Sources
(use as many sheets as necessary to build shared knowledge)

Student: _____ Date: _____ Perspective: _____

DESCRIBE CURRENT CONDITIONS TO ESTABLISH EDUCATIONAL NEED		
STUDENT	ENVIRONMENTS	TASKS
<p>• CIRCLE FUNCTIONAL AREAS OF CONCERN</p> <p>• UNDERLINE BARRIERS TO STUDENT PROGRESS</p> <p>• STAR SUPPORTS FOR STUDENT PROGRESS</p>		

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Describe Current Conditions to Establish Educational Need		
STUDENT	ENVIRONMENT	TASKS
<ul style="list-style-type: none"> • Jeff - 13 yrs old - 7th grader • Medical Diagnosis - Hypotonia • Educational Diagnosis - OI • Hypotonia mainly impacts handwriting • Fatigues when hand-writing • Writes legibly for short periods • WISC-R Full scale IQ - 135 V = 153, P = 108 • Completes about 50% of written work that classmates typically complete in the same amount of time • Finishes class work at home on computer • 3 hours of homework at night with study buddies • IEP goals relate to increasing rate of written productivity while not lowering quality or independence • Avid video game player • Expects to attend college and law school • Requires no curricular modifications • Concerned about the time and effort it takes to complete written assignments • Walks with no difficulty, but tires • Well-liked by teachers and peers 	<ul style="list-style-type: none"> • In accelerated classes • Two story building • Classes in subject area wings • Classes on both floors (most on first floor, but computer and science on 2nd) • Computers in some classrooms • Receives OT ½ hour per week • OT in separate classroom (OT reports that Jeff concentrates better and does not disrupt others in this room) • OT primarily strengthening exercises on manual typewriter for endurance • Currently has accommodation of multiple lockers so books kept near classrooms • Additional set of books home • Study buddies do homework and play video games each evening • Teachers concerned and considering change in placement due to overwhelming written work • Parents expect college and law school 	<ul style="list-style-type: none"> • IEP goals related to increasing rate of written productivity while not lowering quality or independence • Compare/contrast essays in science • Analytical book reports in English • Science projects as part of cooperative learning group <p><u>Near future concerns:</u></p> <ul style="list-style-type: none"> • Essay exams • Note-taking • Increasing length of written assignments

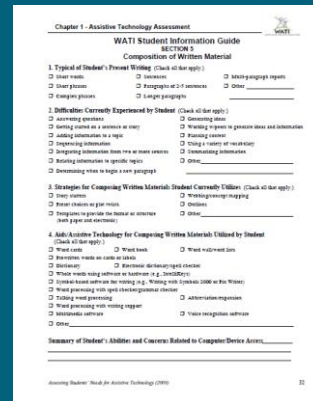
WATI Guides: Wisconsin Assistive Technology Initiative www.wati.org

- GUIDES designed to gather information for all areas of Assistive Technology
- WATI free resources include: AT Laws for Schools, AT Consideration, AT Assessment Guides, Observation Guides, Referral Forms, AT Checklists, Transition Guides, as well as support resources for AT Multiple Challenges and AT for Autism Spectrum Disorder
- Forms available in Spanish as well!

Student Information Guides

- Section 1 - Seating, Positioning and Mobility*
- Section 2 – Communication*
- Section 3 - Computer Access*
- Section 4 - Motor Aspects of Writing
- Section 5 - Composition of Written Material
- Section 6 – Reading*
- Section 7 – Mathematics*
- Section 8 – Organization**
- Section 9 - Recreation and Leisure
- Section 10 - Vision
- Section 11 - Hearing
- Section 12 - General

*changed 2009
**new 2009



Quality Indicators of Assistive Technology (QIAT)

- Consideration of AT Needs
- **Assessment of AT Needs**
- AT in the IEP
- AT Implementation
- Evaluation of Effectiveness of AT
- AT in Transition
- Administrative Support for AT
- AT Professional Development

Quality Indicator for AT Assessment

- ✓ Procedures for all aspects of AT assessment are clearly defined and consistently applied.
- ✓ AT assessments are conducted by a team with the collective knowledge and skills needed to determine possible assistive technology solutions.
- ✓ All AT assessments include a functional assessment in the student's customary environments.
- ✓ AT assessments, including needed trials, are completed within reasonable time lines.

www.qiat.org

Quality Indicator for AT Assessment

- ✓ Recommendations from AT assessments are based on data about the student, environments and tasks.
- ✓ Provides the IEP team with clearly documented recommendations that guide decisions about the selection, acquisition, and use of AT devices and services.
- ✓ AT needs are reassessed any time changes in the student, the environments and/or the tasks result in the student's needs not being met with current devices and/or services.

www.qiat.org

Common Errors

- ❖ Procedures for conducting AT assessment are not defined, or are not customized to meet the student's needs.
- ❖ A team approach to assessment is not utilized.
- ❖ Individuals participating in an assessment do not have the skills necessary to conduct the assessment, and do not seek additional help.

Common Errors

- ❖ Team members do not have adequate time to conduct assessment processes, including necessary trials with AT.
- ❖ Communication between team members is not clear.
- ❖ The student is not involved in the assessment process.
- ❖ When the assessment is conducted by any team other than the student's IEP team, the needs of the student or expectations for the assessment are not communicated.

MYTH

The SETT Framework is primarily for selecting AT devices.

REALITY

The goal of the SETT Framework is to help collaborative teams create

Student-centered, (Self)
Environmentally-useful, and
Tasks-focused
Tool systems

that foster participation and achievement

MYTH

It is possible to complete a SETT Framework.

REALITY

The SETT Framework supports continuing effort.

"Assessment and intervention form a continuous, dynamic process"

Guiding Principles
Arkansas Tech Act Project



The SETT Framework as a Place to Start

- What do I know, from my perspective?
- What do WE know, collectively?
- What do we still need to know and how can we find out?
- What outcomes do we expect?
- What system of supports and services (if any) is needed for this student to progress?



Remember Two Things!

1. A SETT Framework is ON-GOING !
2. Re-SETTING is not starting over...

It is a matter of keeping decision-guiding information accurate, up-to-date, and clearly inclusive of the shared knowledge of all involved !

South Carolina Assistive Technology Program SCATP

The South Carolina Assistive Technology Program (SCATP) is located in Columbia, SC: provides state-wide resources; demonstration lab for public; free trial loan of AT devices (pay only return shipping), and annual AT Expo.

www.sc.edu/scatp

SC Department of Education Assistive Technology Specialists (ATS)

Mission

- The mission of Assistive Technology Services (ATS) is to provide assistive technology support, training, consultation, equipment, and technical assistance to educators who teach students at risk of academic failure and students with disabilities.

ATS SERVICES

Professional Development

- presentations, workshops, and trainings on assistive technology for districts and regions, both in person and online;
- training on conducting assistive technology evaluations and assessments for local staff.

Funding Assistance

- Identification of funding sources
- Research into grant opportunities
- Formation of funding networks among AT professionals

Additional ATS Services

Technical Assistance

- Formation and support of AT teams within schools and districts
- Collaborative sessions with instructional technology specialists
- Recommendations on interventions for assisting students at risk of academic failure and students with disabilities
- Training in AT assessment, evaluation, and implementation for AT teams

E-News – “AT Connect”

- News on free software, scheduled trainings, and upcoming conferences

SCCATN WIKI! SC Collaborative Assistive Technology Network Join!!

<http://sccatn.wikispaces.com/>

Upcoming Trainings, Conferences

Free Resources

Vendor Links

FAQ

Best Practice in AT

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Pee Dee Region

Contact Stacy Springer

Low Country Region

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<http://ed.sc.gov/agency/Accountability/Regional-Services/ATRS.html>

AT Resources

- ABLEDATA <http://www.abledata.com> ABLEDATA is sponsored by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education. The searchable ABLEDATA database contains over 21,000 products.
- Alliance for Technology Access (ATA) <http://www.ataaccess.org> The ATA provides AT information and support services to children and adults with disabilities.
- ATSTAR Program <http://www.atstar.org> The Assistive Technology - Strategies, Tools, Accommodations and Resources (ATSTAR) Program is designed to increase AT expertise through technology-enhanced learning environments.
- Assistive Technology Industry Association (ATIA) <http://www.atia.org> The Assistive Technology Industry Association is an organization of manufacturers, sellers or providers of technology-based assistive devices and/or services. The organization sponsors the ATIA annual conference and the Assistive Technology Outcomes Journal.
- Assistive Technology Training Online (ATTO) <http://www.at-training.com> The Assistive Technology Training Online Project provides internet-based training in both general and specific areas of adapted computer use.

AT Resources

- California State University at Northridge, Center on Disabilities (CSUN) <http://www.csun.edu/cod/> Located at California State University, Northridge, the Center on Disabilities develops and publishes materials of interest to the field of disability and sponsors conferences, seminars, and workshops.
- Center for Applied Special Technology (CAST) <http://www.cast.org> CAST is an organization that works to expand learning opportunities for all individuals, especially those with disabilities, through the research and development of innovative, technology-based educational resources and strategies.
- Closing the Gap <http://www.closingthegap.com> This web site spotlights resources in computer technology, special education and rehabilitation. The Resource Directory is a database of over 2000 hardware and software products which is web searchable. Links to vendors are included.
- Council for Exceptional Children (CEC) <http://www.cec.sped.org> CEC is an international professional organization dedicated to improving educational outcomes for individuals with exceptionalities, students with disabilities, and/or the gifted.

AT Resources

- Georgia Project on Assistive Technology (GPAT) <http://www.gpat.org> GPAT is a project of the Georgia Department of Education: Division for Exceptional Students, providing a range of technical support services in the area of assistive technology to local school system personnel and their students. Contains helpful resources, forms, and a video-linked consideration guide. GPAT Videos - http://coefacultyvaldosta.edu/spe/ATRB/Video_Tips.htm
- Guide to the Individualized Education Program <http://www.ed.gov/parents/needs/speced/iepguide/index.html> This publication is provided by the U.S. Dept. of Education and contains useful information related to developing effective IEPs.
- LD Online <http://www.ldonline.com> This interactive website provides resources on learning disabilities to parents, teachers, children and other professionals. The site includes books, articles, videos and a newsletter.
- LD Resources <http://www.ldresources.com> This site provides resources for people with learning disabilities. Materials include essays, articles, resources and other materials that can be used for non-commercial purposes only.
- National Assistive Technology Research Institute (NATRI) <http://natri.uky.edu> (NATRI) conducts assistive technology (AT) research, translates theory and research into AT practice, and provides resources for improving the delivery of AT services.

AT Resources

- National Center for Technology Innovation (NCTI) <http://www.nationaltechcenter.org/> NCTI seeks to broaden and enrich the field of technology for the education of students with disabilities by providing resources and promoting partnerships for the development of tools and applications by developers, manufacturers, producers, publishers and researchers.
- Office of Special Education Programs (OSEP), U.S. Department of Education <http://www.ed.gov/about/offices/list/osep/osep/index.html?src=mr> OSEP is dedicated to improving educational results for children with disabilities. The site provides information on Federal policy, national grant projects, national studies, and statistics related to disabilities and other related resources.
- Oregon Technology Access Program (OTAP) <http://www.otap-oregon.org/> OTAP provides training, information, technical assistance and resources regarding the uses of technology for children with disabilities.
- Quality Indicators for Assistive Technology (QIAT) <http://www.qiat.org> The QIAT Consortium is a national grassroots group dedicated to identifying, disseminating, and implementing a set of widely applicable quality indicators for assistive technology services in school settings. The QIAT listserv provides a national forum for discussion of AT issues.

AT Resources

- Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) <http://www.resna.org/> RESNA is an interdisciplinary association that provides a credentialing program for assistive technology service providers. The RESNA Technical Assistance Project provides technical assistance to the 56 state/territory programs as authorized under the AT Act of 1998.
- Technology and Media (TAM) Division of CEC <http://www.tamcec.org> TAM is a division of the Council for Exceptional Children (CEC) that works to promote the effective use of technology and media for individuals with exceptional educational needs. The site includes information on conferences and professional publications including the JSET Journal.
- Texas Assistive Technology Network (TATN) <http://www.texasat.net> TATN is a collaborative network between the twenty (20) education service centers in Texas with Region 4 Education Service Center in Houston providing statewide leadership. The site provides links, resources, and training materials.
- Wisconsin Assistive Technology Initiative (WATI) <http://www.wati.org> WATI is a statewide project funded by the Wisconsin Department of Public Instruction to help all school districts develop or improve their assistive technology services. It includes information on best practices, training materials, resources, sample forms, and provides links to other sites related to AT.