



# Assistive Technology Implementation: Working Together to Make a Measurable Difference

*Participant Handout booklet*

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# Legal References Related to Assistive Technology

## Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) Public Law 108-446 and Title 34 of the Code of Federal Regulations

### **34 C.F.R. § 300.5 Assistive technology device**

*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 the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of that device.  
(Authority: 20 U.S.C. 1401(1))

### **34 C.F.R. § 300.6 Assistive technology service**

*Assistive technology service* means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes:

- (a) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
- (b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;
- (c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- (d) Coordinating and using 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 a disability or, if appropriate, that child's family; and
- (f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child.

(Authority: 20 U.S.C. 1401(2))

### **34 C.F.R. § 300.14 Equipment**

*Equipment* means—

(b) All other items necessary for the functioning of a particular facility as a facility for the provision of educational services, including items such as instructional equipment and necessary furniture; printed, published and audio-visual instructional materials; telecommunications, sensory, and other technological aids and devices; and books, periodicals, documents, and other related materials.

(Authority: 20 U.S.C. 1401(7))

### **34 C.F.R. § 300.34 Related services**

(a) *General. Related services* means transportation and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education, and includes speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, and medical services for diagnostic or evaluation purposes. Related services also include school health services and school nurse services, social work services in schools, and parent counseling and training.

(b) *Exception; services that apply to children with surgically implanted devices, including cochlear implants.*

(1) Related services do not include a medical device that is surgically implanted, the optimization of that device's functioning (e.g., mapping), maintenance of that device, or the replacement of that device.

(2) Nothing in paragraph (b) (1) of this section—

- (i) Limits the right of a child with a surgically implanted device (e.g., cochlear implant) to receive related services (as listed in paragraph (a) of this section) that are determined by the IEP Team to be necessary for the child to receive FAPE.
- (ii) Limits the responsibility of a public agency to appropriately monitor and maintain medical devices that are needed to maintain the health and safety of the child, including breathing, nutrition, or operation of other bodily functions, while the child is transported to and from school or is at school; or

(iii) Prevents the routine checking of an external component of a surgically implanted device to make sure it is functioning properly, as required in § 300.113(b).

(Authority: 20 U.S.C. 1401(26))

#### **34 C.F.R. § 300.39 Special education**

(a) *General.* (1) *Special education* means specially designed instruction, at no cost to the parents, to meet the unique needs of a child with a disability, including—

(b) *Individual special education* terms defined. The terms in this definition are defined as follows:

(3) Specially designed instruction means adapting, as appropriate to the needs of an eligible child under this part, the content, methodology, or delivery of instruction—

(i) To address the unique needs of the child that result from the child's disability; and

(ii) To ensure access of the child to the general curriculum, so that the child can meet the educational standards within the jurisdiction of the public agency that apply to all children.

(Authority: 20 U.S.C. 1401(29))

#### **34 C.F.R. § 300.42 Supplementary aids and services**

*Supplementary aids and services* means aids, services, and other supports that are provided in regular education classes, other education-related settings, and in extracurricular and nonacademic settings, to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate in accordance with §§ 300.114 through 300.116.

(Authority: 20 U.S.C. 1401(33))

#### **34 C.F.R. § 300.44 Universal design**

*Universal design* has the meaning given the term in section 3 of the Assistive Technology Act of 1998, as amended, 29 U.S.C. 3002.

(Authority: 20 U.S.C. 1401(35))

#### **34 C.F.R. § 300.105 Assistive technology**

(a) Each public agency must ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in §§ 300.5 and 300.6, respectively, are made available to a child with a disability if required as a part of the child's—

(1) Special education under § 300.36;

(2) Related services under § 300.34; or

(3) Supplementary aids and services under §§ 300.38 and 300.114(a)(2)(ii).

(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP Team determines that the child needs access to those devices in order to receive FAPE.

(Authority: 20 U.S.C. 1412(a)(1), 1412 (a)(12)(B)(i))

#### **34 C.F.R. § 300.113 Routine checking of hearing aids and external components of surgically implanted medical devices.**

(a) *Hearing aids.* Each public agency must ensure that hearing aids worn in school by children with hearing impairments, including deafness, are functioning properly.

(b) *External components of surgically implanted medical devices.*

(1) Subject to paragraph (b)(2) of this section, each public agency must ensure that the external components of surgically implanted medical devices are functioning properly.

(2) For a child with a surgically implanted medical device who is receiving special education and related services under this part, a public agency is not responsible for the post-surgical maintenance, programming, or replacement of the medical device that has been surgically implanted (or of an external component of the surgically implanted medical device).

(Authority: 20 U.S.C. 1401(1), 1401(26)(B))

#### **34 C.F.R. § 300.172 Access to instructional materials**

(a) *General.* The State must—

(1) Adopt the National Instructional Materials Accessibility Standard (NIMAS), published as appendix C to part 300, for the purposes of providing instructional materials to blind persons or other persons with print disabilities, in a timely manner after publication of the NIMAS in the *Federal Register* on July 19, 2006 (71 FR 41084); and

(2) Establish a State definition of “timely manner” for purposes of paragraphs (b)(2) and (b)(3) of this section if the State is not coordinating with the National Instructional Materials Access Center (NIMAC) or (b)(3) and (c)(2) of this section if the State is coordinating with the NIMAC.

**(b) Rights and responsibilities of SEA.**

(1) Nothing in this section shall be construed to require any SEA to coordinate with the NIMAC.

(2) If an SEA chooses not to coordinate with the NIMAC, the SEA must provide an assurance to the Secretary that it will provide instructional materials to blind persons or other persons with print disabilities in a timely manner.

(3) Nothing in this section relieves an SEA of its responsibility to ensure that children with disabilities who need instructional materials in accessible formats, but are not included under the definition of blind or other persons with print disabilities in § 300.172(e)(1)(i) or who need materials that cannot be produced from NIMAS files, receive those instructional materials in a timely manner.

(4) In order to meet its responsibility under paragraphs (b)(2), (b)(3), and (c) of this section to ensure that children with disabilities who need instructional materials in accessible formats are provided those materials in a timely manner, the SEA must ensure that all public agencies take all reasonable steps to provide instructional materials in accessible formats to children with disabilities who need those instructional materials at the same time as other children receive instructional materials.

**(c) Preparation and delivery of files.** If an SEA chooses to coordinate with the NIMAC, as of December 3, 2006, the SEA must—

(1) As part of any print instructional materials adoption process, procurement contract, or other practice or instrument used for purchase of print instructional materials, must enter into a written contract with the publisher of the print instructional materials to—

(i) Require the publisher to prepare and, on or before delivery of the print instructional materials, provide to NIMAC electronic files containing the contents of the print instructional materials using the NIMAS, or

(ii) Purchase instructional materials from the publisher that are produced in, or may be rendered in, specialized formats.

(2) Provide instructional materials to blind persons or other persons with print disabilities in a timely manner.

**(d) Assistive technology.** In carrying out this section, the SEA, to the maximum extent possible, must work collaboratively with the State agency responsible for assistive technology programs.

**(e) Definitions.** (1) In this section and § 300.210—

(i) *Blind persons or other persons with print disabilities* means children served under this part who may qualify to receive books and other publications produced in specialized formats in accordance with the Act entitled “An Act to provide books for adult blind,” approved March 3, 1931, 2 U.S.C 135a;

(ii) *National Instructional Materials Access Center or NIMAC* means the center established pursuant to section 674(e) of the Act;

(iii) *National Instructional Materials Accessibility Standard or NIMAS* has the meaning given the term in section 674(e)(3)(B) of the Act;

(iv) *Specialized formats* has the meaning given the term in section 674(e)(3)(D) of the Act.

(2) The definitions in paragraph (e)(1) of this section apply to each State and LEA, whether or not the State or LEA chooses to coordinate with the NIMAC.

(Authority: 20 U.S.C. 1412(a)(23), 1474(e))

**34 C.F.R. § 300.210 Purchase of instructional materials.**

(a) *General.* Not later than December 3, 2006, an LEA that chooses to coordinate with the National Instructional Materials Access Center (NIMAC), when purchasing print instructional materials, must acquire those instructional materials in the same manner, and subject to the same conditions as an SEA under § 300.172.

**(b) Rights of LEA.** (1) Nothing in this section shall be construed to require an LEA to coordinate with the NIMAC.

(2) If an LEA chooses not to coordinate with the NIMAC, the LEA must provide an assurance to the SEA that the LEA will provide instructional materials to blind persons or other persons with print disabilities in a timely manner.

(3) Nothing in this section relieves an LEA of its responsibility to ensure that children with disabilities who need instructional materials in accessible formats but are not included under the definition of blind or other persons with print disabilities in § 300.172(e)(1)(i) or who need materials that cannot be produced from NIMAS files, receive those instructional materials in a timely manner.

(Authority: 20 U.S.C. 1413(a)(6))

**34 C.F.R. § 300.324 Development, review, and revision of IEP**

**(a) Development of IEP—**

(2) *Consideration of special factors.* The IEP team must—

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

(b) Review and revision of IEPs—

(2) *Consideration of special factors.* In conducting a review of the child's IEP, the IEP Team must consider the special factors described in paragraph (a)(2) of this section.

(Authority: 20 U.S.C. 1412 (a)(1), 1412 (a)(12) (A)(i), 1414 (d)(3) and (4)(B) and (7); and 1414(e))

### **34 C.F.R. § 300.704 State-level activities**

(b) *Other State-level activities*

(4) Funds reserved under paragraph (b)(1) of this section also may be used to carry out the following activities:

(iv) To improve the use of technology in the classroom by children with disabilities to enhance learning;

(v) To support the use of technology, including technology with universal design principles and assistive technology devices, to maximize accessibility to the general education curriculum for children with disabilities;

(Authority: 20 U.S.C. 1411(e))

### **Appendix C to Part 300—National Instructional Materials Accessibility Standard (NIMAS)**

Under sections 612(a)(23)(A) and 674(e)(4) of the Individuals with Disabilities Education Act, as amended by the Individuals with Disabilities Education Improvement Act of 2004, the Secretary of Education establishes the NIMAS. Under section 674(e)(4) of the Act, the NIMAS applies to print instructional materials published after July 19, 2006. The purpose of the NIMAS is to help increase the availability and timely delivery of print instructional materials in accessible formats to blind or other persons with print disabilities in elementary and secondary schools.

**(See Appendix C to Part 300 for Technical Specifications—The Baseline Element Set)**

## **IDEA Definitions Related to the NIMAC**

### **SEC. 674. Technology development, demonstration, and utilization; media services; and instructional materials.**

(e) *National Instructional Materials Access Center.*—

(1) *In General.*—The Secretary shall establish and support, through the American Printing House for the Blind, a center to be known as the 'National Instructional Materials Access Center' not later than 1 year after the date of enactment of the Individuals with Disabilities Education Improvement Act of 2004.

(2) *Duties.*—The duties of the National Instructional Materials Access Center are the following:

(A) To receive and maintain a catalog of print instructional materials prepared in the National Instructional Materials Accessibility Standard, as established by the Secretary, made available to such center by the textbook publishing industry, State educational agencies, and local educational agencies.

(B) To provide access to print instructional materials, including textbooks, in accessible media, free of charge, to blind or other persons with print disabilities in elementary schools and secondary schools, in accordance with such terms and procedures as the National Instructional Materials Access Center may prescribe.

(C) To develop, adopt and publish procedures to protect against copyright infringement, with respect to the print instructional materials provided under sections 612(a)(23) and 613(a)(6).

(3) *Definitions.*—In this subsection:

(A) *Blind or other persons with print disabilities.*—

The term 'blind or other persons with print disabilities' means children served under this Act and who may qualify in accordance with the Act entitled 'An Act to provide books for the adult blind', approved March 3, 1931 (2 U.S.C. 135a; 46 Stat. 1487) to receive books and other publications produced in specialized formats.

(B) *National Instructional Materials Accessibility Standard.*—The term 'National Instructional Materials Accessibility Standard' means the standard established by the Secretary to be used in the preparation of electronic files suitable and used solely for efficient conversion into specialized formats.

(C) *Print Instructional Materials.*—The term 'print instructional materials' means printed textbooks and related printed core materials that are written and published primarily for use in elementary school and secondary school instruction and are required by a State educational agency or local educational agency for use by students in the classroom.

(D) *Specialized Formats.*—The term 'specialized formats' has the meaning given the term in section 121(d)(3) of title 17, United States Code.

(4) *Applicability.*—This subsection shall apply to print instructional materials published after the date on which the final rule establishing the National Instructional Materials Accessibility Standard was published in the Federal Register. Establishment Deadline.

20 USC 1474

## Definitions from Other Statutes Referred to in IDEA 2004

### An Act to Provide Books for the Adult Blind (March 3, 1931, 2 U.S.C. 135a) and Title 36 of the Code of Federal Regulations

#### **36 C.F.R. § 701.10 Loans of library materials for blind and other physically handicapped persons.**

(a) *Program.* In connection with the Library's program of service under the act of March 3, 1931 (46 Stat. 1487), as amended, its National Library Service for the Blind and Physically Handicapped provides books in raised characters (Braille), on sound reproduction recordings, or in any other form, under regulations established by the Librarian of Congress. The National Library Service also provides and maintains reproducers for such sound reproduction recordings for the use of blind and other physically handicapped residents of the United States, including the several States, Territories, Insular Possessions, and the District of Columbia, and American citizens temporarily domiciled abroad.

(b) *Eligibility Criteria.*

(1) The following persons are eligible for such service:

(i) Blind persons whose visual acuity, as determined by competent authority, is 20/200 or less in the better eye with correcting glasses, or whose widest diameter of visual field subtends an angular distance no greater than 20 degrees.

(ii) Persons whose visual disability, with correction and regardless of optical measurement, is certified by competent authority as preventing the reading of standard printed material.

(iii) Persons certified by competent authority as unable to read or unable to use standard printed material as a result of physical limitations.

(iv) Persons certified by competent authority as having a reading disability resulting from organic dysfunction and of sufficient severity to prevent their reading printed material in a normal manner.

(2) In connection with eligibility for loan services "competent authority" is defined as follows:

(i) In cases of blindness, visual disability, or physical limitations "competent authority" is defined to include doctors of medicine, doctors of osteopathy, ophthalmologists, optometrists, registered nurses, therapists, professional staff of hospitals, institutions, and public or welfare agencies (e.g., social workers, case workers, counselors, rehabilitation teachers, and superintendents). In the absence of any of these, certification may be made by professional librarians or by any persons whose competence under specific circumstances is acceptable to the Library of Congress.

(ii) In the case of reading disability from organic dysfunction, competent authority is defined as doctors of medicine who may consult with colleagues in associated disciplines.

[39 Federal Register 20203, June 7, 1974, as amended at 46 Federal Register 48661, Oct. 2, 1981]

### Legislative Branch Appropriations Act, Public Law 104-197 1996 Chafee Amendment to the Copyright Law

#### **AN ACT**

*Making appropriations for the Legislative Branch for the fiscal year ending September 30, 1997, and for other purposes.*

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the Legislative Branch for the fiscal year ending September 30, 1997, and for other purposes, namely:*

*SEC. 316. Limitation on Exclusive Copyrights for Literary Works in Specialized Format for the Blind and Disabled.--*

(a) *In General*—Chapter 1 of title 17, United States Code, is amended by adding after section 120 the following new section:

SEC.121. Limitations on exclusive rights: reproduction for blind or other people with disabilities

(a) Notwithstanding the provisions of sections 106 and 710, it is not an infringement of copyright for an authorized entity to reproduce or to distribute copies or phonorecords of a previously published, nondramatic literary work if such copies or phonorecords are reproduced or distributed in specialized formats exclusively for use by blind or other persons with disabilities.

(b)(1) Copies or phonorecords to which this section applies shall--

(A) not be reproduced or distributed in a format other than a specialized format exclusively for use by blind or other persons with disabilities;

(B) bear a notice that any further reproduction or distribution in a format other than a specialized format is an infringement; and

(C) include a copyright notice identifying the copyright owner and the date of the original publication.

(2) The provisions of this subsection shall not apply to standardized, secure, or norm-referenced tests and related testing material, or to computer programs, except the portions thereof that are in conventional human language (including descriptions of pictorial works) and displayed to users in the ordinary course of using the computer programs.

(c) *For purposes of this section, the term—*

(1) *authorized entity* means a nonprofit organization or a governmental agency that has a primary mission to provide specialized services relating to training, education, or adaptive reading or information access needs of blind or other persons with disabilities;

(2) *blind or other persons with disabilities* means individuals who are eligible or who may qualify in accordance with the Act entitled 'An Act to provide books for the adult blind', approved March 3, 1931 (2 U.S.C. 135a; 46 Stat. 1487) to receive books and other publications produced in specialized formats; and

(3) *specialized formats* means Braille, audio, or digital text which is exclusively for use by blind or other persons with disabilities.

(b) *Technical And Conforming Amendment*—The table of sections for chapter 1 of title 17, United States Code, is amended by adding after the item relating to section 120 the following:

121. Limitations on exclusive rights: reproduction for blind or other people with disabilities.

### **Assistive Technology Act of 1998, Public Law 105-394**

Section 3 Definitions and Rule

(a) DEFINITIONS-- In this act...

(17) UNIVERSAL DESIGN- The term 'universal design' means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly usable (without requiring assistive technologies) and products and services that are made usable with assistive technologies.

## **Texas Statute Related to Special Instructional Materials**

### **Texas Administrative Code (TAC) Chapter 66 State Adoption and Distribution of Instructional Materials Subchapter D. Special Instructional Materials**

#### **§66.121. Special Instructional Materials.**

(a) All laws and rules applying to instructional materials provided to sighted pupils that are not in conflict with the Texas Education Code, §31.028, or this section shall apply to the distribution and control of Braille and large type instructional materials.

(b) Publishers shall grant permission to the state to have adopted instructional materials transcribed into Braille, large type, and audiotape without penalty or royalty.

(c) On or before the deadline specified in the schedule for the adoption process, each publisher of newly adopted instructional materials shall provide computerized files as specified in the proclamation to be used for *producing Braille or other versions of materials to be used by students with disabilities. All information contained in adopted instructional materials shall be included on the computerized files. Computerized files may be copied and distributed to a school district, upon request, for instructional use with a student with disabilities who requires the use of computerized instructional materials, pursuant to an individualized plan developed for the student under the Rehabilitation Act, §504; the Americans with Disabilities Act; or the Individuals with Disabilities Education Act. (Emphasis added)*

(d) The state shall make suitable student instructional materials available in large type. The commissioner of education shall develop specifications for large type instructional materials and notify publishers of student instructional materials suitable for production in large type. The publisher may elect to supply the large type materials, or the commissioner of education may enter into contracts for producing large type materials.

Source: The provisions of this § 66.121 adopted to be effective September 1, 1996, 21 TexReg 7236; amended to be effective October 12, 2006, 31 TexReg 8360.

# Using the SETT Framework to Level the Learning Field for Students with Disabilities

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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, the principles of the SETT Framework have been used to guide decisions about a much broader range of educational services, and also, with minor adjustments, have been successfully 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.

## What questions does the team ask in each section of the SETT Framework?

As playwright Eugene Ionesco said, “It’s not the answer that enlightens, but the question.” This is true of the questions in the SETT Framework because they are expected to guide and deepen discussion rather than be complete and comprehensive in and of themselves. As each of these questions is explored, it is likely that many other questions will arise. The team continues the exploration until there is consensus that there is enough shared knowledge to make informed, reasonable decisions that can be supported by data.

### 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 Environments

- 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

### **How is the S-E-T information used to think about Tools?**

In the SETT Framework, Tools include devices, services, strategies, training, accommodations, modifications –everything that is needed to help the student succeed. Some parts of the Tool system address the specific needs of the student, while parts of the Tool system may more specifically address issues in the Environments, such as access to the classroom, accessibility of instructional materials, support for staff that helps them develop and sustain learning environments that are inviting, challenging, and productive for ALL students, including those with the full range of abilities and special needs.

When determining what the needs to be in the system of Tools to support and increase the achievement of a student, team members analyze the information gathered on the Student, the Environments, and the Tasks to address the following questions and activities.

- 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 supports, devices, and services for the student would be like if there were such a system of Tools.
- Brainstorm specific Tools that could be included in a system that addresses student needs.
- Select the most promising Tools for trials in the natural environments.
- Plan the specifics of the trial (expected changes, when/how tools will be used, cues, etc.)
- Collect data on effectiveness.

### **Does use of the SETT Framework require using a specific process?**

No. It must have the basic elements of an effective process, like those mentioned above, but SETT is a FRAMEWORK, not a protocol requiring a specific set of implementation practices for validity. It is important, however, to keep in mind that consistent processes are required for effective implementation: therefore, people are encouraged to imbed the use of the SETT Framework into existing processes (such as referral, IEP development, implementation planning, evaluation, etc.) or include it in the development of new, more effective processes when required.

Because many people have requested examples of how the SETT Framework fits into various processes, brief guides and forms are being developed to provide a place to begin. Those guides and forms are known as **SETT Scaffolds**. In the building trade, a scaffold is used to support the integrity of a structure and also while it is being developed and also provide access to harder to reach parts of the structure. The SETT Scaffolds have a similar purpose. They provide teams with a place to begin and support the building of strong processes that are imbedded in or aligned to other processes that suit specific environments. During the development of personalized processes, the SETT Scaffolds help teams remember and attend to issues

that might be missed without guidance. SETT Scaffolds, however, may also be used more permanently if appropriate references are maintained.

### **What are the critical elements of using the SETT Framework?**

While the individual processes that a team uses to implement the SETT Framework will vary based on the particular phase of service delivery is being discussed and the particular challenges and facilitators of the environments in which it is being used, there are some critical elements that must ALWAYS be included.

They are:

**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.

**Collaboration:** The SETT Framework is 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.

**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.

**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 there-of.

**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 in important, but that line may well be a moving target.

**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 important factors are discussed.

**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 clearly reflects the shared knowledge of all involved.

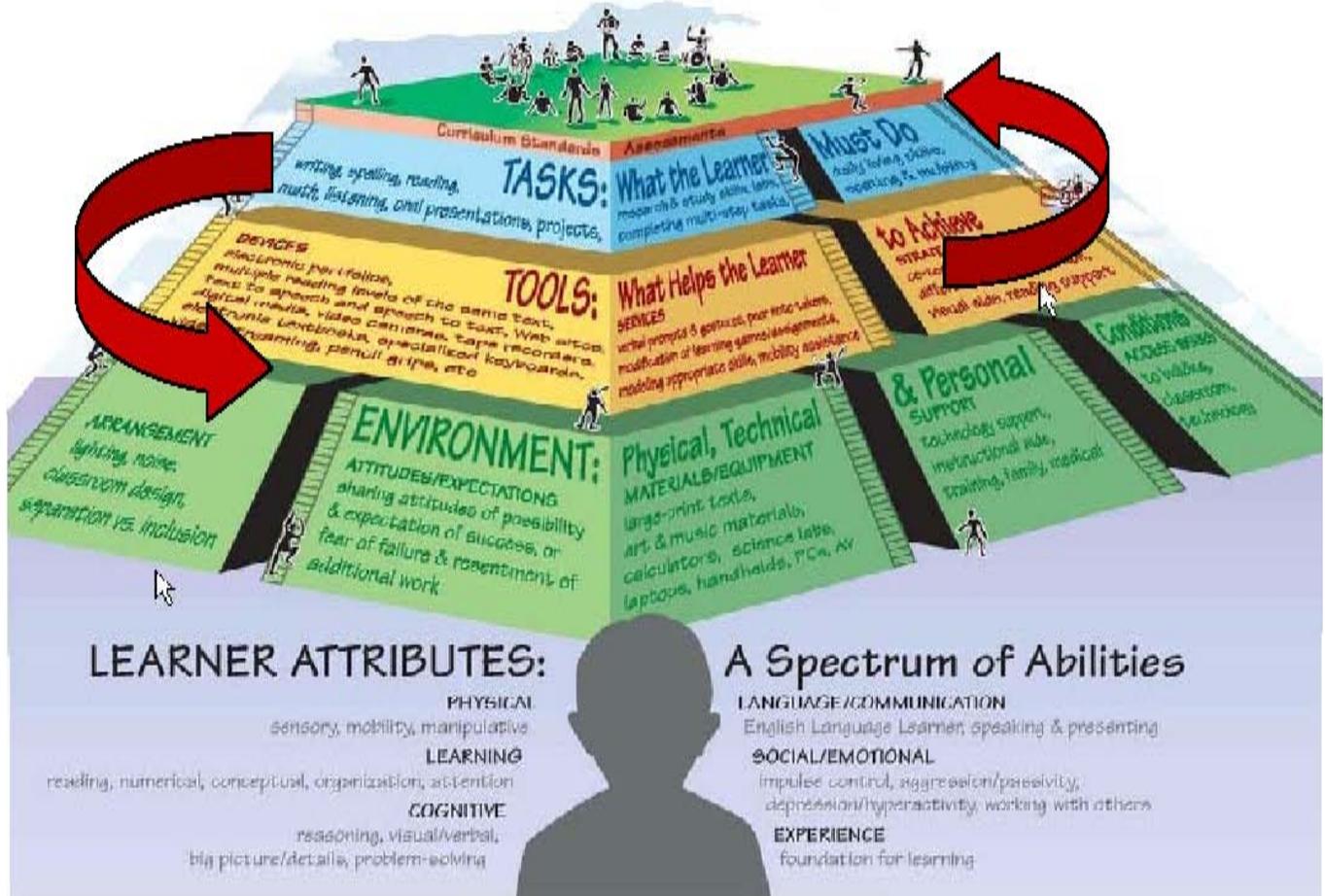
**Conclusion:**

The SETT Framework supports a thorough yet simple approach to assistive technology assessment and intervention. When data is gathered and organized with simplicity, a team's ability to effectively generate a range of Tools that can be used to support student achievement is greatly enhanced. It is much more likely that the selected system of tools will enhance the student's abilities to address the tasks in which he/she is expected to build competency, thus making the tools more valuable. Equally, it is more likely that the people supporting the student will see the relevancy of using the Tools as the student grows in competence, confidence, and independence, and thus, be more active in encouraging and supporting the student's achievement through its use.

Using the SETT Framework as a guide, it is possible, from the start, to address and overcome many of the obstacles which lead to abandonment or "under-implementation" of Tools. When the Environment and the Tasks are fully explored and considered, the lament "Well, I tried that but it didn't work" is much less likely to be heard. Instead, students, parents, and professionals should all rejoice at the increased opportunities for success which come when Tools—devices, services, strategies, accommodations, modifications, training, etc.—are well matched to the student's needs and abilities to perform the natural tasks which are part of living and learning in this world.

# Decision-Making Sequence

Develop shared understanding of the Student, learning Environments, and expected Tasks BEFORE Tools are considered or selected



## Implementation Sequence

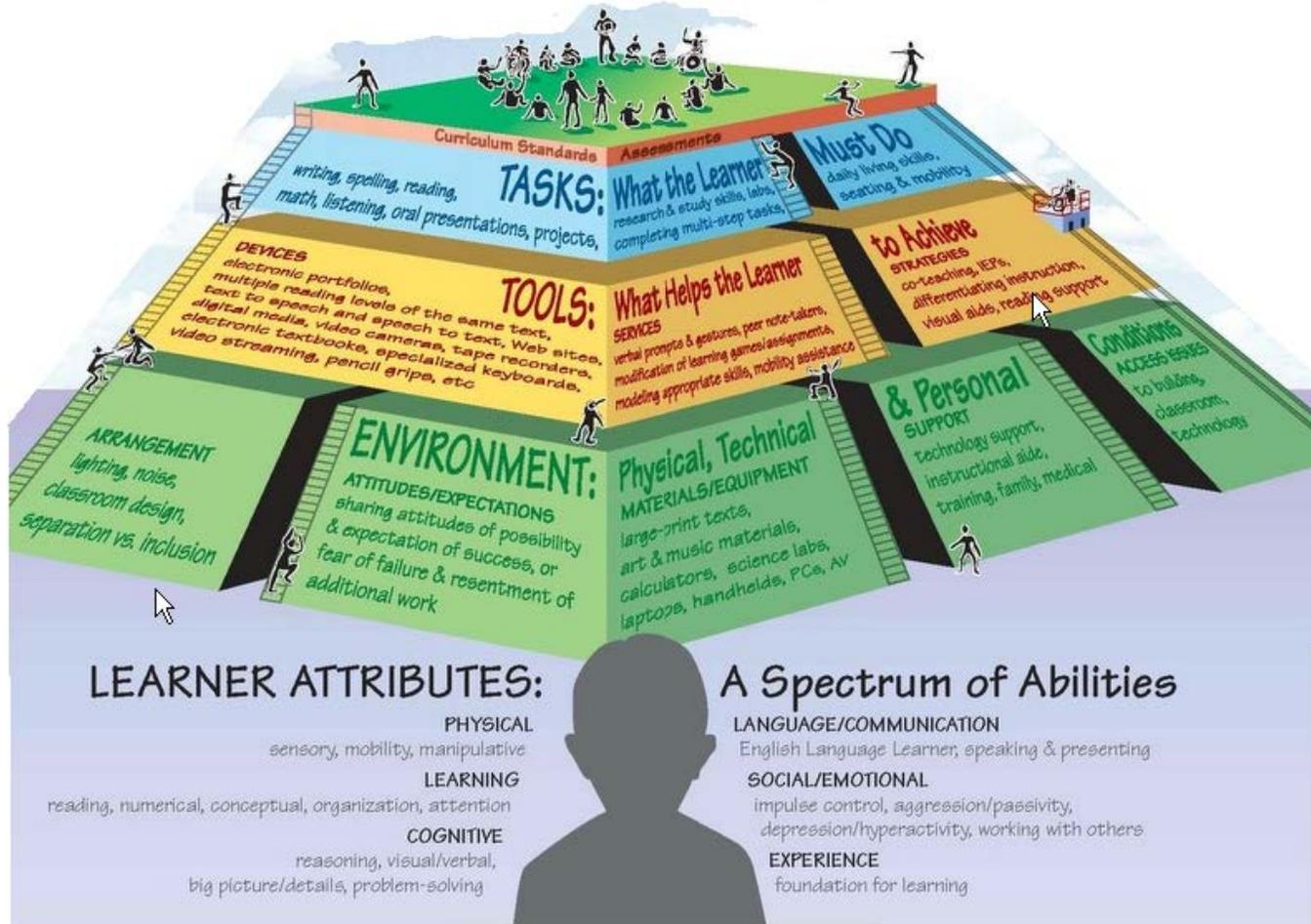
The Student in typical Environments uses Tools to accomplish Tasks

Leveling the Learning Field in *Threshold: Technology for All Learners*

[http://www.ciconline.com/AboutCIC/Publications/Archives/threshold\\_winter05.htm](http://www.ciconline.com/AboutCIC/Publications/Archives/threshold_winter05.htm)

# Implementation Sequence

## The Student in typical Environments uses Tools to accomplish Tasks



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## **QUALITY INDICATORS FOR ASSISTIVE TECHNOLOGY SERVICES RESEARCH-BASED REVISIONS, 2005**

The consideration of assistive technology (AT) devices and services is required during the development of every Individualized Educational Program (IEP) and every Individual Family Service Plan (IFSP) for children from birth to school age. The Individuals with Disabilities Education Act of 1997 (IDEA '97) requires that each team that plans for the education of a child with a disability document any AT devices and/or services the child may need. Despite this requirement, there has been no agreed upon description of high quality AT services by which schools can measure their compliance.

Since the summer of 1998, the Quality Indicators for Assistive Technology (QIAT) Consortium has focused its efforts on defining a set of descriptors that could serve as over-arching guidelines for quality AT services. The Consortium has attempted to develop descriptors that are applicable regardless of service delivery models. It is the belief of the Consortium that these descriptors can be used to guide:

1. School districts in the development and provision of quality AT services which are aligned to federal, state and local mandates;
2. AT service providers in the evaluation and improvement of their services;
3. Consumers of AT services in the selection of adequate AT services;
4. University faculty and professional development providers in the delivery of programs that develop knowledge and skills needed to offer quality AT services;
5. Leaders in the development of regulations and policies related to the use of AT in education.

When reviewing or using the Quality Indicators for Assistive Technology, it is important to be aware of some basic assumptions that pertain to all areas of QIAT. First, it is essential that ALL AT services developed and delivered by states or districts are legally correct according to the mandates and expectations of federal and state laws and are aligned to district policies. Second, AT efforts, at all stages, involve on-going collaborative work by teams which include families and caregivers, school personnel, and other needed individuals and service agencies. Third, multidisciplinary team members involved in AT processes are responsible for following the code of ethics for their specific profession.

Note: IDEA 2004 requires that AT devices and services be provided for all children with disabilities who need them. This applies to children from birth to twenty-one years of age. In the following document, when the term IEP is used, the reader can assume that the indicator could also apply to other service plans with minor modifications.

### **ABOUT THIS DOCUMENT**

**IN ORDER TO ALIGN SPECIFICALLY TO CONTENT OF THIS TRAINING MODULE, THIS DOCUMENT INCLUDES ONLY THE QUALITY INDICATORS FOR ASSISTIVE TECHNOLOGY IMPLEMENTATION AND QUALITY INDICATORS FOR EVALUATION OF EFFECTIVENESS. IS NOT INTENDED, HOWEVER, THAT ANY ONE AREA OF THE QUALITY INDICATORS BE USED INDEPENDENTLY OF THE OTHER AREAS CONTAINED IN QIAT.**



THE COMPLETE LIST OF QUALITY INDICATORS CONTAINED IN QIAT CAN BE DOWNLOADED FROM <http://www.qiat.org>

### Quality Indicators for Assistive Technology Implementation

Assistive technology implementation pertains to the ways that assistive technology devices and services, as included in the IEP (including goals/objectives, related services, supplementary aids and services and accommodations or modifications) are delivered and integrated into the student's educational program. Assistive technology implementation involves people working together to support the student using assistive technology to accomplish expected tasks necessary for active participation and progress in customary educational environments.

**1. Assistive technology implementation proceeds according to a collaboratively developed plan.**

Intent: Following IEP development, all those involved in implementation work together to develop a written action plan that provides detailed information about how the AT will be used in specific educational settings, what will be done and who will do it.

**2. Assistive technology is integrated into the curriculum and daily activities of the student across environments.**

Intent: Assistive technology is used when and where it is needed to facilitate the student's access to, and mastery of, the curriculum. Assistive technology may facilitate active participation in educational activities, assessments, extracurricular activities, and typical routines.

**3. Persons supporting the student across all environments in which the assistive technology is expected to be used share responsibility for implementation of the plan.**

Intent: All persons who work with the student know their roles and responsibilities, are able to support the student using assistive technology, and are expected to do so.

**4. Persons supporting the student provide opportunities for the student to use a variety of strategies—including assistive technology – and to learn which strategies are most effective for particular circumstances and tasks.**

Intent: When and where appropriate, students are encouraged to consider and use alternative strategies to remove barriers to participation or performance. Strategies may include the student's natural abilities, use of assistive technology, other supports, or modifications to the curriculum, task or environment.

**5. Training for the student, family and staff are an integral part of implementation.**

Intent: Determination of the training needs of the student, staff, and family is based on how the assistive technology will be used in each unique environment. Training and technical assistance are planned and implemented as ongoing processes based on current and changing needs.

**6. Assistive technology implementation is initially based on assessment data and is adjusted based on performance data.**

Intent: Formal and informal assessment data guide initial decision-making and planning for AT implementation. As the plan is carried out, student performance is monitored and implementation is adjusted in a timely manner to support student progress.

**7. Assistive technology implementation includes management and maintenance of equipment and materials.**

Intent: For technology to be useful it is important that equipment management responsibilities are clearly defined and assigned. Though specifics may differ based on the technology, some general areas may include organization of equipment and materials; responsibility for acquisition, set-up, repair, and replacement in a timely fashion; and assurance that equipment is operational.

**COMMON ERRORS**

1. Implementation is expected to be smooth and effective without addressing specific components in a plan. Team members assume that everyone understands what needs to happen and knows what to do.
2. Plans for implementation are created and carried out by one IEP team member.
3. The team focuses on device acquisition and does not discuss implementation.
4. An implementation plan is developed that is incompatible with the instructional environments.
5. No one takes responsibility for the care and maintenance of AT devices and so they are not available or in working order when needed.
6. Contingency plans for dealing with broken or lost devices are not made in advance.

**Quality Indicators for Evaluation of the Effectiveness of Assistive Technology**

This area addresses the evaluation of the effectiveness of the AT devices and services that are provided to individual students. It includes data collection, documentation and analysis to monitor changes in student performance resulting from the implementation of assistive technology services. Student performance is reviewed in order to identify if, when, or where modifications and revisions to the implementation are needed.

**1. Team members share clearly defined responsibilities to ensure that data are collected, evaluated, and interpreted by capable and credible team members.**

Intent: Each team member is accountable for ensuring that the data collection process determined by the team is implemented. Individual roles in the collection and review of the data are assigned by the team. Data collection, evaluation, and interpretation are led by persons with relevant training and knowledge. It can be appropriate for different individual team members to conduct these tasks.

**2. Data are collected on specific student achievement that has been identified by the team and is related to one or more goals.**

Intent: In order to evaluate the success of assistive technology use, data are collected on various aspects of student performance and achievement. Targets for data collection include the student's use of assistive technology to progress toward mastery of relevant IEP and curricular goals and to enhance participation in extracurricular activities at school and in other environments.

**3. Evaluation of effectiveness includes the quantitative and qualitative measurement of changes in**

**the student's performance and achievement.**

Intent: Changes targeted for data collection are observable and measurable, so that data are as objective as possible. Changes identified by the IEP team for evaluation may include accomplishment of relevant tasks, how assistive technology is used, student preferences, productivity, participation, and independence, quality of work, speed and accuracy of performance, and student satisfaction, among others.

**4. Effectiveness is evaluated across environments during naturally occurring and structured activities.**

Intent: The team determines the environments where the changes in student performance are expected to occur and prioritizes appropriate activities for data collection in those environments.

**5. Data are collected to provide teams with a means for analyzing student achievement and identifying supports and barriers that influence assistive technology use to determine what changes, if any, are needed.**

Intent: Teams regularly analyze data on multiple factors that may influence success or lead to errors in order to guide decision-making. Such factors include not only the student's understanding of expected tasks and ability to use assistive technology but also student preferences, intervention strategies, training, and opportunities to gain proficiency.

**6. Changes are made in the student's assistive technology services and educational program when evaluation data indicate that such changes are needed to improve student achievement.**

Intent: During the process of reviewing evaluation data, the team decides whether changes or modifications need to be made in the assistive technology, expected tasks, or factors within the environment. The team acts on those decisions and supports their implementation.

**7. Evaluation of effectiveness is a dynamic, responsive, ongoing process that is reviewed periodically.**

Intent: Scheduled data collection occurs over time and changes in response to both expected and unexpected results. Data collection reflects measurement strategies appropriate to the individual student's needs. Team members evaluate and interpret data during periodic progress reviews.

**COMMON ERRORS**

1. An observable, measurable student behavior is not specified as a target for change.
2. Team members do not share responsibility for evaluation of effectiveness.
3. An environmentally appropriate means of data collection and strategies has not been identified.
4. A schedule of program review for possible modification is not determined before implementation begins

