The SETT Framework: Critical Areas to Consider When Making Informed Assistive Technology Decisions

Joy Smiley Zabala, M.Ed.
Region IV Education Service Center

As the language of the Individuals with Disabilities Education Act (IDEA, P.L. 101-476) regarding assistive technology becomes widely known, much attention is being focused on school districts and the procedures and practices which school personnel use in arriving at decisions regarding the provision of assistive technology devices and services. Which students need assistive technology? What kind of technology is needed? Who is involved in making these decisions? What sort of data should be gathered to aid in the decision-making process? Much discussion has been generated about each of these questions. Though there are few quick and easy answers to any of these questions, the first three are generally addressed in some way by a combination of federal law and best practices in fields related to assistive technology. The answer to the fourth question is evolving and is the subject of this discussion.

Which students need assistive technology?...those who need assistive technology in order to receive a free, appropriate public education. (The first "Big Question" in Assistive Technology today, however, is "what constitutes need?". The definition of assistive technology is all-inclusive and its limitations have yet to be determined in the courts.)

What kind of technology is needed?.. this must be determined on a case by case basis related directly to what is needed for a student to receive FAPE. (This is the second of the "Big Questions" in Assistive Technology and is equally undefined by legal action.)

Who is involved in making these decisions?... the student's IEP team, with recommendations from members of a flexible multidisciplinary team which includes the student, family members and/or caregivers, and appropriate educational and related services professionals. This team may also include other people who are significantly involved in the students education and well-being such as medical staff and peers.

What sort of data should the multidisciplinary team gather to aid in the decision-making process?... information about the Student, the Environment, the Tasks, and the Tools.

Are there common goals and expectations which apply to ALL students,
regardless of ability, level, setting, or course of study? Indeed there must be! ALL students must have the opportunity to increase in competence, confidence, and independence to whatever degree is possible in whatever area is being studied. Further, each student must be expected to move toward these common underlying goals as well as the specific goals in any course of study through communication, participation, and productivity in activities which foster the achievement of identified goals. When students have disabilities, particularly in areas which affect communication - written, oral, or both - these goals can be hard to keep in mind and even harder to reach... especially without the right tools and supports!

In the 1993 National Council on Disability's report to the President and Congress of the United States, it was estimated that seventy-five percent of children with disabilities could remain in regular class if supplied with the appropriate assistive technology. Additionally, it was estimated that appropriate assistive technology could lower the level of school related services required by forty-five percent of these children. Long before these figures were published, professionals dedicated to meeting the educational and life goals of students with disabilities worked to identify and provide useful augmentative communication and assistive technology devices with features which match the student's needs and abilities. Decisions were made, devices acquired, and training provided on operational techniques and strategies for effective use. There were high expectations that, with this approach, positive changes would occur on an increasingly regular basis; however, with frustrating frequency, what continues to be seen is students who are marginally involved and devices which are underutilized or abandoned. Why is this happening?

Though the needs and abilities students and the features of devices can be well-matched, tools are frequently selected with insufficient up-front attention to the environment(s) in which the tool is expected to be used, and to the naturally occurring tasks in which the person is expected to participate within the identified environment(s). It is difficult to choose appropriate tools if there is not a clear awareness of where and how they are to be used! Most of us would consider it ridiculous to choose a tool at a hardware store without first considering the task which was to be accomplished with that tool. And yet, assistive technology tools, including augmentative communication devices are often chosen in just that way.

To make effective assistive technology decisions, who should be involved in the decision-making process and what information should be included?...information about the Student, the Environment, the Tasks, and the Tools must be gathered and thoughtfully considered, revised, and acted upon by a multidisciplinary team with full participation from the person and his/her personal and professional supporters. To support this belief, the SETT...
Framework has been developed. The SETT Framework considers, first, the Student, the Environment(s) and the Tasks required for active participation in the activities of the environment, and, finally, the system of Tools needed for the student to address the tasks.

It is important to realize that this outline of questions to consider in each area of the SETT Framework has been developed only as a guideline and a place to start. Teams gathering and acting upon this data may wish to seek answers to numerous additional questions. In virtually every case, however, any questions which arise will relate to one of the areas of the SETT Framework.

The STUDENT

· What does the Student need to do?

· What are the Student's special needs?

· What are the Student's current abilities?

The ENVIRONMENT

· What materials and equipment are currently available in the environment?

· What is the physical arrangement? Are there special concerns?

· What is the instructional arrangement? Are there likely to be changes?

· What supports are available to the student?

· What resources are available to the people supporting the student?

The TASKS (Be as specific as possible)

· What naturally occurring activities take place in the environment?

· What is everyone else doing?

· What activities support the student's curricular goals?

· What are the critical elements of the activities?

· How might the activities be modified to accommodate the student's special needs?

· How might technology support the student's active participation in those activities?

The TOOLS
- What no tech, low tech, and high tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments?

- What strategies might be used to invite increased student performance?

- How might these tools be tried out with the student in the customary environments in which they will be used?

Using SETT appropriately requires collaboration and promotes team-building by using clearly understood language and valuing input from all perspectives. As data is organized and prioritized within the SETT Framework, it promotes logical thinking by all team members and can be an effective consensus-building tool. As environments and tasks are explored, the links between assessment and intervention become strong and clear, as does the need to develop a system of tools which will enhance the student's abilities to address the tasks in which he/she is expected to build competency. In addition to developing a system of tools valuable to the student, participation in developing the SETT increases the likelihood that the people supporting the student will see the relevancy of the technology and will be more active and persistent 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 marginal student inclusion and device abandonment. When the Student, the Environment and the Tasks are fully explored and considered, laments like "Well, the device is here, now what do I do with it?" or "He has it, but he won't use it!" should seldom be heard. Instead, students, parents, and professionals should all rejoice at the increased opportunities for success which come with assistive technology which is well matched to the student's needs and abilities to perform the natural tasks which are part of living and learning in this world.

References:


National Council on Disability. *Study on the Financing of Assistive Technology*