## **Closing The Gap**

**Computer Technology** in Special Education and Rehabilitation

# Ready, SETT, go! Getting started with the SETT framework

By Joy Smiley Zabala, Ed.D, ATP

Whenever I open the Closing The Gap Resource Directory, I am transported back to the first time I entered a Closing The Gap exhibit hall. The year was 1987, and just inside the door I was stopped in my tracks, for there in front of me was a man using exactly the tool I was imagining for a student...and I didn't even know it existed! It was the coolest tool I had ever seen!

can probably find it here!

Everything you see will be "cool." However, the reality is that, though each one is a cool tool, no one of them is "cool" for everyone. Making the "right" decision can be a daunting task. Making the "wrong" decision can be very costly in a variety of ways - unrealized expectations of individuals and families, unproductive use of professional time,

ineffective use of limited resources, high rates of device abandonment or underutilization, and most important, the irreclaimable time lost for living, education, employment, or recreation by the individual whose functional capabilities were not increased, improved, or maintained by the technology.

So the questions arise... How can you sort through the plethora of "cool tools" to find the ones that make up the system of tools that is "right" for a specific individual? How can you select tools that should be included in a make up to the array of tools needed to increase the universal accessibility of a home, school, workplace, community, or any other environment?

It has been observed that even when the needs and abilities of students/individuals and the features of systems of assistive technology tools are well-matched, high rates of abandonment occur when tools are selected without up-front attention to the environments in which tools will be used, and the naturally occurring tasks within those environments. SETT - an acronym for Student, Environments, Tasks, and Tools was developed to help collaborative school-based teams create Student-centered, Environmentally useful, and Tasks-focused Tool systems. However, with minor adjustments, it has proven useful at all level of service provision, from early intervention through adult

The SETT Framework provides an organizational structure that enables all involved to participate

actively and with confidence in assistive technology decision making throughout all phases of service delivery. Use of the SETT Framework helps create an atmosphere in which the information, skills, observations, and thoughts of individuals, families, and professionals are valued and respected. Collaborative team members seek to build a shared vision of what technology might be needed and how it will be used, by first building a common understanding of the student, the environments, and the tasks. The questions and comments below are intended to guide discussion but are not complete and comprehensive. As these questions are explored, other questions arise. Conversation continues until there is consensus that there is enough shared knowledge to make an informed, reasonable decision that can be supported by data.

**The Student** - Information specifically related to the student.

When thinking about the Student, four small questions may yield reams of data: 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?) What are the student's special needs that contribute to these concerns? What are the student's current abilities related to these concerns? What are the student's interests? The questions are intentionally broad, so that they do not preclude anyone or any possible solutions at the outset.

When considering what the student needs to be able to do, it is

As you go through this Directory, you will find a huge array of tools that, when combined with other strategies, can improve, increase or maintain the functional capabilities of individuals with disabilities, and increasingly, their non-disabled peers. You will see tools for communication, productivity, participation - the latest and greatest, the tried and true, the smallest, the most powerful, the most focused and specific, the lowest tech, the highest tech, hardware, software, strategic guides, and a host of supporting materials - tools you are aware of, and to your delight - tools that, like me in 1987, you never knew existed. You name it and you will find it here. In fact, you do not even have to name it... if you can describe it, you

507-248-3810

507-248-3294

Web site

**Address** 

526 Main St.

Henderson, MN 56044

P.O. Box 68

Phone

Fax

www.closingthegap.com

info@closingthegap.com

This article originally appeared in the February / March 2005 issue of Closing The Gap, Vol. 23, No. 6.

Check us out on-line:

Copyright © Closing The Gap, Inc. All rights reserved.

www.closingthegap.com/

fine to be global. "Talk" or "write" or "move about" may be appropriate at this point, though some elaboration is desirable. Later, in the Tasks section, these issues will be explored more deeply, as it would be useless to pursue "talking" if "about what?" could not be defined. The primary goal of this question is to invite active, nonjudgmental sharing to begin to establish consensus among group members about what it is really important for this student to be able to do. The question about the student's special needs is designed to generate conversation about the barriers which keep this student from doing whatever needs to be able to be done.

When exploring current abilities, it is important to keep in mind that, no matter how great the needs, everyone has abilities which can be built upon and enhanced – and not necessarily replaced.

<u>The Environments</u> - Information related to anything or anyone around the student in places where the technology is expected to be used.

While it is appropriate and central to focus on the student and match tools to the student's needs and disabilities, it is just not enough - otherwise we would not have the continuing high levels of underutilization and abandonment that we see all over the country. Although many teams are becoming increasingly aware that it is important to think about the environments and the tasks that are required in those environments, many teams only take a cursory glance at those areas. The questions about the environments need to be as detailed as possible, never just "the 4th grade classroom" (for example). There is SO MUCH more to each of the environments than that! How many students? What is the physical layout? How much support is available from and to staff? What materials and equipment are being used by other students? Are there physical access issues? What services are being provided? What are the attitudes and expectations of others in the environments? AND, certainly, the student does not LIVE in the 4th grade classroom...

What about other school environments like the cafeteria and the playground? What about home environments in which the student may need to use technology? What about community environments in which the student may need to practice skills that will assist in mastery of goals?

<u>The Tasks</u> – Information about what actually happens in the environments.

The tasks are the actual activities that take place that will enable the student to achieve educational goals and be an active participant in the daily life surrounding them – for adults, the tasks may be vocational or have some other focus. Tasks are different than the "functional areas of concern" discussed in the Student area (for example, reading, moving about, communicating, seeing, etc.).

Tasks are what is actually HAPPENING – the specifics of the functional demands for each particular environment. An example of a functional area of concern might be "reading" and the goal might be to "read of grade level". But, when it comes to tasks, nobody ever says, "Alright students, its time to read on grade level." The tasks are EXACTLY what students will need to do IN THE SPECIFIC ENVIRONMENTS to learn to read on grade level. The reason this is important is that, although goals may be similar from environment to environment, there may be quite a wide range of tasks that will take place to help students reach the goals.

The following example provides insight into the importance of exploring specific environments and tasks before attempting to select tools:

There are two students with the same disability who have written productivity issues caused by the same fine motor issue that impedes their ability to hold a pencil securely over a period of time. If discussion focused only on the students and the tools, it could be concluded that the same tools would be required for each student. However, what if one of the students was in the first grade and the other was a junior in high school? Clearly the written productivity TASKS are immensely different for the two students.

The first grader has to fill in blanks, draw lines, write words and letters and, over the year, an increasing number of sentences and short paragraphs. This student's needs may be met with an appropriate pencil grip and some pacing of tasks. Even though the productivity expected at this grade level does not require that the student use a more complex tool at this time, it may also be of benefit for the student to become familiar with keyboarding and word processing by frequently using the classroom computer that he shares with other class members.

The high school student, on the other hand, is likely to have a significant number of lengthy writing tasks throughout his day. Each of those tasks may require more endurance than the student has. Although the pencil grip would also be an important part of this student's tool system, he would very likely need frequent access to a keyboarded device (or devices) that he could use in multiple environments to complete his written assignments. Thus, it is clear to see why selecting tools based only on the student's special needs or disability category is not likely to lead to expected achievement.

### The Tools

Finally, the SETT Framework addresses the area where most people would like to begin. The SETT Framework, leads teams to the main question, "What needs to be included when developing a system of assistive technology tools for a student with these needs and abilities, doing these tasks in these environments?" All other questions merely gather and organize the information that is needed to arrive at answers to this question. It is hoped that a team using the SETT Framework to arrive at this point, does so with a clearer understanding of what tools should be sought. What a difference to begin seeking tools with a clear idea of who is going to use them, where, and for what!

In the SETT Framework, tools include devices, services and strategies – everything that is needed to help the student succeed. They are "no tech" strategies as well as low tech and high tech devices and supports. They are systems of tools working in combination to assist a student in moving forward. More often than we would like to think – even when ongoing training has been provided – a laptop computer may fail to meet expectations because there is no extension cord available when the battery runs low. In a well-thought-out system, the extension cord would have been included.

It is expected that the SETT Framework will be useful during all phases of assistive technology service delivery, from device selection through use and evaluation of effectiveness. 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 promotes teambuilding and builds consensus by using clearly understood language, requiring broad-based participation 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 consensusbuilding 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, participating in a process using the SETT Framework 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, general dissatisfaction 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 systems that 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.

Ready?...Gather the Team... SETT? Explore the Student, Environments, and Tasks... Go! Pick up the CTG Resource Directory and search for cool Tools that are student-centered, environmentally useful, task focused and the race to achievement is on!

For more information, contact Dr. Joy Zabala; E-mail: <joy@joyzabala.com> Web site: <www.joyzabala.com>.