SETT – A Framework for Making Informed Decisions About Inclusive Technologies

Greg O'Connor
Education Services Manager, Spectronics

> *Technology is a tool that serves a set of education goals, and if we don't think about what we want the technology for the first, we end up with technology driven solutions that have very little impact on the lives of children in our educational system*

<div align="right">Linda Roberts, U. S. Department of Education</div>

Introduction

The last 10 years have seen a dramatic increase in the growth and development of inclusive technology tools[1]. In 2003, for example, there were an estimated 25,000 inclusive technology products available (Edyburn 2005), and every year since there has been an increasing number of new technology tools or upgrades of existing tools.

As IEP teams meet to consider inclusive technology options, team members are faced with either an overwhelming array of choices or face the *assistive technology paradox*, "How do I know what is available if I don't know what is available?" (http://wiki.literacytent.org/index.php/AleAssistiveTechnology).

The SETT Framework provides a process to discuss and analyse a student's' abilities and identify specific targeted areas where the student requires additional support to participate independently in learning activities.

SETT Framework

The SETT Framework, developed by Joy Zabala (2005), is an organisational instrument to help collaborative teams create student-centred, environmentally useful, and tasks-focused tool systems that foster the educational success of students with disabilities.

SETT is an acronym for Student, Environment, Task and Tools. Key questions are asked in each area to in order to guide teams in gathering data and information to support the consideration and implementation of appropriate inclusive technologies. These questions provide a framework and not a protocol, as they guide the discussion and provide a vehicle for the team to collaborate and form a consensus on 'where to from here'.

---

[1] The term 'inclusive technology' is often used interchangeably with 'assistive technology'. See http://anzatresearch.wikispaces.com/What+is+Assistive+Technology%3F for a more detailed discussion.

STUDENT – Examples of guiding questions:

- What are the student's current abilities?
- What are the student's special needs?
- What are the functional areas of concern?
- What are the other students doing that this student needs to be able to do?
- What does the student need to be able to do that is difficult or impossible to accomplish independently at this time?

A useful resource to support these questions from a student point of view is Bowser, G., & Reed, P. (2001). Hey Can I Try That? A Student Handbook for Choosing and Using Assistive Technology. This is available from www.educationtechpoints.org/manuals-materials/hey-can-i-try-that

ENVIRONMENTS – Examples of guiding questions:

- What activities take place in the environment?
- Where will the student participate—classroom, home, community, therapy?
- What is the physical arrangement?
- What activities do other students do that this student cannot currently participate in?
- What assistive technology does the student have access to or currently use?

TASKS – Examples of guiding questions:

- What specific tasks occur in the environment?
- What activities is the student expected to do?
- What does success look like?

TOOLS – Examples of guiding questions:

Tools are devices and services—anything that is needed to help the student participate and benefit from.

- Are the tools being considered on a continuum from no/low to high-tech?
- Are the tools student centred and task oriented and reflect the student's current needs?
- Are tools being considered because of their features that are needed rather than brand names?
- What is the cognitive load required by the student to use the tool?
- What are the training requirements for the student, family and staff?

When an inclusive technology solution is identified teams need to consider a number of factors. Does this

tool address the tasks the student is experiencing difficulty with? Does it reinforce least restrictive options? Is it simple to use and acquire? Will it be accepted by student, family, and peers? Will the student require a range of strategies for an individual task? Were no/low-tech options also considered?

Finally, a trial and evaluation of the inclusive technology selected is undertaken.

The SETT Framework is not a one off event but an ongoing framework for collaborative teams to gather information and ensure that the most appropriate inclusive technology tools are being utilised by the student. As a result there needs to be ongoing Re-SETTing, where teams need to return to the SETT questions at least annually. It is a matter of keeping decision-guiding information accurate, up to date, and clearly inclusive of the shared knowledge of all involved (Zabala, 2002)

The SETT Framework has been adopted at a local, state and national level around the world. In New Zealand, the Ministry of Education has embedded the SETT Framework into its national Assistive Technology Guidelines. These can be found at http://tinyurl.com/SETTNZ The Wisconsin Assistive Technology Initiative (WATI), a statewide initiative in the United States, has produced a document entitled *Assessing Students' Needs for Assistive Technology (ASNAT) 5th Edition* which utilises the format for group decision-making and the emphasis on utilizing the decision making process for assistive technology assessment based on the SETT framework. This can be found at http://www.wati.org/?pageLoad=content/supports/free/index.php .

Conclusion

The SETT Framework is an essential guide to ensuring informed decisions are made when considering and implementing inclusive technologies for students in schools. The framework of questions is intended to catch all the ideas and possible solutions provided by a collaborative team. The framework promotes a process that is student centred, flexible, allows for shared knowledge and collaboration, incorporates multiple perspectives and is ongoing. Getting SETT is just the beginning!

Resources and Web links

- Bowser, G., & Reed, P. (2001). Hey Can I Try That? A Student Handbook for Choosing and Using Assistive Technology: Available from www.wati.org/products/pdf/heycanitrythat.pdf
- Personal Choices: Finding Low and Mid Tech Tools That Work For You - http://www.onionmountaintech.com/files/PersonalChoices.pdf

- Zabala, J. S. (2005). Using the SETT Framework to Level the Learning Field for Students with Disabilities. Retrieved 26/02/08, from http://www.ode.state.or.us/initiatives/elearning/nasdse/settintrogeneric2005.pdf
- Assistive Technology Training Online Project (ATTO): Assessing Student Need - http://atto.buffalo.edu/registered/ATBasics/Foundation/Assessment/index.php
- SETT Framework - http://sweb.uky.edu/~jszaba0/JoySETT.html
- NZ Ministry of Education. Assistive Technology Guidelines: Supporting Students with Special Education Needs . A guide to support schools and specialists to provide quality assistive technology services. http://www.minedu.govt.nz/web/downloadable/dl7576_v1/7576-assistive-technology-guidelines-apr-08.pdf
- WATI - http://www.wati.org/?pageLoad=content/supports/free/index.php
- AT Cycle, MATN Online – http://olms.cte.jhu.edu/olms/output/page.php?id=9514
- TexhMatrix – www.technatrix.org
- IT for AT - http://www.paec.org/fdlrstech/itforat/start_here.html
- Onion Mountain Technology - http://www.onionmountaintech.com/assistive.php

References

Edyburn, D. (2005). Special education technology competencies. Special Education Technology Practice, 7(1), 16-27.

Edyburn, D. L. (2008). Assistive Technology Consideration. Special Education Technology Practice, 10, 1, 16-18.

Marino, M. T., Marino, E. C., & Shaw, S. F. (2006). Making informed assistive technology decisions for students with high incidence disabilities. Teaching Exceptional Children, 38(6), 18-25.

Peterson-Karlan, G. R. (2003). An administrative consideration of the AT "Consideration" mandate. Paper presented at the Fifth Annual Fall Conference of the Illinois Alliance of Administrators of Special Education, Tinley Park, IL. Available from http://www.seat.ilstu.org/resources/2003.shtml

Wissick, C. A., & Gardner, J. E. (2008). Conducting Assessments in Technology Needs: From Assessment to Implementation. Assessment for Effective Intervention, 33(2), 78-93.

Zabala, J. S. (2000). Setting the stage for success: Building success through effective selection and use of assistive technology systems. Retrieved 12/6/06 from www.ldonline.org/article/5874?theme=print

Zabala, J. S. (2002). A Brief Introduction to the SETT Framework. Retrieved from http://www.sbac.edu/~ese/AT/referralprocess/SETTUPDATE.pdf

Zabala, J. S. (2005). Ready, SETT, go! Getting started with the SETT framework. Closing the Gap, 23(6).

Zabala, J. S. (2005). Using the SETT Framework to Level the Learning Field for Students with Disabilities. Retrieved 26/02/08, from www.ode.state.or.us/initiatives/elearning/nasdse/settintrogeneric2005.pdf

Watts, E.H., O'Brian, M., & Wojcik, B.W., (2004) Four models of assistive technology consideration: How do they compare to recommended educational assessment practices? Journal of Special Education Technology, 19, 1. Retrieved 9/7/07 from: http://jset.unlv.edu/shared/volsmenu.html

This overview of the SETT Framework is available online from www.spectronicsinoz.com/blog
For more information contact Greg O'Connor, grego@spectronicsinoz.com