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Improving Special Educational Needs Student Engagement in the Classroom: Considering Assistive Technology Through the SETT Framework



By **Wong Meng Ee**

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According to the United States Individuals Disability Education Act, assistive technology (AT) is defined as “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customised, that is used to increase, maintain, or improve functional capabilities of a child with disability” (IDEA, 2004).

AT is widely accepted to be an enabler to support students with disabilities to compensate in areas where their impairments may interfere in a variety of activities including positioning, mobility, communications, computer and instructional access (Bryant & Bryant, 2003). With so many possible AT devices to meet the diverse needs of our students with special educational needs, how can we proceed to plan for a systematic approach to consider AT for our students

especially when we know educators do not always use frameworks to guide them? (Wong & Lee, 2021).

SETT Framework

SETT is an acronym for Student, Environments, Tasks, and Tools developed to help collaborative school-based teams create Student-centered, Environmentally useful, and Tasks-focused Tool systems (Zabala, 2005).

The SETT Framework provides an organisational structure that enables stakeholders to actively participate in AT consideration. Use of the SETT Framework brings together information, skills, observations, and the contributions from individuals, families, and professionals to better inform the factors set out in SETT. Team members work collaboratively to identify appropriate technology by first understanding the student, the environments, and the tasks. The questions and comments highlighted in each section are not conclusive but intended to generate present and further discussion as unfolding questions arise. The conversation continues until the team is satisfied that adequate information

and shared knowledge has been sought where informed and reasonable decision can be supported by data (Zabala, 2005).

Student

- » 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 strengths?
- » What are the student's interests?

Environment

- » What materials and equipment are currently available in the environment?
- » What is the physical arrangement? Are there special concerns?
- » What is the instructional schedule?
- » What supports are available to the student?
- » What resources are available to the people supporting the student?
- » What are the attitudes and expectations of others in the environments?



Task

- » What does the student need to do?
- » What activities take place in the environment that support the student's curriculum?
- » What are the critical elements of the activities?
- » How might the activities be modified to accommodate the student's special needs?

Tools

- » How might technology support the student's active participation in those activities?
- » What strategies might be used to improve student performance?
- » What no-tech, low-tech, and/or high-tech options should be considered for this student in these environments?

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