# PROMOTING ACTIVE ENGAGEMENT FOR CHILDREN WITH SPECIAL NEEDS: A TPE MODEL

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**Abstract:**

Engagement is crucial for all students in any learning. Attention wanes when children are disengaged and learning will decrease. Children with special needs will find it difficult to engage with teachers and activities due to factors such as inattention, slow processing speed, boredom, and others. Hence, the author of this paper proposed a TPE model which consists of three components (1) Task (T), (2) People (P), and (3) Environment (E). These components have a direct impact on students' engagement in their learning. Additionally, suggested checklists on how these components can be used as guidelines to help teachers plan their lessons were also included. It is hoped that this model serve to promote active engagement in children with special needs in their learning so as to enhance motivation, attention, and participation.

**Keywords:** engagement, children, special needs, classroom management

## Introduction

In the beginning life of their year, children begin to explore and learn the world around them. When a baby watches and is fascinated by the fingers moving within his/her visual field, or a toddler carefully scoops sand from the shovel and pours it into a bucket with eyes wide open for the first time, they are seeing engagement at its best. Exploration, curiosity, persistence, and enthusiasm are some of the demonstrative behaviours children display if they are highly engaged with anything around them.

Attention wanes when students are disengaged in class. When attention wanes, learning decreases. There has been empirical evidence (Brown, Roedigger & McDaniel,

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2014; Benassi, Overson, & Hakala, 2014) to support that attention results in active engagement, thereby resulting in positive academic achievement. In classroom settings, engagement typically describes both psychological and behavioural characteristics (Brewster & Fager, 2000; Finn & Rock, 1997; Marks, 2000). Psychologically, engaged students are intrinsically motivated by curiosity, interest, and enjoyment, and are likely to want to achieve their own personal goals. Behaviourally, the highly engaged child demonstrates concentration, investment, enthusiasm, and effort.

It should also be noted that students who are on tasks may not be highly engaged. But a highly engaged student is definitely on task. Hence, there is a distinctive difference between being engaged and being on tasks. Students who are on task may perform whatever the teachers instruct them what to do and they usually are not highly motivated, inquisitive, and engage in problem-solving. However, students who have high level of engagement use their mind, body, and heart to perform the assigned tasks. According to Schlechty (2001), engagement is defined as:

> *"Engagement is active. It requires that students be attentive as well as in attendance; it requires the student to be committed to the task and find some inherent value in what he or she is being asked to do. The engaged student not only does the task assigned but also does it with enthusiasm and diligence. Moreover, the student performs the task because he or she perceives the task to be associated with a near-term end that he or she values. (2001, p. 64)."*

How then does engagement have an impact on children's learning? What is the importance of promoting engagement during the course of teaching in children's learning journey?

**Engagement and its Importance to Children with Special Needs**

Engagement, or the ability to tune in, is crucial for learning to take place. It can also refer to the degree of attention, curiosity, interest, motivation, and passion that students reveal when they are learning. In other words, children tend to be more inquisitive or inspired to learn when they are engaged with the assigned tasks given by the teachers. Conversely, students will be bored and uninterested if they are not engaged. Disengagement occurs when students lose interest in classroom activities, find tasks boring and not meaningful, and respond poorly to teachers' instruction and classroom interaction. Children with low levels of engagement are at risk for disruptive behaviour, absenteeism, and finally dropping out of school. Thus, the need to increase engagement is critical to children's success in school (Roderick & Engle 2001).

According to Schlechty (2001, p.64), children will only be engaged when the engagement is active by requiring them to be attentive as well as in attendance. It also requires the student to be committed to the task and find some inherent value in what he or she is being asked to do with enthusiasm and diligence. When students are engaged in their tasks, it has positive impact on their learning, especially their attendance and achievement. Research (e.g., Finn & Rock 1997; Marks 2000; Roderick & Engle 2001; Willingham, Pollack, & Lewis 2002) shows a significant relationship between high levels of students' engagement and improved attendance and achievement as measured through direct observations using questionnaires and interviews with children and teachers.

As the pressure to emphasize academic achievement is mounting in Singapore, it is all the more essential for educators of young children with special needs to reflect on the most effective practices for ensuring that children are actually learning what is being taught. Though some factors related to children's achievement are beyond teachers' control, but creating a climate of engagement in the classroom is very crucial for optimal learning. Hence, the use of engagement strategies is a powerful teaching tool critical in promoting children's achievement as it focuses children on learning, supports learning specific skills and concepts, and provides them positive associations with learning.

Hence, in order to promote and encourage active engagement for students with special needs, the author of this conceptual paper would like to propose a TPE model. In this model, there are three core components: (1) T-Task, (2) P-People, and (3) E-Environment. As shown in Figure 1 below, each of these components will be briefly discussed below.
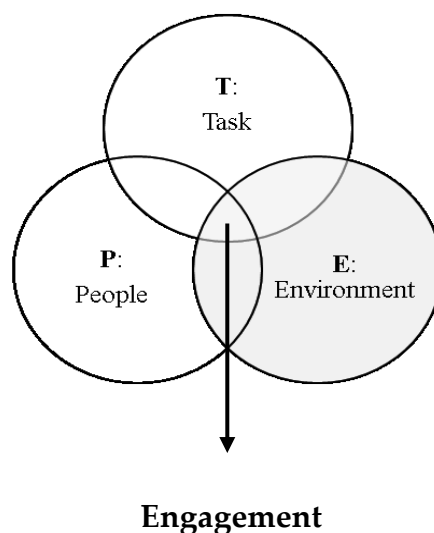


**Engagement**

**Figure 1:** A Proposed TPE Model to Promote Active Engagement

**First Component: Task (T)**

According to Lee (2000, p. 32), a task can be defined as: *(1) a classroom activity or exercise that has (a) an achievable objective by the interaction among participants, (b) a mechanism for structuring and sequencing interaction, and (c) a focus on meaning exchange; (2) a language learning endeavour that requires learners to comprehend, manipulate, and/or produce the target language as they perform some set of work plans.*

Tasks or classroom activities (e.g., play toys, worksheets, etc.) are work to be used by children after teachers have imparted their teaching. The purpose of providing tasks is to ensure children understand what is being taught after teachers had imparted a particular topic/theme. Usually, such tasks can include, but not limited to, work time (e.g., worksheets), play (e.g., role play), circle time, music time, book time and art and crafts. Tasks that are engaging, fun, creative, and interesting can bring about active participation of the children. According to Fredricks (2014), students who are engaged with the tasks are often seen to be exhibiting positive behaviour (i.e., follow classroom rules, complete assigned tasks, etc.), positive feelings (i.e., happy, excited, etc.), and, students' thinking (i.e., problem-solving). Research also suggests that designing and implementing fun and creative class activities may help increase students' engagement behaviorally, emotionally, and cognitively. This ultimately affects students' learning in a positive way (Fredricks, 2014).

Not only tasks that are fun and creative can engage children better, they must also be meaningful in order for full attention and engagement. Research has shown that if students do not consider a learning activity worthy of their time and effort, they might disengage with the tasks. (Fredricks, Blumenfeld, & Paris, 2004). Hence, in order to ensure that activities are personally meaningful, teachers can connect them with students' previous knowledge and experiences with the infusion of teaching materials and topics that are interesting and motivating to the child in classroom. For example, materials and topics are chosen based on the child's preferences and learning strengths (e.g., favourite characters from stories, gross motor play, etc.). The teacher recognizes that the child's intrinsic motivation to communicate is fostered in these contexts in contrast to activities that are selected by adult and imposed on the child regardless of the child's interest. In this way, the teacher provides meaningful activities in which the child has the opportunity to initiate communication and participate in extended interactions. For example, the teacher captures the child's interest in toys or activities that require another's assistance (e.g., bubbles, wind-up toys, paint bottles with tight lids), or the teacher places a few of the child's preferred or desired objects out of reach (e.g., placing motivating toys or objects on a high shelf or in a sealed but see-through container that will require assistance to open).

When developing lesson plans for children with special needs, educators need to bear in mind that resources (e.g., teaching materials such as play toys and worksheets) must be developmentally suitable. Developmentally Appropriate Practice (DAP) is very important during the planning phase of teaching. According to the National Association for the Education of Young Children, DAP is an approach to teach young children to develop and learn in an effective early education with the aim to promote young children's optimal learning and development. This practice also involves teachers meeting young children where they are (developmental milestone), both as individuals and as part of a group with the ultimate aim to help each child meet challenging and achievable learning goals (see http://www.naeyc.org/DAP for more information). The teacher can design activities to be developmentally appropriate for the child's ability levels. For example, activities are designed with appropriate expectations for social communication, attention, and active participation for the child, taking into consideration of the child's language, motor, and attentional requirements. In other words, it is crucial for teachers to understand the individual developmental profile of all the children with special needs when writing their lesson plans and preparing appropriate teaching resources. Table 1 below shows a suggested checklist that can be used as a guideline to promote positive engagement when working with children with special needs in the classroom. Teachers may use this checklist prior to their teaching when writing their lesson plans.

**Table 1:** Task Engagement Checklist

| Is/Are the task(s) | Please Tick | | Comment/Suggestions |
|---|---|---|---|
| • Age appropriate (e.g., too challenging for student's current level of functioning) | □ Yes | □ No | |
| • Novel and creative | □ Yes | □ No | |
| • Using multi-sensory approach (VAKT) | □ Yes | □ No | |
| • Provides real experiences (e.g., cooking) | □ Yes | □ No | |
| • Play games (infuse elements of surprise) | □ Yes | □ No | |
| • Arouse curiosity (element of surprise) | □ Yes | □ No | |
| • Allow exploration | □ Yes | □ No | |
| • Activate prior knowledge and experiences | □ Yes | □ No | |
| • Promote social communication & interaction | □ Yes | □ No | |
| • Encourage collaboration | □ Yes | □ No | |
| • Too much waiting time | □ Yes | □ No | |
| • Meaningful and useful to the student | □ Yes | □ No | |

**Note:** *VAKT denotes Visual, Auditory, Kinesthetic, and Tactile*

Tasks that are engaging are useless without an experienced teacher to help students to actively engage with the teaching resources, teachers, and friends in the classroom.

Hence, the following section will discuss on the second component of People (P) of the TPE model.

**Second Component: People (P)**

For the discussion in this paper, the term "People" refers to the educators (i.e., parents, teachers, therapists, and other professionals) who are teaching and working closely with children of special needs.

The greatest single factor that will predict success in schooling for children with special needs is the attitude of the teacher responsible for the child's education. Nothing is more important and nothing replaces the attitude of the class teacher towards students. Teachers must have a teaching philosophy that every child has the potential to learn and excel. In addition, they must have the passion in working with children and love them unconditionally, regardless of their disabilities. Children with special needs often do not learn like other typically developing children. They might need more time to process information and respond to their teachers and friends, have impairment in motor skills (gross motor or fine motor), adaptive skills, language delay, etc. Hence, special needs educators need patience and perseverance when teaching children with a diverse learning challenges.

The ability of the teacher to modify and change assignments, instructional strategies, class resources, methods of assessment and teaching style also influence a student's achievement in school. Teachers need to know that each child has a unique profile. Hence, teaching children in special education is tailored to the needs of the child and there is no such thing as a one-size-fits-all teaching approach. Everything must be tailored to the child's unique profile of strengths and weaknesses. This means that special needs educators need to have an open mind to accept changes and suggestions from others.

Teachers' factors have direct impact on students' achievement. Though research has focussed on teachers' beliefs, attitudes and practices, this paper will only discuss on teaching practices. Many studies (e.g., Brophy & Good, 1986; Wang, Haertel & Walberg, 1993) have described aspects of teaching practices which are related to effective classroom learning and student achievement. Close monitoring, adequate pacing and classroom management as well as clarity of presentation, well-structured lessons and informative and encouraging feedback have been demonstrated to have a positive impact on students' engagement and achievement.

Another good teaching practice is instruction. Good instruction is not determined just by the teacher's background, beliefs and attitudes; teachers should also be sensitive and responsive to students' learning needs, classroom and school background factors. For example a study on aptitude-treatment interactions by Snow

and Lohman (1984) showed that students with low intellectual abilities benefit more from structured, teacher-centred instruction, while students with high intellectual abilities may gain more from less structured and more complex instruction.

Table 2 below shows a suggested checklist that can be used as a guideline to determine how people (i.e., teachers, therapists, counselors, parents, and others working) can affect engagement when teaching children with special needs. Educators may use this checklist as a guideline to reflect and evaluate themselves during the three phases of teaching (i.e., before, during, and after) when delivering their lessons.

**Table 2:** People Engagement Checklist

| Is/Does the teacher | Please Tick | | Comment/Suggestions |
|---|---|---|---|
| • Has positive attitude for child's education | □ Yes | □ No | |
| • Like working with children | □ Yes | □ No | |
| • Believe that every child can learn | □ Yes | □ No | |
| • Know the children profile well (likes/dislikes, strengths, challenges, family, etc.) | □ Yes | □ No | |
| • Accommodate diversity | □ Yes | □ No | |
| • Able to deliver differentiated instruction (explicit & implicit) that caters to the developmental language of each child | □ Yes | □ No | |
| • Allow choice making | □ Yes | □ No | |
| • Nurture independent thinking (problem-solving) | □ Yes | □ No | |
| • Have expectations on self (professional training-upgrade content knowledge and teaching skills/strategies) | □ Yes | □ No | |
| • Have expectations on children | □ Yes | □ No | |
| • Promote group interaction | □ Yes | □ No | |

**Note:** *Teachers have to understand the individual profile of the children with special needs well to cater to their individualized learning goals.*

Though experienced teachers may engage children in the process of learning, the physical environment is of utmost importance as it has a strong impact on the overall development of the children.

**Third Component: Environment (E)**

A large amount of a child's time is spent learning in the classroom setting. The classroom is where children learn knowledge and skills from their teachers, communicate and interact with teachers and friends. Not only the teachers' instruction in teaching is important, it is also imperative that the classroom environment is one that allows students to perform to their highest potential as a safe environment provides security and emotional support.

Sometimes, modification and/or adaption of the environment is necessary to help children with special needs maintain an optimal level of arousal. For example, lighting and controls for noise level and visual distraction need to be adjusted to cater to the needs of the sensory profiles of children with autism. A child with autism who has oversensitivity to sound may find the classroom too noisy if there are too many people in the room or it is near a main road with many vehicles passing by. Modification of the environment by arranging certain furniture to partition a structured learning corner is also required to help the child with distractibility (e.g., Attention Deficit Hyperactivity Disorder) focus better so as to enhance attention. Sometimes, teachers may use a preferred seating arrangement or semi-circular tables for small-group instructions or may cover visual stimuli on a bulletin board near the child's working table if the child is easily distracted. In addition, arranging learning environment can also help the child initiate interaction with the teachers and friends. For example, the teacher may organize materials out of reach or sight to promote initiation of requests throughout daily classroom routines rather than providing all materials in specified locations. In other words, environmental arrangement involves purposefully planning the placement and organization of classroom materials, furniture, and activities to promote appropriate behaviours and decrease the likelihood of problem behaviour (Kaiser, Ostrosky, & Alpert, 1993). Research (e.g., Hwang, & Hughes, 2000; Kaiser, Ostrosky, & Alpert, 1993; Ostrosky, & Kaiser, 1991) has shown that environmental arrangement can lead to increment in the frequency of communicative acts and social interactions with peers and adults.

According to Stewart, Evans and Kaczynski (1997), they argued that "an orderly and attractive environment can have a positive effect on behaviour by improving the level and quality of student interactions, so teachers and students carry out activities efficiently without excessive noise or interruption" (p. 53). Classroom management and students' behaviour are two biggest factors that have tremendous impact on students' learning (Marzano and Marzano, 2003). Stewart et al. (1997) also concurs that behaviour management and classroom control are central to stimulating learning in children.

To use environmental arrangement effectively, teachers should plan how to arrange the environment *before* an activity occurs. The two common strategies for two aspects of environmental arrangement strategies are (1) materials arrangement, and (2) schedules arrangement. However, it is not the intent of this paper to discuss them here.

Table 3 below shows an environmental arrangement checklist that can be used as a guideline to help in promoting active engagement when working with children with special needs in the classroom. Teachers may use this checklist prior to their teaching when writing their lesson plans. It should be noted that the term "Environment" used in this paper simply restricted to the classroom setting when the child is in school.

Other environmental factors such as socio-cultural factors (e.g., family structure, child rearing practices, race, religious beliefs, ethnic identity, etc.) are not being discussed in this paper. Hence, teachers need to gather such information from parents when working with the child.

**Table 3:** Environmental Arrangement Checklist

| Is/Does the environment | Please Tick | | Comment/Suggestions |
|---|---|---|---|
| • Safe | □ Yes | □ No | |
| • Cluttered/ Disorganized | □ Yes | □ No | |
| • Distracted (visual and auditory) | □ Yes | □ No | |
| • Well ventilated and lighted | □ Yes | □ No | |
| • Provide ease of transition | □ Yes | □ No | |
| • Has ample place for play, movement, and work | □ Yes | □ No | |
| • Have visibly clear boundaries for different activity areas | □ Yes | □ No | |
| • Has easily accessible materials | □ Yes | □ No | |
| • Ample amounts of available play materials to encourage physical activity (wheel toys, large and small balls, etc.) and exploration | □ Yes | □ No | |
| • Promote positive behavior | □ Yes | □ No | |
| • Have rules that are effectively communicated | □ Yes | □ No | |
| • Has open spaces for running and other physical activity and movement in outdoor play area | □ Yes | □ No | |

**Note:**

*Other environmental factors such as poor nutrition, health (medical conditions), and safety are not included in this checklist.*

*Socio-cultural factors such as family structure, child rearing practices, race, religious beliefs, etc. are not included in this checklist.*

All the three above suggested checklists on tasks, people, and environment may be used as guidelines for educators to develop lesson plans and help to implement intervention strategies when working with children with different special needs. It should also be noted that these checklists will only serve as references and they may be subjected to changes to cater to the individual profiles (diagnoses, strengths, challenges, and needs) of the children with special needs.

**Conclusion**

This short conceptual paper provides a TPE model with the aim to promote active engagement for children with special needs in classroom setting. The three main components of the TPE model are (1) Task (T), (2) People (P), and (3) Environment (E) and each of these components that affects children's engagement was briefly discussed.

For each of the component, there were suggested checklists to help teachers in planning and evaluating their lesson plans. These checklists were developed with the aim to promote active engagement in children with special needs. Only when there is active engagement, children will be highly motivated with full attention and participation in learning and achieve their individualized goals.

## References

1. Benassi V. A., Overson C. E., Hakala C. M. (2014). Applying science of learning in education: infusing psychological science into the curriculum. Retrieved from the Society for the Teaching of Psychology website: http://teachpsych.org/ebooks/asle2014/index.php.

2. Brewster, C., & J. Fager. (2000). Increasing student engagement and motivation: From time on task to homework. Portland, OR: Northwest Regional Educational Laboratory. Retrieved online: www.nwrel.org/request/oct00/textonly.html.

3. Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C.

4. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 376-391). NY: Macmillan.

5. Brown P. C., Roediger H.L., McDaniel M.A. (2014). *Make it stick: the science of successful learning.* Cambridge, MA: Belknap Press.

6. Finn, J. D., & Rock, D.A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology, 82* (2), 221–34.

7. Fredricks, J. A. (2014). *Eight myths of student disengagement: creating classrooms of deep learning.* LA: Corwin.

8. Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.

9. Hwang, B., & Hughes, C. (2000). Increasing early social-communicative skills of preverbal preschool children with autism through social interactive training. *Journal of the Association for Persons with Severe Handicaps, 25*(1), 18-28.

10. Kaiser, A. P., Ostrosky, M. M., & Alpert, C. L. (1993). Training teachers to use environmental arrangement and milieu teaching with non-vocal preschool children. *Journal of the Association for Persons with Severe Handicaps, 18*(3), 188-199.

11. Lee, J. (2000). *Tasks and communicating in language classrooms.* NY: McGraw-Hill.

12. Marks, H.M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle and high school years. *American Educational Research Journal, 37*(1), 153–84.

13. Marzano, R. J. & Marzano, J. S. (2003). The key to classroom management. *Educational Leadership, 61*(1), 6-13.

14. National Association for the Education of Young Children. Developmentally Appropriate Practice (DAP). Retrieved from September 20, 2017, http://www.naeyc.org/DAP.

15. Ostrosky, M. M., & Kaiser, A. P. (1991). Preschool classroom environments that promote communication. *Teaching Exceptional Children, 23*(4), 6.

16. Roderick, M., & Engle, M. (2001). The grasshopper and the ant: Motivational responses of low-achieving students to high-stakes testing. *Educational Evaluation Policy Analysis 23*(3), 197–227.

17. Schlechty, P. (2001). *Shaking up the school house: How to support and sustain educational innovation*: San Francisco: Jossey-Bass.

18. Snow, R. E., & Lohman, D. F. (1984). Toward a theory of cognitive aptitude for learning from instruction. *Journal of Educational Psychology, 76*(3), 347-376.

19. Stewart, S. C., Evans, W.H. & Kaczynski, D.J. (1997). Setting the stage for success:

20. Assessing the instructional environment. *Preventing School Failure, 41*, 53-56.

21. Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*(3), 249–294.

22. Willingham, W.W., Pollack, J.M., & Lewis, C. (2002). Grades and test scores: Accounting for observed differences. *Journal of Educational Measurement, 39*(1), 1–37.