

COVID Recovery and SEL/MTSS Creating a Culture of Learning: Lessons from Tools of the Mind

TOOLS OF THE MIND

**COVID Recovery and SEL/MTSS
Creating a Culture of Learning: Lessons
from Tools of the Mind**

Fall 2020  Fall 2021 

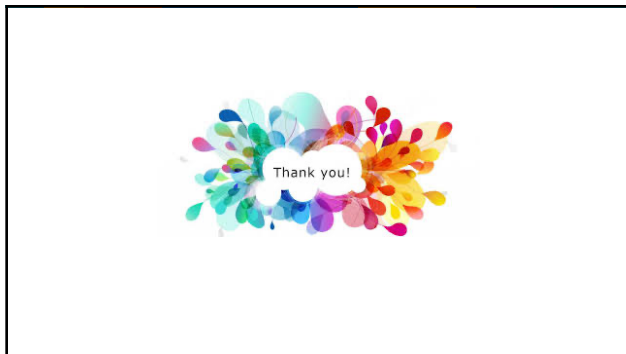
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Some of the Impacts of COVID19

- A disrupted education schedule—no consistency
- Academic gap grew among children—due to inequalities of access and support
- Increased trauma and stress for many children
- Social isolation and worries about re-engaging in face-to-face instruction
- Increased pressure on teachers and parents

All of these and many other problems have been exacerbated for children with special needs

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**Our solution:
Creating a Culture of Learning**

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What is Tools of the Mind®?

Tools of the Mind® provides a coherent approach to building the foundation for every child's long-term school and life success.

Tools embeds this approach in a comprehensive PreK & K curriculum with robust teacher professional development.




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What is Tools of the Mind?

A theory of teaching and learning

Tools of the Mind:

- Based on the teaching and learning approach of Lev Vygotsky
- Develops Executive Functions *and* academic skills
- Scaffolds learning based on an individual child's development
- Integrates Make-Believe Play and Playful Learning as leading activities
- Teaches children *how* to learn



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Creating a Culture of Learning: Lessons from Tools of the Mind

Tools of the Mind is well-researched

Practical Program Improves Cognitive Control

Closing the Achievement Gap through Modification of Neurocognitive and Neuroendocrine Function: Results from a Cluster Randomized Controlled Trial of an Innovative Approach to the Education of Children in Kindergarten

PLOS ONE

Randomized control trial of Tools of the Mind: Marked benefits to kindergarten children and their teachers

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Creating a Culture of Learning

Teaching practices for meeting the needs of diverse learners and helping each child achieve their full potential

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Vygotsky's view of special education

Promoting self-regulated behaviors

The power of Peer Scaffolding

The power of multi-level activities

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Creating a Culture of Learning with Tools of the Mind

Vygotsky's view of Special Education

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Vygotskian approach to learning and development

- According to Vygotsky, the social environment is not just a context in which children develop, but rather a source of development of mental processes.
- The development of children's mental processes is mediated by adults in the context of social interactions with peers

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Vygotskian approach to disability


- Is aimed against a deficit view of disability to focus instead primarily and centrally on individual differences
- "a child whose development is impeded by a defect is not simply a child less developed than his peers but is a child who has developed differently" (1993, p. 30).
- The reason that secondary disabilities develop is that primary disabilities often prevent a child from mastering the cultural tools critical for engaging in social interactions.
- It prevents the child from acquiring even more cultural tools and eventually leads to systemic distortions in this child's mental functioning.

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Vygotskian approach to Special Education



- Using Dynamic Assessment to determine the factors contributing to the child's learning problems
- Focusing on the whole child and not on one "impaired" function
- Making sure the child engages in social interactions with peers in the context of age-appropriate activities
- Re-mediation as a means for remediation: teaching children to use mental tools

"Thought is the highest form of compensation for the insufficiencies of visual perception"
Vygotsky, 1993, p. 204


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**Creating a Culture of Learning:
Promoting self-regulated behaviors**

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Learning leads development




- "...properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning"
Vygotsky, 1978, p.10
- Vygotsky viewed self-regulation as a basis for the development of cognitive and social skills
- Development of Executive Functions makes self-regulated behaviors possible

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Executive Functions

What are Executive Functions?
A set of mental skills identified by neuroscience that

- Make deliberate cognitive and social self-regulated behaviors possible
- Are associated with maturation of the prefrontal cortex




When do you use Executive Functions?

- When you need to be intentional
- When you need to learn to do something new, on purpose
- When you need take another person's perspective

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Executive Functions

Definition of Executive Functions



- **Inhibitory Control**—ability to master and filter our thoughts and impulses so we can resist temptations, distractions, and habits, enabling us to pause and think before we act
- **Working Memory**—the capacity to hold and manipulate information in our heads over short periods of time
- **Cognitive Flexibility**—the capacity to nimbly switch gears and adjust to changed demands, priorities, or perspectives, and to be able to apply different rules in different settings

Harvard Center on the Developing Child

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The Development & Neural Bases of Cognitive Flexibility and Executive Function




Adele Diamond

Canada Research Chair Professor of Dev. Cog. Neurosci.
Department of Psychiatry
University of British Columbia, Vancouver
BC Children's Hospital, Vancouver
British Columbia, Canada

adele.diamond@ubc.ca




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Supporting self-regulated learning in the classroom

Why?

- It is more than the content—**how** we teach matters as much as **what** we teach
- It takes time and an active, engaged mind to internalize something new—multiple exposures and intentional practice—self-regulated learning
- Focusing only on “associative memory” (pairing of one fact to another without cultivating deeper neural networks) leads to superficial memories which are easily lost
- Self-regulation helps children control feelings of anxiety that naturally arise as you make mistakes or struggle with remembering




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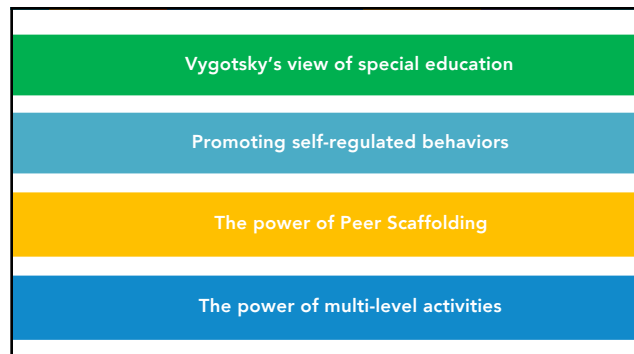
Supporting self-regulated learning in the classroom

Lessons from Tools of the Mind





The leading activity for the development of self-regulated learning in the early childhood classroom is make-believe play and playful learning

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**Creating a Culture of Learning:
The power of peer scaffolding—social interactions in the service of learning**

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The Power of Peer Scaffolding

Creating a classroom culture of **peer scaffolding** has positive academic **and** social-emotional learning benefits:

- Helping another person learn has positive learning benefits for the helper. It reinforces learning and strategy use.
- Peer scaffolding allows children to practice independently, increasing total engaged practice time, and reducing practice errors
- Positive social interactions in learning activities build feelings of belonging, agency and acceptance in the classroom community

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Creating a Culture of Learning: Lessons from Tools of the Mind

The Power of Peer Scaffolding

Lessons from Tools of the Mind


- **Pairings enact principles of equity**—Peer scaffolding activities must be designed so that children with different levels of skill can provide **authentic support** to each other. **Children with fewer skills should not always be the partners being “tutored”** but can actually provide **meaningful support** to more skilled partners
- Peer Scaffolding requires norms, clear focuses and child agency
- **Every child is partnered with every other child in the class, no exceptions.** Teachers help children who don't get along learn to work together.

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How we group children matters

- Grouping based on ‘skills’ leads to a way of thinking about yourself and others
 - The classroom becomes a social hierarchy with social inequity
 - The lower group internalizes negative beliefs about their ability
- Increased inequity in learning opportunities and teaching approaches
 - Lower group doesn't have the same level of intrinsically motivating content
 - Developmentally inappropriate methods of instruction—more time spent on drill and kill
 - These differences have lasting impact

Ability grouping unintentionally becomes a form of institutionalized racism



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How we group children matters

Lessons from Tools of the Mind

- Group and teach in ways that promote “intellectual equity,” so **all** children engage in the the same complex, intellectually interesting content using materials geared toward individualized needs
- Provide repeated opportunities to think about the same big ideas with different peers in different activities




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How we group children matters

Lessons from Tools of the Mind

- Create multi-level activities where children at different levels of ability can engage in the same activity instead of creating a different activity with different content for each skill level.
- Multi-level activities allow teachers to provide individualized scaffolding and children to practice what they need to practice while being engaged in the same creative, intellectually interesting activity.




Kindergarten writing after an Interactive Read Aloud

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Vygotsky's view of special education

Promoting self-regulated behaviors

The power of Peer Scaffolding

The power of multi-level activities

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Questions?

www.toolsofthemind.org

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