

Tools of the Mind

Program Overview

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Program name

Tools of the Mind

Country of Origin

Canada

Implementation level of the program

Organization

Type of Program

Evidence-based intervention

Description

Tools of the Mind (Tools) is an early childhood curriculum and a professional development program that supports children's cognitive, social, and emotional development with a special emphasis on the development of executive function and self-regulation.

The pedagogy used by Tools of the Mind teachers is based on the concept of individualized scaffolding within each child's Zone of Proximal Development (ZPD) that the teacher has determined through Dynamic Assessment.

To provide the most cohesive learning experience for children, and to facilitate a powerful, positive feedback loop between teachers and parents, Tools of the Mind has adapted its approach to teaching and learning to include learning at home. This is Tools@Home.

Format:

Tools of the Mind contains several activities aimed at all the main areas of the child's development and destiny, to be used in large groups, in small groups, as well as by pairs of children and by individual children. Some of the activities carried out in small groups functioned as games, in which the children had minimal or no support from the teacher. In these games, children practice the concepts of:

literacy and mathematics;

learn to follow increasingly complex sets of rules

build a classroom community: children and teams do not compete with each other, but with their own previous results and are encouraged to help each other when someone does not know the answer

develop intentional self-regulatory structures (the practice of self-regulation is incorporated into all activities in all thematic areas).

In Tools preschool classrooms, children spend a significant part of their day playing and play is modelled, scaffolded, and organized in a particular way to ensure that children create an imaginary situation, act out well-defined roles and follow the rules built in the pretend scenario.



In Tool's kindergarten, children continue to acquire and refine their play skills as they engage in play-dramatization, creating and acting out pretend scenarios based on literature they study in class. Strategic choice of the literature ensures that children use their play to master science and social studies content along with rich vocabulary.

Materials:

Each classroom makes a 1-time purchase of a Tools of the Mind Kit (produced by and purchased through Lakeshore© Learning Materials Inc). The Lakeshore Kit includes all the materials needed to implement activities (e.g., phonological awareness activities, phonics activities, fiction books, science materials, and writing activities).

Age Range

3-7 years

Age Range Information

Early Childhood (3-4) – Preschool; Late Childhood (5-11) - K/Elementary.

Group Size

Small groups

SEL Skills Targeted

Relationship skills, Self-management

Sequenced Activities

The intervention involves the implementation of activities, organized sequentially in order to promote the development of the competencies recommended by the program.

Active Learning

Most learning takes place in small groups and partnered activities, engaging children in interacting with one another to learn, build social relationships and create a positive classroom culture.

Children in Tools are not given any words or phrases to copy, as they are invited to write their own messages, by representing the sounds in words with as many letters as they can.

Outcomes / Results

The effectiveness of the intervention was assessed using a randomized design, including control and experimental / groups assessed before and after the intervention.

Some main studies were conducted:

Blair & Raver, 2014;

Blair et al., 2018;

Barnett et al., 2008;

Diamond et al., 2007;

Farran & Wilson, 2014;



Solomon et al., 2018; Diamond et al., 2019; Overall results: Decrease Aggressive antisocial behaviour Conduct problems Increase Academic performance Cognitive development

Strengths and Weaknesses

Throughout the studies carried out, some limitations were observed, such as measures that were not independently evaluated; very small samples; few or no behavioural effects, among others.

Additional Information

https://www.blueprintsprograms.org/programs/1008999999/tools-of-the-mind/

References

Barnett, W. S., Jung, K., Yarosz, D. J., Thomas, J., Hornbeck, A., Stechuk, R., & Burns, S. (2008). Educational effects of the Tools of the Mind curriculum: A randomized trial. Early Childhood Research Quarterly, 23(3), 299-31. https://doi.org/10.1016/j.ecresq.2008.03.001

Blair, C., McKinnon, R. D., & Daneri, M. P. (2018). Effect of the Tools of the Mind kindergarten program on children's social and emotional development. Early Childhood Research Quarterly, 48, 52-61. https://doi.org/10.1016/j.ecresq.2018.01.002

Blair, C. & Raver, C. C. (2014). 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, 9, 1-13. https://doi.org/10.1371/journal.pone.0112393

Diamond, A., Barnett, W. S., Thomas, J., & Munro, S. (2007). The early years - Preschool program improves cognitive control. Science, 318, 1387-1388. https://doi.org/10.1126/science.1151148

Diamond, A., Lee, C., Senften, P., Lam, A., & Abbott, D. (2019). Randomized control trial of Tools of the Mind: Marked benefits to kindergarten children and their teachers. PloS one, 14(9), e0222447. https://doi.org/10.1371/journal.pone.0222447

Farran, D. C., & Wilson, S. J. (2014). Achievement and Self-regulation in Pre-kindergarten Classrooms: Effects of the Tools of the Mind Curriculum. Peabody Research Institute.

Solomon, T., Plamondon, A., O'Hara, A., Finch, H., Goco, G., Chaban, P., Huggins, L., Ferguson, B., & Tannock, R. (2018). A cluster randomized-controlled trial of the impact of the Tools of the Mind curriculum on self-regulation in Canadian preschoolers. Frontiers in psychology, 8, 2366. https://doi.org/10.3389/fpsyg.2017.02366

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