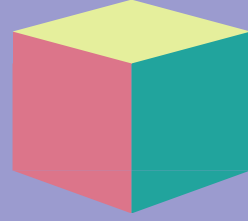


**THE
DIFFICULT
SIDE OF
MATH**



**EFFECTIVE
STRATEGIES
FOR
CHILDREN
WITH
DYSCALCULIA**

DYSCALCULIA

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ABOUT DYSCALCULIA

Dyscalculia is a specific learning disability in mathematics. It is believed to be a permanent neurological condition that affects the ability to process numerical and quantitative concepts (Munro, 2003 as cited in Peard, 2010).

Characteristics of Children with Dyscalculia

- Inability to understand numbers
- Inability to conduct mathematical operations and calculations
- Difficulty in recognizing mathematical symbols
- Difficulties in counting and reverse counting
- Inability to solve multi-step calculations

(May & Ahmad, 2021)

- Problems with remembering formulae
- Weak short-term memory
- Difficulty understanding mathematical word problems
- Increased stress or fatigue while encountering numbers

(Doyle, 2010)



- Multi-sensory Teaching Strategies involve using pictures, colors, and physical apparatus. For example, a student can jump from one painted numeral to another painted numeral on the floor to learn basic operations like addition and subtraction (Henderson, 2012 as cited in Alamro, 2019).



EFFECTIVE TEACHING STRATEGIES FOR CHILDREN WITH DYSCALCULIA

- Use games available that focus on practicing math concepts. For example, to learn the table of 5, you could ask the students to stand if the number is a multiple of 5 and sit if it is not. These games encourage the students and reduces the anxiety of students with dyscalculia (Alamro, 2019).

- Breaking the problem into smaller components is an effective way to help children with dyscalculia as they often get overwhelmed by complex problems.
- Drawing the problem can also help students with dyscalculia as it can help them see relationships and understand concepts, which are difficult to understand with mere numbers.

(Strategies for Managing Dyscalculia, n.d.)



CLASSROOM ACCOMODATIONS FOR CHILDREN WITH DYSCALCULIA

- Allow them extra time on math tests.
- Give step by step instructions and have students repeat them.
- Let the student use a calculator when computation is not being assessed.
- Highlight key words and numbers on word problems.
- Teach students to self talk through math problems.
- Review what the student already learned before teaching new concepts.

(Morin, 2021)

- Positive reinforcement - Parents should praise their children for putting in the effort and not just focus on the result.
- Patience - Parents should not get frustrated when they see the child struggling with the problem. Instead, they should patiently guide their child towards a solution.
- When at home, parents can play games that involve numbers to teach children that math can be fun.



HOW CAN PARENTS SUPPORT LEARNING AT HOME FOR CHILDREN WITH DYSCALCULIA?

(How Parents Can Support Learning at Home - Dyscalculia, 2022)

- Using examples of mathematical significance from daily life to teach simple concepts. For example, when buying an ice cream for the child, ask them how much change would you get back.
- Tell the child that they are unique and encourage them to find their strengths to boost their confidence.
- Teach them self-advocacy so that they can communicate with the teachers and peers about their problems.