

Logic for Children

Concepts and Exercises

Decio Martins de Medeiros

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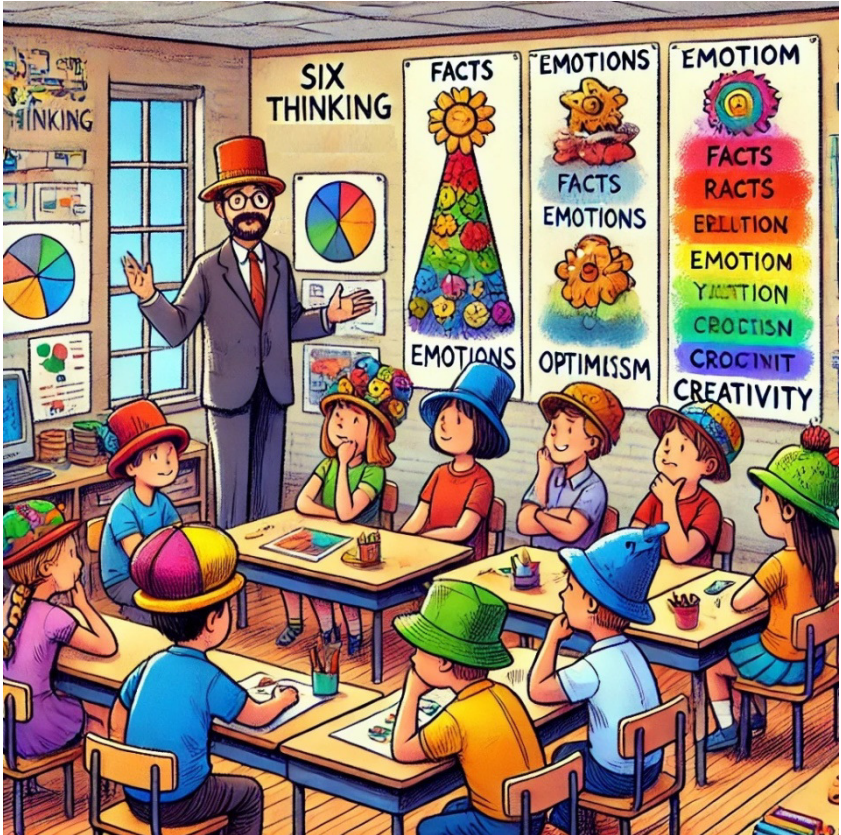
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0-Teaching Children to Think

Edward De Bono argued that, instead of just learning facts and procedures, children should be taught to think critically, creatively, and constructively.

De Bono also criticized the traditional approach to education, which often emphasizes memorization and linear thinking, at the expense of stimulating the ability to solve problems creatively. He believed that if children were taught to develop these skills from an early age, they could grow up to be more innovative, adaptable, and successful adults.

He developed practical methods for this, such as the Six Thinking Hats, a tool used to encourage thinking from different perspectives, and believed that this type of approach could transform the way students tackle problems, not only in school but also in everyday life.



A book that teaches logical thinking to children should have a clear and gradual progression, respecting the children's cognitive development level. Start with concrete concepts and gradually move towards more complex

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abstractions, always with practical examples and fun activities.

1-Introduction to Logical Thinking

Hi, everyone! Today we're going to talk about something really cool and super useful: logical thinking! But what does that mean, and why is it so important? Let's find out together!

What is logical thinking?

Logical thinking is about using your brain to solve problems in an organized, step-by-step way. Imagine you have a puzzle to complete: you need to look at the pieces, think about how they fit together, and connect them until you form the picture. That's logical thinking in action!

We use logical thinking in many parts of our day:

- **At school**, when solving math problems or answering questions in class.
- **In games**, like when playing chess or video games and planning your next moves.

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- **At home**, when figuring out the best way to do tasks, like tidying your room or helping in the kitchen.

Where do we use logical thinking?

Logical thinking shows up in many moments of the day, often without us even noticing. It's there when:

- **Making important decisions**, like deciding what to do first on your homework.
- **Solving problems**, like figuring out why your bike isn't working properly.
- **Understanding the world around us**, like noticing that when you throw a ball up, it comes back down.

Why is logical thinking important?

Now that we know what it is, let's see why logical thinking is so important! It helps us in many ways:

1. **Problem-solving:** Logical thinking allows us to stay calm and find solutions to everyday challenges. If something isn't working, logic helps you figure out what to do to fix it.
2. **Making better decisions:** Sometimes we need to choose what to do first or how to act in a situation. Logical thinking helps us see the best choice and understand why.

3. **Organizing ideas and tasks:** Using logic makes it easier to organize things. It helps plan the day, complete tasks in order, and even understand school lessons better.
4. **Understanding how things work:** The world around us follows rules, and logical thinking helps us understand them. For example, you know that mixing water and soap creates bubbles, right? That's logic!

How to improve logical thinking?

You can train your logical thinking in fun ways, such as:

- **Puzzle games:** Sudoku, chess, or building with Lego can help develop logic.
- **Solving problems:** Think about daily situations like, "If I have 10 candies and eat 2, how many are left?" That's logic!
- **Observing patterns:** Try finding patterns around you. For example, if numbers follow a sequence like "2, 4, 6, 8..." what's next? Spotting patterns is great for improving logical thinking.

Logical thinking is a superpower!

Now that you know what logical thinking is and why it's important, you can use it in any situation. Solving problems, making good decisions, and organizing ideas