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Development of Logical and Critical Thinking Skills of Children

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Abstract

Toddlers solve problems through trial and error. This in turn helps them think logically. During play, children discover real-life skills that are needed to identify a problem resolve a conflict and take action. Critical thinking is one of the main skills of the 21st century that allows you to analyze data, draw conclusions and make decisions based on analysis, as well as form your own opinion and defend your own position. Today in the modern world, everyone can be seen under the sea of data. They have a wide variety of resources and the information needs to be revised and verified. Through critical thinking, we see various contradictions and contradictions, remove misinformation from among them and interpret them sorted.

Keywords: *Critical Thinking, Analyze Data, Draw Conclusions, Variety of Resources*

1. Introduction

Here's how logical thinking skills will benefit your child: Good exercise for the brain: Learning to apply logical reasoning through logic puzzles and other brain games will stimulate the brain while developing skills such as patience, memory, and concentration. (Solving puzzles helps the brain make connections, and this can help your child focus on a single task.) Games such as picture sudoku and simple sequential activities help stimulate logical thinking in children.

Develop critical thinking skills: When children grow up and face real-world problems, they will be better equipped to solve them if they have strong logical thinking skills. They will be ready to think outside the box, independently.

Help in math and reading: Brainteasers (e.g., puzzles) will help children come up with more solutions and become better at math. The logic that they require to solve problems should be built on from an early age, and these puzzles are the best way to achieve that. Interestingly, there is another benefit. According, having a basic logical thinking ability can even help children become better readers.

Activities to Help Preschoolers Develop Logical Thinking Skills Good questions will build logic. Can you fit it in this? Why do you think it will not fit? Can the elephant sit here, on a small chair? "Concrete examples, language, and questioning is important. Asking questions will make your child analyze and evaluate, thereby stretching their thinking.

2. Materials And Methods

Besides asking appropriate questions, the best way to get preschoolers started with logical reasoning is by doing these activities:

1 Sequencing worksheets and games: Sequencing, spatial and pattern exercises and pictorial activities can build logical thinking. Give children a variety of toys and blocks of different shapes, colors, and sizes, and ask them to identify and arrange things in patterns. For instance, you can create a simple color pattern (like red block-blue block-red block-blue block) and ask your child what comes next.

2 Sorting by shape: Putting shapes in the shape sorter is a great way of building logic. Say, your child has a triangle and is pushing it into the rectangular cavity. Asking her questions like why the triangle is not fitting in the cavity will help her think and apply logic.

3 Lining up toys: Give your child 4–5 toys and let him arrange them in ascending or descending sizes. This game requires thinking about order and attribute (here, size). Then you can ask your child which position is occupied by which toy. You can also ask him to place his toys and animal figures in a line

according to your directions—instead of giving direct instructions ("Put the car first" or "Place the doll at the end"), give clues that make your child think. For example, you could say, "Put the toy with wheels first in line", "The animal with spots is last in line" and "The toy with long ears is behind the car".

4 Pretend plays: This kind of imaginative play strengthens your child's thinking skills, as he makes logical connections in his stories. Set up a pretend play box for your child with old clothes. Could your child use her dad's old shirt to make a doctor's coat? Can she wear a hat and turn into a magician? She can mix and match the clothes in a multitude of ways. You can even set up boxes with other open-ended materials and props such as toy dishes, blocks or cushions and let your child develop her own ideas to play.

5 Treasure hunt: Create a treasure map for your child to follow. Cut out 5–10 large X-shapes from colored paper and lay them in a path leading to a room. Have the path end at a "treasure", which could be a small snack or a sticker.

6 Rain game: Put a small plastic bowl outside the house to catch the rain. With your child, watch the rainfall into the bowl. When it's done raining, bring the bowl inside.

Talk with your child about how much rain you caught: A lot? A little? Will it fit into a big cup or a small cup? Let your child transfer the rainwater from a big container into a smaller one and observe what happens.

7 Asking questions: To make your child think logically, try asking a lot of "why" questions. For instance, you can ask "Why is the answer 5?" or "Why did you add in step 2?" Answering such questions will help your child think through the logic they used to solve a problem or come to a certain conclusion. They should be so used to having to justify their methods or their answers that when they have to solve a new problem, they think through the why on their own. What would happen if you climb up and then stand on that tall stool? How will you feel after eating a whole bag of chips?

8 Picture cards: Ask them situation-based questions. For example, if you have pictures of a small house and an elephant, you can say to your child: "This is a small house. Can the big elephant enter the small house? Why can't it enter?" When children think and when they also ask questions, it means they are engaged.

9 Sort and categorize: Sorting is a valuable skill that helps apply logical thinking to objects, daily life and mathematical concepts. Give your child toys and other objects of different shapes, sizes and colors, and ask him to sort them (e.g., all yellow blocks together or all the toy cars in one pile, all the animal toys in another). You can also let him sort on his own without giving directions. Don't forget to encourage your child to think by asking him to explain how he decided to sort and why.

3. Results and Discussion

By allowing your child to do the activities listed above—and by asking the right questions—you can help your child enhance her logical thinking skills, which will, in turn, help her make sense of her world. Now, you may wonder how logical reasoning is different from critical thinking, another skill that we all use to make sense of information and solve problems. Both skills are actually the two sides of the same coin. Logical reasoning means to logically connect two things, to put two and two together; it builds your critical thinking skills. Critical thought involves a little more questioning-Do things make sense? What causes things to happen? Critical thinking allows you to examine and eliminate possibilities and involves thinking about a problem from multiple perspectives.

Why Logical Reasoning is Important for Children

When children play on their own, they often face challenges that they overcome through logical thinking. Hence, free is essential to develop logical thinking. My 2.4-year-old loves playing with balls. I have given him balls of different sizes, which he has to put through the hoop. He maneuvers different balls through the ring to see which one fits, and he logically figures out that small balls will go through the ring and big balls will not. When my child gets frustrated if the big ball doesn't fit, I don't rush to help him. Instead, I patiently wait for him to figure it out.

Children's thoughts are typically egocentric, that is, they see and understand things only from their perspective. This egocentrism is essential to their survival. Only after 8 years of age do they understand things from other people's perspectives. Person explains that around the age of 2, children begin to understand that things are connected logically. Asking questions like "What do you think?" will increase reasoning and logical thinking and enable learning, compared to merely stating the facts to a child.

4. Conclusion

This is why instead of saying this stick is longer than the other stick, you should ask your child, "What do you think? Which stick is longer?" Who hasn't seen a preschooler apply logic as they go about their daily activities? For example, when their hands get dirty, they want to wash them; they wear socks before wearing shoes; they peel the crayon wrapper when the crayon finishes, and wear sunglasses when it's too sunny. Children are able to make these logical connections even before they can communicate them in words.

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