

## Features of Thinking at Each Age

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### Abstract

Thinking, like other mental processes, begins to develop in children from a young age. A child does not have the ability to think from birth. Some scientists compare the thinking of a child to the thinking of a monkey. The theory of psychologists about the thinking of a monkey is not true. A child is a person by birth, he lives in a society of people, interacts with people, grows under their influence. A child's thinking is first and foremost a human thinking. A child's thinking grows slowly, under the influence of knowledge and experience, living conditions and the education he receives. At first, the child learns about the outside world and things at home only by sensing and perceiving.

### 1. Introduction

Gradually, as the child grows older, he begins to notice similarities between things, and then generalizes the similarities. For example: a 6-7-month-old child crawls to the table when he is alone, pulls the tablecloth and takes what he needs, then goes to the bed and pulls a sheet or blanket in the same way.

The thinking of young children develops not spontaneously, but under the guidance of adults.

Children acquire human-made knowledge and concepts with the help of adults. Thinking in children begins to appear after the age of 1 year. After the age of 1, when his tongue comes out, he understands why he needs things close to him. The most prominent feature of the thinking of a 2-year-old child is that they analyze and generalize.

Children of this age cannot reflect what they perceive. Therefore, when summarizing things, it is based on visible external signs. For example: a 1.5-year-old child says, "Don't generalize an apple, a ball, a round ball."

Thinking begins to develop very quickly during the child's kindergarden age. The reason for this is that the life experience of children aged 1 to kindergarden has greatly increased, speech has developed well during

this period from 2 to 3, children of kindergarden age have a lot of opportunities to be free and independent. The role of speech in the development of children's thinking is very large. Because thinking is done through speech. A man of speech has no means of thinking. The reality of thinking is seen in speech. After children learn the names of various things and events around them, they will gradually generalize them. In the family, through the interaction of adults in kindergarden with children, children quickly learn not only certain concepts, but also ready-made logical speech forms. A preschooler's vocabulary begins to increase rapidly. During the kindergarden age, the child's speech improves not only quantitatively, but also qualitatively. The development of the child's speech is closely related to the growth of his thinking. As we know, concrete thinking prevails in a small group of kindergarden children. Gradually, his thinking begins to turn into logical thinking. For this, first of all, a sufficient vocabulary is required.

The child learns nouns, verbs, adjectives and pronouns from word groups. This, in turn, affects the child's thinking. For example: showing a 3-year-old a doll and a pencil, what is it? - when asked, the child says the name "this is a doll, this is a pencil", a 5-year-old child plays with a doll "this is a pencil, it is black, red" - says:

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a 6-year-old child and he answers that "he writes with a pen, he is tall, black in color", "he plays with a doll, he has a head, arms, legs and hair".

The area of free movement in the period of kindergarten age is much wider than in the period of old age. This gives children the opportunity to get acquainted with many things.

Kindergarten children create and compare their own thinking processes, such as analyzing and summarizing. After the child learns a lot in his experience, he begins to be interested in the inner properties of things.

That's why they have questions like (what is it? Why is it like that? Why is it necessary?). Usually, any thought process is caused by not being able to understand something, being surprised by something, and as a result, various questions arise.

Children mainly think about things and events within their life experiences.

That's why they ask a very interesting question.

For example: Why do clouds move?

How many stars are there ?

Is Santa a man?

Where does electricity come from?

Don't the vine strike the sparrows that land on the wire?

Why does it rain?

Why is snow white?

As you can see from the above questions, there are several reasons why children find their questions so interesting when they ask questions about each area:

- 1). Children reflect the things and events around them as they are, that is, as a whole:
- 2). They do not develop deep analysis and synthesis of things and events:
- 3). Scientific concepts of nature and social phenomena have not yet been included in them:
- 4). They will have little life experience. That's why they keep asking questions, wanting to know.

Their questions should be taken seriously. If children cannot find an answer to their question or if adults do not pay attention to their question, the child's curiosity and thoroughness will decrease. Many parents and educators say that if children ask more questions, "don't be too polite!" "Where did you learn such things?" they jerk. As a result, the child learns and tries to understand as best he can. He will certainly get many things wrong, and this understanding will remain for a very long time.

For example: 6-year-old children now try to explain the cause of events.

A boy named Yura said, "I know what the stars are made of - there is a big hole in the sky - a mesh of holes. A large bonfire is burning on the grid. "Stars are visible through the holes of the net," he tries to understand.

True, it is difficult to answer such questions of a child, because they ask questions about things and events that they do not yet fully understand. But it is necessary for the educator to explain thoroughly in accordance with the child's age. For example: "Where does it rain?" A 6-year-old boy answered the question: "Rain lives in the sky, his house is higher than the clouds. "When the clouds open, the rain falls," he explains. At this time, the teacher should explain the scientific concept of rain in a simple and understandable way, showing the example of the formation of water particles when the cold glass is affected by hot steam.

It is known that some children ask too many questions, while others hardly ask any questions.

The fact that children ask a lot of questions about each area is a positive characteristic and indicates the child's curiosity, activity and independence.

Usually very passive and shy children do not ask any questions.

The teacher himself should ask such children questions during various activities and excursions and thereby activate them.

By the time of kindergarten age, the child's ways of thinking also begin to develop. In small groups of the kindergarten (3-4), the child's thinking consists of visual action thinking. By tinkering with his hands, the child separates the objects he knows into pieces through "practical action", combines, compares and contrasts, analyzes and synthesizes what he perceives. For example: a child breaks his toy into pieces in order to find out "what's inside" and analyzes it: he makes a "house" out of cubes and synthesizes it. Kindergarten children are dominated by visual, figurative thinking. Children only have concepts of what they perceive and can imagine. Children of this age can only think about concrete things. That's why they don't have abstract thinking. Since the child bases his thinking on concrete facts, he pays special attention to the color of things. For example: the conducted experiments show that after reading the fairy tale "Little Red Riding Hood" to children, the educator asked them: "children, the little red riding hood was wearing a coal-red and air-colored

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hat?" When he asks, the children object: "No, no, he was in a color shirt and a red hat." This example shows that the child's thinking has a concrete, demonstrative character. That is why it is necessary for educators to always conduct educational activities on a demonstration basis, taking this into account.

Logical thinking is still developing in preschoolers. "Some Western scientists say that children under the age of 7 are completely incapable of thinking logically." That is why they claim that there is no point in working on the development of children's thinking. These thoughts are completely wrong, because the child amazes adults with his sharp and clear judgments. In addition, the child can distinguish between right and wrong within the material he can understand, he can tell that the words he perceives do not correspond to reality: for example: a 5-year-old girl standing in a picture says: "They are bringing a fir-tree from the forest, why is there a star on the fir-tree: did the star knock on the fir-tree at home?" OR another example: A father drew a picture of a train to his daughter. He took a picture of the door of the carriage, but did not take a picture of the stairs. The girl asked her father: "Where is the ladder of the wagon?" - "On the other side" - "why is there a door here?" these examples also show that the child can think logically and distinguish right from wrong. By the time the child reaches the age of kindergarten, they have mastered the forms of logical thinking - the basic types of judgment and conclusion. Kindergarten-aged children learn from other people in their thinking. Since children of this age have not yet developed logical thinking, they accept the opinion of adults as the truth and make excuses like "Mom said so". Since preschool children's thinking is not limited, they generally generalize their life experiences and make incorrect judgments and conclusions about things and events. For example: when a 6-year-old girl was asked: "Why is the bread on the plate placed on the edge of the table" - "so that the plate does not fall to the floor!" he answered. Kindergarten-age children's thinking is directly subordinated to their perception, so children make the wrong conclusion that what occupies more space in space is bigger. For example: French psychologist J. Piaget conducts the following experiment. Shows children exactly the same and equal in size dough balls. Each child looks carefully and says that the fringes are equal to each other.

That is why children crush one piece of dough in front of their eyes and immediately see that the dough in the form of bread takes up more space on the table and come to the conclusion that the dough in the form of bread is more than the dough. By the older groups of kindergarten age, after children begin to understand the causes between things and events, they begin to reason about these events and draw correct conclusions in inductive and deductive ways. For example: "Iron sinks in water because it's heavy, wood floats because it's light," and "if you plant a seed in the ground, it will turn green." Children of this age draw conclusions based on what they have previously perceived in their thought processes. For example: from a 6-year-old child: "Does a walnut sink or float in water?" - when asked, he answered "it flows", the reason why the child gave the right answer was that he had tried to drop a nut into water in his experience. Because children are very curious, they begin to draw clear conclusions in their reasoning. For example: Gulnara (5 years and 8 months) says, "My father went on a long-term business trip." When they asked, "How do you know?", he answered, "My father took a big suitcase." (in fact, father usually takes a small suitcase when he goes on a short business trip). By the time of kindergarten, the child's concepts become concrete and meaningful. Now, the child's concepts will be more content in the concept of children of the age of five, that is, in the concept of kindergarten children, the signs of things will be reflected more. Usually they see the consumption of things and why they need them as the most important sign of this thing. For example: "What do you need a bowl for?" "Tea is drunk in a cup", "What is the need for grass?" "The grass is eaten by cows and sheep." "What kind of animal is a cow?" "A cow is an animal that gives milk." "What kind of animal is a horse?" "horse-riding animal". Kindergarten children's concepts are concrete, not abstract, and children only have concepts about what they perceive and can imagine. For example: a child of this age can think about a good grandmother, about a beautiful flower, about equal cubes, but they think about goodness, beauty, equality. they can't. So, the concepts of this age will be concrete. That is why they cannot solve simple tasks given in abstract form. By kindergarten age, children's thinking (processes) skills are also improving. The child now analyzes and synthesizes things and events, summarizes things based on their

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important features. They begin to identify similarities and differences by knocking on each other. For example: If we show a doll to a child, he will analyze it like this. "This is a doll, it has two eyes, two arms and legs, it has black eyes. "The following one is also beautiful, I liked it," he said. The child also develops the ability to generalize things based on their important features. For example: child - "apples, apricots, bread, cherries, grapes, pomegranates, quinces, peaches" are fruits. It is called The child can now freely use the general concept of "fruit" in his speech. Also, the child begins to distinguish similarities and differences by knocking things together.

For example: "Square and rectangle, square and rectangle have four sides, so they are similar. But the difference is that the four sides and four corners of a square are equal, and the opposite sides of a rectangle are equal. Kindergarten allows children to think and talk about solving simple problems. A four- to five-year-old child solves a problem with practical action and talks about it through speech. For example: a 4-year-old boy pulls a stuck flag stick out of a pipe, but cannot get it out. Then the child carefully turns the stick into the tube and pulls out the flag. The issue has been resolved. So, the children of the small group solve the problem through practical action and finish the work done with a speech. 5-6-year-old children think about the problem in advance and make a plan for it. This is done through internal, silent speech. They solve the problem orally: For example: "7 birds are sitting on a tree. Two of them flew away, how many birds are left on the tree?" Nowadays, our nation has set an important task of educating a person who is harmoniously developed in all aspects. The builder of an independent state must be intellectually mature, which requires a person's thinking to be highly developed. It is known that thinking is developed from a very young age, that is, from kindergarten age. That is why it is necessary to pay special attention to the development of the child's thinking during this period. Various educational activities play a big role in developing a child's thinking. The lessons help to develop the child's mind and teach him to think independently. The development of a child's thinking begins with the formation of concepts. Initially, concrete concepts are formed in children in small groups of kindergarten. For example: a table, a doll, a tree, a plate, as well as individual concepts are formed. For example: But about our

grandfather. Common concepts are formed in children by coming to large groups of kindergarten. For example: "plant:", "fruit", "transportation", "furniture", etc., in addition, the abstract concepts formed by children are concreted by connecting them to objects . language training, numeracy and speech development. For example: a house is built from cubes, a pyramid is divided into pieces. Puts things into a group based on their common characteristics. He collects pictures of tables, sofas, sofas, beds, chairs, puts them in one group and calls them "furniture". OR put a coat, shirt, sweater, suit pants in one group and say "clothes". Children will be able to use general concepts (furniture, clothes).

The educator should teach children to generalize by playing square lottos with different pictures. Children's reasoning ability is developed with the help of activities to develop elementary mathematical ideas: they are taught to draw conclusions and solve simple problems. With the help of cubes, circles, squares and stripes, children can be taught to compare things, to distinguish similarities and differences, to form a group of some things and to distinguish one from a group, to divide things into several equal parts, i.e. 2 and 4, and it is necessary to teach them to compare.

It is possible to develop a child's thinking by teaching them to count in tens and solve oral problems when going to preparatory groups.

Children's thinking is also developed with the help of various walks and excursions.

Excursions help to activate and develop the thinking process in children.

Children's observation increases during excursions and trips, they learn to compare different things, analyze and synthesize. For example: the children who went on an excursion to the garden at one end of the garden make a turtle digging in the ground with its legs like a shovel, and the second child likes the digging of an excavator. Such critical comments have an active influence on the development of children's thinking.

Each excursion should be conducted for a specific purpose. We know that children are very curious. They seek to know the cause of events, to be aware of the secret of everything. These are their interests related to the cognitive process. As the great Russian pedagogue KD Ushinsky said: "Curiosity is full thinking. It is necessary to use these interests in developing children's thinking, because interest deepens the child's knowledge. So, as the child's thinking grows rapidly

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with pictures during the kindergarten age, its further development and development is one of the most important tasks facing children's institutions today. Didactic games also develop thinking.

The development of thinking in students of junior school age has its own characteristics. Scientists who have studied the characteristics of the thinking of students of junior school age have studied the child's thinking in the following three directions: firstly, the peculiarity of thinking at a young age, secondly, its development, and thirdly, the factors of the formation of concepts.

One of the most important features of children's thinking is that they cannot notice the permanence of some unchanging features of things. At the initial stage of education, the child's generalization is very simple and is based only on the sign of similarity. Later, the child moves on to grouping and classifying the signs of external qualities and characteristics of things and events, generalizing about the properties of things and events, laws, important signs of complex internal connections and relationships.

Making inductive and deductive conclusions is of special importance for students. Conclusions are made on the basis of what is directly perceived. In the process of direct observation and perception, it is a conclusion that reflects the relationship between objects and events, and occupies a central place in the child's thinking. Because a conclusion is made based on clear-image thinking. Then there is a type of inference that arises from abstract conditions.

Analytical-synthetic activity of thinking plays an important role in the educational process. In the process of analysis, students divide a whole relationship or thing into parts and determine their organic connection, while in synthesis, they do the opposite, that is, determine the connection of parts into a whole. Students practice analysis and synthesis, comparison by doing, they learn to separate the important features of things and events from their casual knowledge and thus improve their abstraction activities. It is known from the research carried out for the purpose of developing the generalization activity of primary school students that by the end of the year, the children themselves will be able to summarize things independently based on their important signs. The amount of local concepts, terms, and concepts in them is drastically reduced. Teaching children the methods

of abstraction and generalization raises the development of children's thinking to a new level. Their thinking differs sharply from the thinking of preschool children and teenagers with its specific features of using various methods of logical thinking, reasoning, judgment and conclusion, comparison, analysis. Children have a certain superiority in their thinking, and their thinking shows an absolute age-appropriateness. Teaching mental operations and independent thinking in the educational process is the key to the development of children of primary school age.

During adolescence, important shifts in thinking activity occur. The level of thinking development achieved at the junior school age allows a teenager to successfully and systematically learn the basics of science. The new nature of mastering the logical knowledge of the content of the studied subjects and the structure of the educational courses requires relying on independent thinking. The ability to abstract and generalize, compare, reason, draw conclusions, prove is necessary.

Adolescent thinking tends to be deep and more abstract. They adopt scientific concepts and use almost general judgments. Teaching mathematics is essential for the development of generalized and critical thinking.

Under the influence of school education and independent learning activities, the adolescent's analytical-synthetic activity begins to develop rapidly. That is why the study of explanation of cause and effect is strengthened. The reader tries to make broad generalizations by distinguishing the important features of the material.

Analytical-synthetic activity is not sufficiently developed in students during adolescence. That is why difficulties arise if the methods of solving the problem from mathematics or physics are not shown or the way of proof.

The main feature of adolescent thinking is the year-by-year growth of abstract thinking ability, the change in the ratio between concrete figurative and abstract thinking in favor of abstract thinking.

Another of the most important characteristics of a teenager is the rapid development of independent thinking and critical thinking. With the direct influence of school education, the process of self-awareness begins to develop in a teenager. He tries to be independent in his opinion, to have his own opinion on

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some issue. Therefore, he looks critically at what the teacher and parents say. Independence of thinking is very important for a person. The teacher must support this quality in various ways in the course of the lesson and outside of the lesson, in any difficult conditions, otherwise the excellent quality of the adolescent's mind will be destroyed.

In order to develop the intelligence of teenagers, it is necessary to constantly teach them logical ways of thinking. The most important feature of this age is the formation of active independent, creative thinking. As psychologists say, adolescence is a sensitive age for the development of such thinking.

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