INTERNATIONAL JOURNAL OF FORMAL EDUCATION

**Volume: 3 Issue: 5 | May–2024 ISSN: 2720-6874**
http://journals.academiczone.net/index.php/ijfe

# Peculiarities of Convergent and Divergent Thinking of Preschool Children

***Shokirjonova Fotimakhon Murodjon kizi***
*Student of Fergana State University*

**Abstract:** This article talks about the specific aspects of convergent and divergent thinking of preschool children.

**Key words:** Divergent thinking, creative and logical thinking, emotional thinking, analytical perception, graphic dictation.

## Introduction

Convergent thinking is a term coined by Joy Paul Guilford in 1956 as the opposite of divergent thinking. This usually refers to the ability to answer standard questions that do not require much creativity, such as in school art assignments and standardized multiple-choice intelligence tests.

Convergent thinking is a type of thinking that focuses on finding a single, clear answer to a problem. It aims to get the best or correct answer to the question. Convergent thinking emphasizes speed, accuracy, and logic, and focuses on recognizing and reusing familiar patterns and retrieving stored information. It is most effective in situations where the response is readily available and must be developed through recall or decision-making strategies. An important aspect of convergent thinking is that it leads to a single best answer and leaves no room for uncertainty. In this context, the answers are true or false. The solution at the end of the convergent thinking process is often the best answer.

Convergent thinking is also related to knowledge because it involves manipulating existing knowledge using standard procedures. Knowledge is another important aspect of creativity. It is a source of ideas, suggests solutions, and provides benchmarks for efficiency and innovation. Convergent thinking is used as a tool for solving creative problems. When a person uses critical thinking to solve a problem, they consciously use standards or probabilities to make judgments. This is different from divergent thinking, where judgment is deferred while seeking and accepting many possible solutions. Convergent thinking is often used in conjunction with divergent thinking.

## The main part.

Divergent thinking usually occurs in a spontaneous, free-flowing manner in which many creative ideas are generated and evaluated. Several possible solutions will be explored shortly. After the divergent thinking process is completed, ideas and information are organized and structured using convergent thinking and decision-making strategies are applied, leading to a single best or correct answer. Examples of divergent thinking include using brainstorming, free-writing, and creative thinking early in the problem-solving process to produce solutions that can be evaluated later. Convergent thinking can be used after a sufficient number of ideas have been explored. Knowledge, logic, probability, and other decision-making strategies are taken into account as solutions are evaluated individually in the search for the best answer that is not unambiguous when reached.

Simply put, a basic math problem (eg 1+1=2) is a convergent reasoning task. You follow logical steps in math to arrive at a single answer. In contrast, some math word problems require consideration of different aspects of the problem or additional solutions using different kinds of thinking. Our children need both convergent and divergent thinking to succeed in school.

Volume: 3 Issue: 5 | May–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

Creativity for children is actually a complex, very elegant set of skills. But at the heart of children's creativity lies one simple skill - divergent thinking. There are two main types of thinking that help solve problems and implement new ideas: convergent and divergent. Children need to develop both convergent and divergent thinking skills to deal with an ever-changing world full of problems. But only one of them is supported by schools and today's dominant culture.

Some kids just need to "think outside the box" to solve a problem they're struggling with. This tactic is called divergent thinking, and it forces children to find several answers to a question and determine which one is the best, most useful.

Consider divergent thinking, why it's important, and how it differs from its opposite, convergent thinking. Then, use a few strategies to help children strengthen and maintain divergent thinking skills. What do we mean by divergent thinking and how does it differ from other problem solving strategies? Divergent thinking is defined here as an educational strategy that encourages children to find different solutions to a problem. After students think of different answers, they decide which answer best fits the question or proposition.

Although divergent thinking is not synonymous with creativity—defined here as the ability to have new ideas or create new things—the two skills are closely related. Divergent thinking can lead to creativity as children come up with more unique solutions. Similarly, encouraging creativity in your children can lead them to consider different answers to their problems.

Research shows that, in general, children have stronger reasoning skills than adults. For example, children are better at imagining different ideas than adults. In fact, a person's divergent thinking ability decreases with age. Teaching children divergent thinking is not about teaching a new skill, but about maintaining it.

**Divergent thinking and convergent thinking**

Divergent thinking should not be confused with convergent thinking, a problem-solving strategy often taught in schools. Convergent thinking encourages students to find one clear answer to a question based on the given information. Once they find this solution, they stop and disagree with others.

Convergent thinking is not necessarily a negative thinking strategy. In some cases, there may be only one answer to a question (although there is not only one way to get that answer). But overall, teaching divergent thinking to its convergent counterpart helps students solve problems more creatively and effectively.

**Divergent thinking improves problem solving and children's achievement**

There are many benefits to teaching children divergent thinking skills. As I mentioned earlier, divergent thinking is strongly associated with creativity. According to neuroscience, creative thinking helps our brain learn new concepts by creating stronger neural connections. By fostering creativity and divergent thinking in your children, they will be better equipped to fulfill their academic potential.

Divergent thinking also helps students develop more open-mindedness, an important social-emotional skill. As children learn to think about a topic in new ways, they are able to consider ideas outside of their own experiences. It helps them broaden their perspective and better understand people whose ideas differ from their own.

In addition, divergent thinking strategies teach children how to solve problems. Instead of settling on the quickest, easiest, or most obvious solution, children spend time thinking about different answers. Thus, they learn to prioritize finding an effective solution over a quick solution.

The younger children are, the easier it is for them to think differently. For example, in a study by the Royal Society of Medicine, 90% of kindergartners ranked as "genius" for divergent thinking. If you can

Volume: 3 Issue: 5 | May–2024 ISSN: 2720-6874
http://journals.academiczone.net/index.php/ijfe

develop this skill early in a student's academic journey, you can help them retain skills that will benefit them throughout their lives.

**Strategies to stimulate divergent thinking in preschool children**

One simple but effective way to help children think differently is to ask open-ended questions. Open questions are questions that cannot be answered with "yes" or "no". The more open-ended the question, the more likely children will find different answers.

Encourage children to focus more on the learning process than on the answer. If children worry too much about finding the "right" answer, they may rush and choose the first answer. But if they spend a little more time on the question, they might think of something better.

Also, teach your children to view failure as a positive experience rather than a negative one. Making mistakes gives children a learning experience that helps them move on to a more successful solution. If a child is struggling with an activity, praise him for working hard and encourage him to try again on the other side.

Research shows, for example, that pretend play is associated with strong distributed thinking skills in young children. Assign activities that allow children to use their imaginations and play in the completion.

5 ways to encourage divergent thinking

1. Give children time for free, open play!

Get them off the screen and into situations where they have to use objects in different ways. Use different methods of outdoor games in the open air.

2. Try Cup Fight.

Give the children a bowl and ask, "What can you do with this?" ask, and after they show you, "What else can you do with it?" ask. Continue to see how well they can respond and how well you can respond.

3. Play this, not this.

Start with household items or natural treasures (sticks, augers, rocks, and feathers will all do the trick). Hold it up and ask, "Do you know what this is?" Continue with “hmm… it's not a stick, it's a…”. Pause to see if your child can invent new uses for it. Or share some ideas of your own. A stick can be an example of infinite things.

1. Allow children to be bored and learn to work with things.

Boredom is the mother of creativity and can be a great starting point for divergent thinking. If the children are bored, ask them open questions: "What else can you do?", "How can you use your blocks, LEGOs, stuffed animals in a new way today?" "What adventure can you continue?".

2. Find these moments every day.

Use a trip to the grocery store, time in the yard, or even a car ride to try these creativity-boosting tips.

**List of used literature:**

1. Ortikova, Z., & Yuldasheva, M. T. (2023). THE IMPORTANCE OF THE MOTHER TONGUE AND READING LITERACY TEXTBOOK IN THE FORMATION OF STUDENTS'LINGUISTIC COMPETENCE. *Academia Science Repository*, *4*(04), 273-275.
2. Nurmaxamatovna, O. Z. (2022). A Model of Cooperation in Fostering Children's Relationships in the Family Based on National Values and Traditions. *International Journal of Innovative Analyses and Emerging Technology*, *2*(4), 118-122.

**Volume: 3 Issue: 5 | May–2024 ISSN: 2720-6874**
http://journals.academiczone.net/index.php/ijfe

3. Nurmuhammatovna, O. Z., & Madinabonu, E. (2023). Family and School Integration in the Development of the Creativity Component in Students Based on Collaboration Technology. *Journal of Pedagogical Inventions and Practices*, *19*, 52-55.
4. Nurmaxamatovna, O. Z. (2022). The Essence of Foreign Approaches to the Upbringing of Children in the Family Based on National Values and Traditions. *European Multidisciplinary Journal of Modern Science*, *6*, 101-105.
5. Ortikova, Z. N., & Anvarova, S. A. (2023). Artistic and Aesthetic Skills of Primary Class Students. *Journal of Pedagogical Inventions and Practices*, *19*, 48-51.
6. Zulfiya, O. (2023). Ways to Improve Mental Activity of Students by Means of Integrated Lessons. *Journal of Pedagogical Inventions and Practices*, *19*, 56-62.
7. Nurmakhamatovna, O. Z. (2022). BASIC CONCEPTS" VALUES"," FAMILY"," FAMILY EDUCATION"," VALUE ATTITUDE". *Gospodarka i Innowacje.*, *22*, 40-44.
8. Nurmaxamatovna, O. Z. (2021). Content of socio-moral qualities of children through TV shows. *Academicia: An International Multidisciplinary Research Journal*, *11*(3), 1261-1264.
9. Nurmahamatovna, O. Z. (2021, November). The Place Of The Family, School And Neighborhood In The Formation Of Social And Moral Qualities Of Children. In *Archive of Conferences* (Vol. 22, No. 1, pp. 104-106).
10. Nurmakhamatovna, O. Z. (2022). PEDAGOGICAL TECHNOLOGIES AIMED AT EDUCATION IN JUNIOR SCHOOLCHILDREN VALUE ATTITUDE TO THE FAMILY. *Gospodarka i Innowacje.*, *22*, 45-49.
11. Ortikova, Z. (2019). TO DEVELOP STUDENTSCREATIVE THINKING. *Scientific Bulletin of Namangan State University*, *1*(9), 224-229.
12. Ортиқова, З. Н. (2019). SOCIO-ECONOMIC QUESTIONS OF CHILDREN IN THE FAMILY Factors for making statements. *Scientific Bulletin of Namangan State University*, *1*(11), 335-337.
13. Ортиқова, Z. N. (2019). ОИЛАДА БОЛАЛАРНИНГ ИЖТИМОИЙ-АХЛОҚИЙ СИФАТЛАРИНИ ШАКЛЛАНТИРИШ ОМИЛЛАРИ. *Scientific Bulletin of Namangan State University*, *1*(12), 395-397.
14. Ortikova, Z. (2020). MECHANISMS OF PREPARING ADOLESCENTS FOR SOCIAL RELATIONS IN THE ERA OF GLOBALIZATION. *Theoretical & Applied Science*, (2), 661-664.
15. Tajimamatovich, J. V. (2023). Pedagogical Management Ability of Socio-Cultural Activity Owners. *American Journal of Public Diplomacy and International Studies (2993-2157)*, *1*(6), 14-17.
16. Tojimamatovich JV, Alimdjanovna XM. Basic Concepts of the Smart Home System. International Journal of Culture and Modernity. 2022;17:7-13.
17. Tojimamatovich, J. V. (2023). Formation of Managerial Skills of Students in the Process of Practical Training. *Journal of Sustainability in Integrated Policy and Practice*, *1*(2), 76-82.
18. Zokirov, M. T., & Dadabayeva, S. S. (2020). ABOUT THE ROLE OF LANGUAGES CONTACTS IN THE DEVELOPMENT OF LANGUAGES. *Theoretical & Applied Science*, (4), 687-691.
19. Zokirov, M. T., Zokirova, S. M., & Dadabayeva, S. S. (2021). About The Influence Of The Uzbek Language In Rishtan Tajik Dialects Of Ferghana Region. *Turkish Online Journal of Qualitative Inquiry*, *12*(4).

**Volume: 3 Issue: 5 | May–2024 ISSN: 2720-6874**
http://journals.academiczone.net/index.php/ijfe

20. Zokirova, S. M., & Axmadjonova, G. M. (2023). MAKTAB YOSHIDAGI O'QUVCHILARDA KO'P TILLIK O'QITISHNING O'ZIGA HOS HUSUSIYATLARI. *INNOVATION IN THE MODERN EDUCATION SYSTEM*, *3*(33), 100-102.
21. Zokirova, S. M., & Nuriddinova, M. S. (2023). The First Step in the Development of the New Textbook Education System. *Web of Synergy: International Interdisciplinary Research Journal*, *2*(5), 98-104.
22. Zokirova, S., & Akbarova, M. (2023). Savodga o 'rgatish jarayonida smart darslikdan foydalanish. *Евразийский журнал академических исследований*, *3*(6), 80-89.