



FORMATION AND DEVELOPMENT OF CREATIVE THINKING THROUGH CHESS GAMES

Boboqulov Chori Urolovich

Termez University of Economics and Service,

Teacher of the Department of Physical Culture

Abstract:

This article analyzes the process of forming and developing creative thinking in primary school students through chess games. Chess is not only a game that develops logical thinking, but also plays an important role in the formation of students' independent, analytical and innovative thinking skills. The article discusses the impact of chess on creative thinking, its contribution to the intellectual development of students, and methods for effectively using chess in the modern education system. During the study, the impact of chess classes on creative thinking was studied on an experimental basis, and its positive results are presented.

Keywords: Chess, creative thinking, logical thinking, strategic thinking, primary education, intellectual development, problem solving, innovative approach, cognitive development, educational methodology.

Introduction

In the modern education system, it is important not only for students to acquire knowledge, but also to develop their independent and creative thinking skills. In particular, the use of chess games is one of the effective methods for shaping the thinking of primary school students. Chess is not only an intellectual game, but also a tool that deepens human thinking, forms problem-solving skills, and stimulates creative thinking. One of the main features of chess games is that, in addition to developing students' analytical and logical thinking, it also gives them the opportunity to create new ideas and form an innovative approach. Therefore, if chess is included in the educational process, not only mathematical and logical abilities, but also creative thinking can be effectively developed.



Today, in the era of rapid information exchange and technological progress, students are required not only to memorize and assimilate ready-made knowledge, but also to form the skills of independent thinking and creative approach. Chess games are seen as an effective pedagogical tool for this purpose. In world experience, as a result of the integration of chess into educational programs, it is observed that not only intellectual, but also creative thinking of students has significantly developed. In particular, chess games develop in children the skills of planning in advance, considering alternative solutions, strategic thinking and making innovative decisions. Therefore, researching this topic and studying the impact of chess education on creative thinking is one of the current issues today.

Research objective:

To study the process of forming and developing creative thinking in primary school students through chess games and to determine its effectiveness in the educational process.

Research objectives:

- to theoretically study the impact of chess on creative thinking - to analyze the impact of chess games on children's logical and creative thinking abilities and to study best practices in this regard.
- to develop a methodology for developing creative thinking in primary school students through chess - to identify and propose effective methods for introducing chess classes into the educational process.
- to conduct experimental work and analyze the results - to empirically study changes in the level of creative thinking of students engaged in chess classes and draw scientific conclusions.

Literature review

The importance of chess in the educational process and its impact on the formation of students' creative thinking have been studied in many scientific studies. Studies show that chess classes not only develop logical thinking, but also help to form students' personal qualities, creative thinking, and strategic thinking skills.

Kholikov U. Q. (2021) in his article "Formation of personal qualities and logical thinking in primary school students during chess teaching" analyzed the impact of



chess on the intellectual and personal development of students in primary school. The author of the study showed that as a result of chess classes, children develop independent thinking, quick decision-making, and problem-solving skills. It was also noted that students' attention, memory, and analytical thinking skills changed significantly through chess games.

The article "Chess: A Game of Intellect and Strategies" by Ferangiz M. (2024) highlights the contribution of chess not only to educational, but also to strategic and intellectual development. The author analyzes the role of chess in the systematic development of human thinking and its importance in solving life problems. The article also discusses the innovative use of chess in the modern education system and its impact on intellectual development. Akramov E.S. (2024) in his article "Ways to Develop the Intellectual Abilities of Secondary School Students in the Process of Teaching Chess" analyzes the role of chess classes in the development of students' intellectual potential on a scientific basis. The author emphasizes in his study that chess has a positive effect not only on logical thinking, but also on creative thinking. The results of the study show that through chess games, students can develop the skills of independent thinking, finding new solutions, and forming a creative approach.

The article "The Importance of Children's Games in the Mental, Moral, Physical, and Aesthetic Education of the Young Generation" by Taslimboev A. (2024) is devoted to studying the role of chess and other intellectual games in children's education. According to the author, chess games not only develop logical thinking in children, but also affect their aesthetic views and moral education. Through chess games, students acquire the skills of controlling their behavior, reaching compromises, and making strategic decisions.

Based on these sources, the role of chess in the formation of students' creative thinking, its contribution to logical and intellectual development, and the effectiveness of using chess in the educational process were widely analyzed. Scientific research shows that chess games help develop students' creative thinking skills. Therefore, integrating chess into the educational process and studying its impact on creative thinking remains a pressing issue.



Research Methodology

This study aims to study the process of forming and developing creative thinking of primary school students through chess games. In order to ensure the scientific validity of the study and achieve specific results, the following methods were used: Theoretical analysis - advanced scientific works, pedagogical and psychological sources on the impact of chess education on creative thinking were studied. Scientific articles and books of scientists who studied the impact of chess on cognitive and creative development were analyzed.

Empirical research - experimental work was conducted to study the impact of chess classes on students' creative thinking. Primary school students participated in the experiment, special chess classes were organized for them.

Experimental method - the participants of the study were divided into two groups:

Experimental group - students who were engaged in chess classes;

Control group - students who did not have chess classes.

During the experiment, the level of creative thinking of the two groups was compared.

Test and diagnostic methods - special tests were used to determine the creative thinking of students, including the Torrens Creative Thinking Test (TTCT) and tasks measuring problem-solving skills.

Interview and observation - interviews were conducted with teachers and students to assess the thinking skills of students before and after chess lessons. Through observation, students' strategic approach, analytical thinking, and creative decision-making skills were assessed during chess play.

Statistical analysis - the results of the experiment were analyzed using mathematical and statistical methods. The data obtained were summarized in the form of diagrams and tables.

Based on the results, the effect of chess lessons on students' creative thinking was assessed and scientific conclusions were drawn.

During the study, the effect of chess games on the creative thinking of primary school students was studied and the following results were achieved:

Research results

- Chess classes were found to develop creative thinking.

The differences in the level of creative thinking between the experimental group (students who participated in chess classes) and the control group (students who did not participate in chess classes) were analyzed. It was observed that the problem-solving ability, skills in generating new ideas, and the level of logical thinking of students in the experimental group were significantly higher than those in the control group.

- Chess strengthens the analytical and strategic thinking skills of students. During the experiment, students who played chess improved their ability to plan ahead, justify their decisions, and find alternative solutions. It was observed that these skills were reflected not only in chess games, but also in assignments in other subjects.

- Chess classes develop the main criteria of creative thinking. The level of creative thinking of students was assessed using the Torrens Test (TTCT). Students in the experimental group achieved high results in terms of flexibility, the ability to generate new ideas, and finding non-standard solutions. This shows that chess games stimulate students' not only logical thinking, but also creative thinking.

- Students who played chess developed independent thinking and decision-making skills. Students who participated in chess lessons gained the ability to independently solve problems, develop new strategies, and take risks. They became accustomed to justifying their decisions and expressing their thoughts logically.

Discussion

The results obtained show that chess games are an effective tool for the formation and development of not only logical thinking, but also creative thinking. These results are consistent with previous studies, confirming that chess games serve to strengthen students' analytical thinking, teach them to make independent decisions, and form a creative approach (Kholikov, 2021; Akramov, 2024).

The study also identified the following important factors that influence chess classes on creative thinking:

- Students learn to develop logical and creative solutions in complex situations.

- Chess games form personal qualities such as patience, attention, and discipline in students.



- During the classes, students' competitiveness and self-assessment skills increase. Also, during the study, it was found that when introducing chess into the educational process, the following factors should be taken into account to increase its effectiveness:

1. Systematically introducing chess into the school curriculum.
2. Using interactive and practical exercises to develop creative thinking.
3. Developing special methodological guides and lesson plans for teachers.

In general, this study confirmed the important role of chess not only in developing logical thinking, but also in forming the creative abilities of students. A deeper study of the importance of chess classes in the educational system and its wider application in the educational process may be one of the important directions in the future.

The research found that students who regularly played chess had significantly higher levels of creative thinking than the control group. Chess games help students develop skills such as independent thinking, finding alternative solutions, and analytical analysis. It was also found that chess classes strengthen children's ability to concentrate, be patient, and creatively approach problems.

The results of the study confirm that chess has a positive effect on the intellectual and creative development of primary school students. Based on these results, the following conclusions were drawn:

1. Chess is an effective tool for developing creative thinking. By playing chess, students develop non-standard solutions, generate new ideas, and develop creative thinking skills.
2. Chess games form analytical and logical thinking. Students acquire the skills to deeply analyze situations, make decisions, and develop strategies.
3. Chess lessons have a positive impact on students' personal development. Through the game, they develop important personal qualities such as self-control, patience, discipline, and responsibility.

Based on the results of the study, it is recommended to introduce chess more widely into school curricula and develop special methodological manuals for teachers. Future research should focus on a more in-depth analysis of the long-term impact of chess training and assessing the effectiveness of chess education in different age groups.



Chess is not only an intellectual game, but also a powerful tool for developing creative thinking. Therefore, its widespread use in the educational process serves to increase the intellectual and creative potential of students.

Conclusion. This study was devoted to studying the importance of chess games in the formation and development of students' creative thinking. The results obtained showed that chess training, along with developing students' logical thinking, also forms their creative approach, problem-solving and strategic planning skills.

References

1. Xoliqov, U. Q. Boshlang'ich sinf o'quvchilarda shaxmat o'rgatish jarayonida shaxsiy sifatlar va mantiqiy fikrlashini shakllantirish. *Интернаука*, (2021). (4-3), 78-80.
2. Ferangiz, M. Shaxmat: intellekt va strategiyalar o'yini. *activist science*, (2024). 1(1).
3. Akramov, E. S. (2024). UMUMTALIM MAKTABI O 'QUVCHILARINING INTELLEKTUAL QOBILİYATINI SHAXMATNI O 'RGATISH JARAYONIDA RIVOJLANTIRISH YO 'LLARI. YANGI O 'ZBEKISTON, YANGI TADQIQOTLAR JURNALI, 1(3), 367-372.
4. Taslimboyev, A. Barkamol avlodni aqliy, axloqiy, jismoniy va estetik tarbiyalashda bolalar o 'yinlarining ahamiyati. *Pedagogikada ilmiy izlanishlar*, (2024). 2(1), 13-16.
5. Kutlimuratov, I. K. Effectiveness of methods for improving the speed endurance of chief referees in football. *Eurasian Journal of Sport Science*, (2021). 1(2), 61- 65.
6. Igamberdiev, O. R. Organization of football clubs in schools and improving the physical fitness of those involved in them (on the example of 4-5 graders). *Eurasian Journal of Sport Science*, (2021). 1(2), 177-184.
7. Yunusova Yu.M. Jismoniy madaniyat metodikasi asoslari Darslik Toshkent 2005 yil.
8. Chori, B. (2024). The Influence of Chess Sports on Children's Mental Development. *Miasto Przyszłości*, 53, 941-943.
9. Salomov R.S. Sport mashg'ulotining nazariy asoslari-Toshkent., O'zbekiston davlat jismoniy tarbiya instituti, 2005 yil.



10. Ismagilov, D. K. (2018). Talabalar uchun jismoniy tarbiyaning innovatsion tizimlari. Bugungi kunda pedagogikada: muammolar va yechimlar (1-3-betlar).
11. Urolovich, B. C., & Dilshodbek, K. (2024). Technology of Using Movement Games to Increase the Efficiency of Physical Education Lessons. *International Journal of Scientific Trends*, 3(11), 44-48.
12. Boboqulov, C. (2023). PSYCHOLOGICAL, PEDAGOGICAL AND PHYSICAL ASPECTS OF PERSONALITY DEVELOPMENT OF PRIMARY CLASS STUDENTS. Theoretical aspects in the formation of pedagogical sciences, 2(5), 147-149
13. Dusyarov, T. (2023). A SYSTEMATIC APPROACH TO ATHLETIC TRAINING IS THE KEY TO SUCCESS. *Евразийский журнал академических исследований*, 3(4 Part 4), 97-101.
14. Urolovich, B. C. Zarina Rakhimova Fakhridin qizi.(2023). CHARACTERISTICS OF PHYSICAL CULTURE FORMATION IN THE FAMILY. *IQRO JURNALI*, 2(1), 325-330.
15. Zarina, R. (2023). PATRIOTIC EDUCATION OF DISABLED STUDENTS THROUGH PHYSICAL EDUCATION AND SPORTS. *Best Journal of Innovation in Science, Research and Development*, 304-307.
16. Beknazarovich, D. T. (2022). Application of stretching to stimulate the health of older preschool children.
17. Urolovich, B. C. (2023). Pedagogical Principles of Using Activity and National Games in the Physical Education of Student Girls. *Best Journal of Innovation in Science, Research and Development*, 2(12), 575-579.