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DEVELOPING STUDENTS' INDEPENDENT THINKING THROUGH A CREATIVE APPROACH

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Abstract This article analyzes the theoretical and practical aspects of shaping and developing students' independent thinking. Independent thinking is considered on e of the core goals of modern education. The article explores various definitions of independent thinking, its components, stages of development, and its role in education. Based on experimental results conducted with students, the article also recommends effective methods for enhancing their independent thinking skills.

Keywords: Independent thinking, critical thinking, creative reasoning, pedagogical methods, problem-based learning, interactive lessons, debates and discussions, project-based learning

Introduction

In today's era of globalization and digital information, educating individuals who can think independently is one of the most pressing challenges in education. Students who possess independent thinking skills can actively participate in social life, make sound decisions, solve problems, and develop creative reasoning. Independent thinking is a process linked to forming one's own viewpoint, drawing conclusions, and applying critical analysis. Education plays a key role in developing this process.

Fostering independent thinking in the learning process means not only delivering knowledge but also developing students' reasoning, creative potential, and problem-solving approaches. Therefore, educational strategies and pedagogical methods are being reconsidered. One of the main goals of modern education is to cultivate students' independent and critical thinking skills. This process ensures that students not only absorb textbook knowledge but also analyze real-life problems, propose alternative solutions, and make well-reasoned decisions.

Independent thinking is not merely possessing knowledge—it is the ability to analyze, evaluate, and generate new approaches. Today's youth must be taught to navigate the flow of information, think critically, and express their ideas freely. From this perspective, activating the learning process and moving away from traditional approaches toward interactive and creative methods is essential.

Methods

The research was conducted among 8th-grade students at a school in Tashkent. A total of 60 students participated and were randomly divided into experimental and control groups.

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In the experimental group, special methods aimed at developing independent thinking were applied, including:

Problem-based learning: Students were presented with various problem scenarios and encouraged to find solutions.

Debates and discussions: Students were divided into small groups and asked to justify their opinions on current social and ethical issues.

Project-based learning: Students were assigned small projects related to the topic and tasked with presenting them to the class.

Reflection technique: After each lesson, students analyzed their activities and expressed what they learned in written or oral form.

In the control group, traditional teaching methods (lectures, Q&A, task-based learning) were used. This allowed for a comparative assessment of the experiment's effectiveness.

Students' independent thinking levels were evaluated using specially developed diagnostic tests, observation sheets, and teacher interviews. Video recordings of lessons were analyzed to assess student participation, engagement in Q&A, and ability to express ideas. Before and after the experiment, both groups were given specially designed test questions to assess the following skills:

Identifying and analyzing problems

Proposing alternative solutions

Providing evidence and reasoning

Making final decisions and justifying opinions

Results

At the end of the experiment, significant improvements were observed in students' independent thinking levels. Test results in the experimental group were 25% higher than in the control group:

Additionally, students in the experimental group asked more questions during lessons, proposed new ideas, and were able to justify their opinions.

The results demonstrate that methods aimed at fostering independent thinking positively influence students' reasoning quality and activity. In the experimental group, average scores across all evaluation criteria for independent thinking showed significant improvement.

1. Problem Analysis Skills

At the beginning of the experiment, the average score for this criterion was 12.5, which increased to 18.3 by the end. Students began to approach problem situations more independently and showed a growing ability to analyze cause-and-effect relationships.

2. Justifying and Supporting Opinions

In the initial phase, most students struggled to convincingly justify their opinions. By the end of the experiment, 76% of students successfully expressed their views with supporting evidence.

3. Creative Thinking and Alternative Proposals

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During debates and group activities, students were encouraged to think creatively. For example, in project work, 15 students applied creative approaches to their topics by producing original infographics, videos, or diagrams based on their ideas.

4. Reflective Thinking Skills

Students learned to analyze their own performance after each lesson. They began independently answering questions such as "What did I learn today?" and "Where did I struggle?"

5. Statistical Analysis of Results

These results show that when methods aimed at developing independent thinking are applied, students' analytical, creative, and reflective thinking skills improve significantly. Additionally, students in the experimental group were observed to ask more questions, propose new ideas, and justify their opinions more effectively.

Discussion

The research findings demonstrate that educational methods focused on developing independent thinking positively influence students' depth of reasoning, their attitude toward learning, and their ability to express themselves. The methods used in the experimental group—problem-based scenarios, group work, debates, and project-based learning—enhanced students' communication, argumentation, and ability to propose innovative ideas. This contributed not only to their intellectual development but also to the growth of their social competencies.

Problem-based learning was especially effective in developing analytical thinking. Students actively participated in the thinking process by independently analyzing problems and generating alternative solutions, laying the foundation for critical thinking.

Debates helped students improve their verbal communication, logical reasoning, and argumentation skills. They learned to justify their viewpoints, respect others' opinions, and engage in constructive dialogue.

However, some limitations were observed during the study. A few students showed passivity, faced speech difficulties, or lacked social engagement, which hindered their ability to fully demonstrate independent thinking. This highlights the need for teachers to apply more individualized approaches.

Additionally, teachers' mastery of these methods and their creative engagement played a crucial role in fostering independent thinking.

Conclusion

Teaching methods play a vital role in shaping independent thinking. To develop this skill in students, interactive approaches, problem-based scenarios, practical tasks, and group work should be actively integrated into the lesson process.

Based on the research findings, the following can be recommended:

Developing students' independent thinking is a continuous, systematic, and interactive process that requires the teacher's methodological expertise, thoughtful lesson design, and effective communication with students.

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