



Cooperative Teaching Technology in Primary Schools: Innovative and Integrative Methods

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Abstract: This article emphasises the importance of continuing reforms meant to raise the standard of education in our nation and incorporate cutting-edge technologies into the educational system. Both pedagogical theory and practice in the educational system are changing significantly in the modern day. Specifically, using cooperative learning strategies in elementary school classrooms improves learning while also fostering the growth of students' abilities, memory, attention, and thinking. Furthermore, a pedagogical collaboration-based educational process promotes the social and personal growth of students. Through interactive techniques, cutting-edge technologies, and successful teacher-student interactions, the article highlights the importance of fostering students' capacity for independent thought, creativity, and teamwork.

Keywords: Education, Pedagogy, Technology, Knowledge, Society, Community, Development, Activity, Cooperation.

Introduction

Currently, our country is undergoing the formation of a new education system aimed at integrating into the global educational sphere. This period is marked by significant changes in the pedagogical theory and practice of the teaching and learning process; the content of education is evolving, new approaches to knowledge delivery are being introduced, and different attitudes and behavioral principles are taking shape. All these transformations are driven by the demands of the 21st century – an era of new technologies and evolving human relationships. Indeed, as President Shavkat Mirziyoyev has emphasized, “One of the issues that will always remain relevant and important for us is the task of raising our children to be independent thinkers, individuals with modern knowledge and professional skills, a strong life position, and true patriots of their country” (Mirziyoyev, 2017). The process of conducting lessons collaboratively in primary school students not only involves mastering a complex system of knowledge and developing various academic and intellectual skills but also includes enhancing cognitive processes such as attention, memory, thinking, and ability.

As a result of comprehensive reforms aimed at improving the quality of education and integrating advanced technologies into the learning process in our country, the effectiveness of primary education has increased. Additionally, opportunities have expanded to develop individuals capable of living consciously in the rapidly changing era of globalization. At the same time, the need to refine and implement the mechanism for establishing a collaborative learning environment in primary education has become evident. In this regard, within the framework of tasks outlined in Presidential Decree No. PF-60 "On the Development Strategy of New Uzbekistan", which focuses on further improving the continuous education system and creating conditions for supporting and realizing the creative and intellectual potential of the younger generation, it is crucial to study the pedagogical collaboration environment and didactic features of primary education, as well as to enhance the mechanisms for their formation.

Methodology

In order to ascertain the function and efficacy of a collaborative learning environment in the education of primary school pupils, this study employed both qualitative and quantitative research methods. The research's methodological underpinnings were empirical, experimental, and theoretical analysis.

Analysing cutting-edge educational technologies, assessing their use in primary education, and researching the didactic and psychological underpinnings of collaboration in education were all part of the theoretical analysis approach.

Data was gathered using surveys, interviews, observations, and experiments with teachers and students in primary schools as part of the empirical research approach.

Testing collaborative learning tools and assessing their effects on pedagogical practice were the main goals of the experimental research approach.

All things considered, the research methodology sought to investigate the function and efficacy of a collaborative learning environment in the primary education process, pinpoint current issues in this field, and suggest creative solutions.

Result and Discussion

In the primary education process, the formation of personal qualities in young school-age students is achieved only through purposeful education and upbringing. During this stage, students engage in collaborative activities and acquire the fundamentals of ethical behavior. As a result, they internalize moral norms and behavioral rules while also developing social orientation. Their interactions with adults – including parents, teachers, peers, and those around them – help integrate them into the community. These new relationships contribute to their socialization by encouraging participation in new types of activities and fostering their overall development. As a result, they develop unique experiences in social interactions within a community, shaping their character and willpower while fostering their moral and ethical development. "Children at this age significantly differ from individuals in other stages of life due to the precision, fluency, clarity, and sharpness of their perception. They exhibit a strong need for conscious actions,

deep trust, and profound respect for their teachers. During this period, their thinking becomes highly active, and they develop a positive attitude toward academic subjects, a sense of responsibility before the community, and an understanding of the social significance of acquiring knowledge. Additionally, young school-age students refine their ability to assess mental images created through learning, relying on the objective laws of nature and society” (Dilova, 2012). Therefore, when a primary school teacher organizes a cooperative learning process, they must take all these factors into account.

Of course, children’s upbringing and moral-ethical development begin even before they enter school. However, within the school education process, their development takes place strictly within the framework of established moral norms, rules, and regulations. These norms regulate students’ behavior in the educational process, their social interactions, as well as their conduct within the family and community, shaping their daily activities and actions. Students are required to adhere to socially accepted norms and moral rules in their interactions with teachers, classmates, and within the collaborative educational process. Throughout their education, primary school students’ moral and ethical understanding and conclusions are significantly enriched. The primary education process plays a crucial role in fostering collective relationships among students based on cooperation. Through effective education and upbringing, students acquire essential experience in cooperative activities, which is necessary for their future development. They develop the skills to work collaboratively within a group and contribute to collective efforts.

In the learning process, which is considered the leading activity for primary school students, various interactive teaching technologies and methods are used to develop analytical thinking skills. These include “Reading Together”, “Working in Small Groups”, “T-Chart”, “Venn Diagram”, “Cinquain”, “Pinboard”, “Remarkable Text”, “Discussion”, and “Text Analysis” – which involves placing text within predefined parameters. Additionally, the effectiveness of problem-based situations, didactic games, and collaborative activities is highlighted. Lessons conducted through group-based games contribute to the cohesion of the student community, play a significant role in shaping their behavior, and facilitate the systematic development of personal qualities.

Organizing and managing an educational process based on pedagogical collaboration involves several key components:

- designing a collaborative learning process;
- organizing and structuring the learning environment;
- ensuring active cooperation between students and teachers;
- managing and monitoring the collaborative learning process;
- developing a comprehensive system of pedagogical activities based on collaboration (Boymurodova, 2020).

Observations reveal that 80% of primary school teachers rate their pedagogical skills in organizing a collaborative learning process higher than their actual level. To ensure the success of the educational process, teachers must continuously improve their pedagogical practice and consistently master collaborative learning technologies.

One of the key tasks of the study was to assess teachers' readiness to organize a collaborative learning process and to address the issue of providing them with pedagogical support in this regard. Based on the findings, it became clear that preparing teachers for collaborative learning should be guided by the following principles:

- ensuring that the teacher's role in the collaborative learning process remains dynamic and evolving;
- promoting humanistic, democratic, and interactive dialogue, as well as tolerance and creativity in the teacher's professional activities;
- recognizing not only the results of collaborative learning but also the process itself as an important measure of teacher readiness;
- evaluating a teacher's performance based not only on task completion but also on their ability to foster pedagogical collaboration and create a friendly and supportive learning environment (Imamova, 2024).

In organizing the learning process based on pedagogical collaboration, the following organizational forms are evident: "Teacher-Class Community", "Teacher-Small Group", "Teacher-Large Group", "Teacher-Student", "Student-Student", "Small Group-Small Group", "Small Group-Class".

As a result of comparing traditional and non-traditional teaching methods in fostering collaborative learning, it was found that using interactive methods in organizing the pedagogical collaboration process yields effective results. These methods include:

- rapid presentation of information to students;
- creating problematic situations;
- establishing a creative environment based on inquiry;
- making effective use of dialogue;
- engaging students in various didactic games.

The use of collaborative learning technology in teaching helps develop independent thinking in young school-age students through both external and internal motivation. In this process, the purposeful activities of the teacher (facilitating) and the student (acquiring knowledge) play a decisive role.

Conclusion

The conducted research and observations have clearly demonstrated that ensuring the effectiveness of the collaborative learning process requires special attention to the teacher-student and student-student dialogue, which should be based on modern pedagogical thinking. It was also revealed that collaborative learning has central subjects and various types. Pedagogical interventions carried out with respondent teachers and students, as well as equipping them with the theory of collaborative learning, showed that participants in the experimental group developed a strong interest in both organizing and participating in the collaborative learning process. Respondents from the experimental group became convinced that collaborative learning fosters strong interest, independence, and the ability to navigate broad educational fields among students.

During the conducted experimental trials, the increase in respondents' readiness to organize a collaborative learning process based on cooperative teaching technology not only confirmed the effectiveness of the proposed methodology but also provided justification for the correctness of the research hypothesis.

Based on the findings, the following recommendations were developed:

1. Develop a model for teaching subjects using pedagogical technologies and create a technological map of the educational process to organize collaborative learning through modern pedagogical technologies.
2. Design a system of learning tasks that allows students to work collaboratively while considering the learning objectives of each subject.
3. Organize seminars, training sessions, and conferences to ensure that teachers consistently master collaborative learning technologies.
4. Expand the scope of scientific research aimed at developing the theory of collaborative learning.

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