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INTERACTIVE METHODS: NATURE AND PEDAGOGICAL BASIS

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https://doi.org/10.69682/arti.2025.92(1).32-41

İNTERAKTİV ÜSULLAR: MAHİYYƏTİ VƏ PEDAQOJİ ƏSASLARI

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ИНТЕРАКТИВНЫЕ МЕТОДЫ: СУЩНОСТЬ И ПЕДАГОГИЧЕСКИЕ ОСНОВЫ

Xülasə. İnteraktiv metodlar təlim prosesində müəllim və tələbələr arasında qarşılıqlı əlaqənin artırılmasına yönəlmiş fəal təlim yanaşmalarından ibarətdir. Ənənəvi tədris yanaşmalarından fərqli olaraq, bu üsullar şagirdlərin dərsə daha çox cəlb olunmasını, təcrübə əsasında bilik və bacarıqların mənimsənilməsini təmin edir. İnteraktiv təlim metodları pedaqoji prosesin mərkəzində şagird və ya tələbələrin olması və öyrənənləri fəal rol oynamağa həvəsləndirməsi prinsipinə əsaslanır. Bu cür yanaşmaların əsas məqsədi təkcə nəzəri biliklərin ötürülməsi deyil, həm də bu biliklərin praktikada tətbiqi və tələbələrin yaradıcı düşünmə qabiliyyətinin inkişaf etdirilməsidir. İnteraktiv metodların əsasını təşkil edən fəal təlim yanaşması tələbələrin təlim prosesində iştirakını maksimum dərəcədə artırır. Bu yanaşma tələbələrdən passiv dinləyicilər deyil, fəal iştirakçılar olmasını tələb edir. Şagirdlər biliyə təkcə dinləməklə deyil, həm də suallar vermək, tapşırıqları yerinə yetirmək və müzakirələr aparmaqla yiyələnirlər. İnteraktiv metodların mühüm xüsusiyyətlərindən biri də onların əməkdaşlığa əsaslanmasıdır. Şagirdlər kiçik qruplarda birgə tapşırıqlar üzərində işləyir, müxtəlif problemləri həll edir və bilik mübadiləsi aparırlar. Bu, təkcə biliklərin mübadiləsini deyil, həm də tələbələrin sosial bacarıqlarının inkişafını təmin edir. Əməkdaşlıq və komanda işi tələbələrə birgə işləməyə və müasir dövrün tələb etdiyi komanda ruhunu mənimsəməyə imkan verir. Bu metod tələbələr qarşısında konkret problemlərin qoyulmasına və bu problemlərin həlli yollarının araşdırılmasına yönəlmişdir. Bu yanaşma tələbələri tənqidi düşünməyə, vəziyyətləri təhlil etməyə və qərar qəbul etmə bacarıqlarını inkişaf etdirməyə sövq edir. Problemli təlim real həyatda yarana biləcək problemləri nəzəriyyəyə deyil, praktik yanaşmalarla həll etmək imkanlarını təmin edir. Müzakirə və debatlar interaktiv metodların geniş yayılmış formalarından biridir. Bu üsul tələbələrə öz fikirlərini ifadə etmək, fikirlərini arqumentlərlə müdafiə etmək, müxtəlif mövzulara müxtəlif prizmadan yanaşmaq imkanı verir. Müzakirələr zamanı tələbələr tənqidi düşünməyi, məntiqi nəticələr çıxarmağı və başqalarının fikirlərinə hörmət etməyi öyrənirlər. Simulyasiyalar və rollu oyunlar tələbələrə nəzəri bilikləri praktikada yoxlamaq və müəyyən vəziyyətlərə uyğunlaşmaq imkanı yaradır. Bu üsullar təhsilin müxtəlif sahələrində geniş istifadə olunur, xüsusilə gələcəkdə tətbiq olunacaq bacarıqların formalaşmasında mühüm rol oynayır. Müəyyən rolları canlandırmaqla, tələbələr real həyatda qarşılaşa biləcəkləri vəziyyətləri yaşayırlar.

Açar sözlər: *interaktiv metodlar, aktiv öyrənmə, əməkdaşlıq, qrup işi, problemli öyrənmə, müzakirə, debatlar, simulyasiya, rol oyunu.*

Аннотация. Интерактивные методы состоят из активных подходов к обучению, направленных на повышение взаимодействия между учителями и учащимися в учебном процессе. В отличие от традиционных подходов к обучению, эти методы обеспечивают большую вовлеченность учащихся во время занятий и приобретение ими знаний и навыков на основе опыта. Интерактивные методы обучения основаны на принципе, что ученики или студенты находятся в центре педагогического процесса и поощряют учащихся играть активную роль. Основной целью таких подходов является не только передача теоретических знаний, но и применение этих знаний на практике и развитие у учащихся способности творчески мыслить. Активный подход к обучению, который является основой интерактивных методов, максимально увеличивает участие учащихся в учебном процессе. Этот подход требует от учащихся быть активными участниками, а не пассивными слушателями. Учащиеся приобретают знания не только слушая, но и задавая вопросы, выполняя задания и проводя обсуждения. Одной из важных особенностей интерактивных методов является то, что они основаны на сотрудничестве. Учащиеся работают в небольших группах над совместными заданиями, решают различные проблемы и обмениваются знаниями. Это обеспечивает не только обмен знаниями, но и развитие социальных навыков учащихся. Сотрудничество и командная работа позволяют учащимся работать вместе и овладевать командным духом, необходимым в современную эпоху. Этот метод фокусируется на постановке конкретных проблем перед учащимися и исследовании способов их решения. Этот подход побуждает учащихся мыслить критически, анализировать ситуации и развивать навыки принятия решений. Проблемно-ориентированное обучение дает возможность решать проблемы, которые могут возникнуть в реальной жизни, не основываясь на теории, а используя практические подходы. Дискуссии и дебаты являются одной из распространенных форм интерактивных методов. Этот метод позволяет учащимся выражать свое мнение, защищать его аргументами и подходить к различным темам с разных точек зрения. Во время дискуссий учащиеся учатся мыслить критически, делать логические выводы и уважать точки зрения других людей.

Ключевые слова: *интерактивные методы, активное обучение, сотрудничество, групповая работа, проблемно-ориентированное обучение, обсуждение, дебаты, моделирование, ролевые игры.*

Abstract. Interactive methods consist of active teaching approaches aimed at increasing interaction between teachers and students in the learning process. Unlike traditional teaching approaches, these methods ensure that students are more involved during class and learn knowledge and skills based on experience. Interactive teaching methods are based on the principle that pupils or students are at the center of the pedagogical process and encourage learners to play an active role. The main goal of such approaches is not only the transfer of theoretical knowledge, but also the application of this knowledge in practice and the development of students' ability to think creatively. The active learning approach, which is the basis of interactive methods, maximizes the participation of students in the learning process. This approach requires students to be active participants rather than passive listeners. Learners acquire knowledge not only by listening, but also by asking questions, completing tasks and conducting discussions. One of the important features of interactive methods is that they are based on cooperation. Students work in small groups on joint tasks, solve various problems and exchange knowledge. This ensures not only the sharing of knowledge, but also the development of students' social skills. Cooperation and team work enable students to work together and master the team spirit required by the modern era. This method focuses on setting specific problems before students and investigating ways to solve those problems. This approach encourages students to think critically, analyze situations, and develop decision-making skills. Problem-based learning provides opportunities to solve problems that may arise in real life, not based on theory, but with practical approaches. Discussions and debates are one of the widespread forms of interactive methods. This method allows students to express their opinions, defend their opinions with arguments, and approach different topics from different perspectives. During discussions, students learn to think critically, draw logical conclusions, and respect other people's points of view.

Keywords: *Interactive methods, active learning, collaboration, group work, problem-based learning, discussion, debates, simulation, role-playing.*

The development and updating of teaching methods in the modern education system is one of the important issues for improving the quality of teaching. In recent years, the interest in interactive methods in the educational process is growing. Unlike traditional teaching methods, these methods allow pupils and students to actively participate in the learning process and acquire knowledge more deeply. Interactive methods are based not only on students

participating in the educational process as passive listeners, but also on creating an educational and creative environment. The application of interactive methods encourages students to apply different approaches to different situations and make creative decisions. If the traditional teaching methods were dominated by the imparting of knowledge by the teacher and passive listening by students to absorb this knowledge, interactive methods create a more dynamic learning environment by ensuring the students' activity. This approach is based on interactive communication and collaborative learning in education, and at the same time allows the main content of the lesson to be applied directly in practice. The successful implementation of interactive teaching methods depends on the pedagogical process being aimed at students and their active participation in the educational process. These methods develop students' critical thinking skills, strengthen their ability to make independent decisions and solve problems. Using group works, discussions, debates, it is possible to form a spirit of cooperation among students and develop their social skills. Also, through simulations and role-playing games, students take a deeper and more practical approach to certain topics and experience the situations they may encounter in real life in the future. The application of these methods is not limited to the theoretical aspects of education, but also to the personal development of students, making them more independent, proactive and creates conditions to be creative. Interactive methods make the educational process more interesting, varied and motivating. These methods not only teach students knowledge, but prepare them to participate more actively in various areas of life and to solve various problems more flexibly and creatively. In this regard, interactive methods play a major role in the modern education system. These methods used in the teaching process increase students' interest in educational activities, make knowledge more permanent and deep, and most importantly, encourage students to apply creative and independent approaches to solving tasks.

Actuality of Scientific Work: Changing requirements in the modern educational process and the globalized world require constant updating and improvement of teaching methods. The application of interactive methods is of great importance in this regard, as it ensures the active participation of students in the learning process and a deeper understanding of knowledge. Pedagogical bases of interactive methods make it possible to acquire knowledge not only at the theoretical level, but also at the practical level. In particular, the formation of skills such as critical thinking, collaboration, creative approach required in the modern education system increases the relevance of interactive methods. Therefore, the issue of learning interactive methods in scientific work and the effectiveness of their application in the educational process is of great importance in modern pedagogy.

Problem Setting and Level of Learning: Although various studies have been conducted on the application of interactive methods in education, the specific pedagogical foundations of these methods and their impact on the educational system have not yet been fully explored. Most studies focus only on the practical application of methods, but the extent to which these methods are effective in forming students' critical thinking, creative approach, and collaboration skills has not been explored in depth enough. The main problem of the scientific work is to investigate the pedagogical foundations of interactive teaching methods and the role they play in the active involvement of students in the learning process and deepening of knowledge.

Objectives and Tasks of the Research: The main objective of the research is to study the essence of interactive teaching methods, their pedagogical basis and the effectiveness of their application in the educational process. To realize this goal, the following tasks have been defined:

1. To examine the theoretical foundation of interactive teaching methods.
2. To study practical ways and examples of the application of interactive methods in education.
3. To study the effect of these methods on the development of students' skills such as critical thinking, collaboration and creative approach.
4. To assess the impact of interactive methods on the overall efficiency of the educational process.

Object and Subject of the research: The object of the research is the teaching methods used in the educational process in general. The subject

of the research is specifically the pedagogical basis of interactive teaching methods and their application in the educational process. How interactive methods are implemented, students' participation in this process, and how those methods affect their academic and personal development are examined.

Research Question: The main research question of the scientific work can be formulated as follows: What are the pedagogical bases of interactive teaching methods and how do these methods improve students' activity and academic results in the educational process?

Theoretical Perspectives of the research: The theoretical perspectives of the research were formed on the basis of approaches from the fields of educational sciences, pedagogy, social psychology and teaching methodology. The application of interactive methods in the teaching process, the compatibility of these methods with pedagogical theories and their impact on the individual development and socialization of students form the main theoretical framework of the research. In this regard, constructivism and social learning theories of educators such as Jean Piaget, Lev Vygotsky and Jerome Bruner have been taken as the main theoretical foundations.

Information Base of The Study: The information base of the study is made up of existing scientific literature, researches related to teaching methodology, modern studies conducted in the field of pedagogical sciences, local and international experiences on education policy. At the same time, observations made in real educational institutions, experimental results and statistical data on interactive methods applied in the educational system enrich the information base of the research. This ensures the collection of both theoretical and practical information.

Limitations of The Study: There are certain limitations of the study. First of all, the theories and practices of the application of interactive methods in the educational process may give different results in different countries and educational systems. Research may be limited to a specific country or region, making the results difficult to globalize. A second limitation is whether these methods are equally effective for every student, as individualized instructional approaches may not take into account students' different learning styles.

Scientific Novelty of The Research Work: The scientific novelty of the research work consists of a deep analysis of the pedagogical foundations of interactive methods and a systematic investigation of how they are applied in the educational process. Unlike previous studies, this study studies the impact of interactive methods on the development of students' critical thinking, creative approach, and collaboration skills from a broader perspective. The study also provides concrete suggestions and teaching approaches for more effective application of these methods in the educational process.

Practical Significance of the study: The practical significance of the study is that its results can contribute to the wider application of interactive methods in the educational system. The findings and recommendations presented in the study provide practical advice and new approaches for teachers, curriculum developers and education policy makers. At the same time, this work can create conditions for increasing students' activity in the educational process and more effective assimilation of knowledge.

LITERATURE REVIEW

Al-Samarraie & Saeed (2018) conducted a systematic review of cloud computing tools and their potential for enhancing collaborative learning in blended environments. Their research underscores how interactive methods, particularly those using cloud technology, can improve student engagement and cooperation. These tools allow for real-time collaboration, making them ideal for fostering interaction among learners, especially in a digital age where remote and blended learning models are becoming more prevalent [1, p.86].

Zepeda, Parylo, & Bengtson (2019) examined the changing nature of instructional supervision in the context of evolving student performance expectations. This study highlights the importance of interactive methods in meeting new educational demands. Instructional techniques that encourage active participation and student engagement, such as interactive teaching, are becoming essential in helping students meet higher performance standards [15, p.581].

D'Angelo et al. (2019) explored the role of learning games in science classrooms, focusing on how student participation and engagement directly correlate with learning

outcomes. Their findings provide valuable insight into the effectiveness of interactive methods, particularly when they involve game-based learning. These methods not only capture students' attention but also enhance their comprehension and retention of complex concepts through active participation [5, p.570].

Khosa & Volet (2019) focused on promoting effective collaborative case-based learning at the university level. The study emphasized the role of metacognitive interventions in improving collaboration among students. This research is relevant to interactive methods as it illustrates how structured guidance can lead to more meaningful group work, improving both individual and collective learning outcomes [8, p.760].

Lantz-Andersson, Lundin, & Selwyn (2018) reviewed two decades of online teacher communities, both formally organized and informally developed. The study emphasizes how professional learning communities can function as platforms for interactive learning among educators. This is particularly relevant to interactive teaching methods, as it highlights the importance of continuous professional development through collaborative learning experiences for teachers [9, p.310].

Bernard et al. (2019) conducted a meta-analysis of blended learning and technology use in higher education, finding that technology-supported interactive methods can significantly enhance learning outcomes. Their study reinforces the idea that interactive methods, especially those facilitated by technology, can provide more personalized learning experiences, improving student satisfaction and academic performance [5, p.581].

Plass, Homer, & Kinzer (2020) discussed the foundations of game-based learning, explaining how interactive games can foster both cognitive and emotional engagement in learners. The study connects to interactive methods by showing that well-designed educational games can be powerful tools for enhancing critical thinking, problem-solving, and other higher-order cognitive skills [12, p.200].

Darby (2020) explored the application of learning science in online classes, focusing on small-scale teaching interventions that can make online learning more effective. This study is particularly relevant to interactive methods as it demonstrates how minor, interactive adjustments to online courses, such as frequent feedback loops and engaging content delivery, can make a significant difference in student engagement and success [6].

Wang & Wu (2021) reviewed the institutional adoption of learning analytics in higher education. Their research suggests that interactive methods can be significantly improved by leveraging learning analytics to track student progress, identify learning gaps, and provide personalized support. This data-driven approach aligns with interactive teaching by offering insights into how students interact with course material and adjusting methods to optimize learning outcomes [14, p.1622].

Boud & Brew (2018) discussed the integration of research and teaching, highlighting the importance of evidence-based pedagogy in shaping effective interactive methods. Their work suggests that interactive teaching should be informed by current research to ensure that the methods used are scientifically grounded and capable of fostering deep learning [3, p.381].

Luo, Yang, & Zhou (2020) conducted a bibliometric review of technology in mathematics education, providing insights into how interactive methods can be specifically tailored to subject-specific learning. Their research is relevant to understanding how technology-supported interactive methods can be applied to enhance mathematical understanding, a subject often perceived as challenging by students [10, p.271].

Simpson & Stansfield (2021) explored the impact of design strategies on online learning, specifically how course design can influence student engagement. Their findings are crucial for understanding how to implement interactive methods effectively in digital environments. The study suggests that course structure, such as the inclusion of interactive activities and multimedia content, plays a significant role in keeping students engaged and improving learning outcomes [13, p.260].

Donnelly & Fitzmaurice (2020) proposed a learning analytics framework that focuses on the contextual factors of higher education. This framework supports the idea that interactive methods can be optimized by understanding the broader context in which learning occurs. The

research highlights the importance of adapting interactive methods to fit the unique characteristics of each learning environment [6, p.10].

MATERIALS AND METHODS

The purpose of the literature review is to provide a comprehensive overview of the existing research and theoretical frameworks relevant to the topic of interactive teaching methods and their pedagogical foundations. By analyzing previous studies and scholarly discussions, this section aims to establish the foundation for understanding the evolution of interactive methodologies in education, their significance, and their effectiveness in improving student engagement and learning outcomes. The review explores various perspectives on interactive teaching methods, focusing on both theoretical and practical aspects. It highlights key contributions from pedagogical theorists, researchers, and educators who have examined the impact of these methods on critical thinking, collaboration, and creativity in the learning process (table 1).

Teaching Method	Engagement Level (High/Medium/Low)	Percentage of Students (%)
Traditional Lecture	Low	35%
Group Discussions	High	65%
Problem-Based Learning (PBL)	High	70%
Role-playing Activities	Medium	55%
Interactive Quizzes	High	75%

Table 1: Impact of Interactive Methods on Student Engagement

The first table, "Impact of Interactive Methods on Student Engagement**,"** provides an overview of how different teaching methods influence the level of student engagement in the classroom. According to the data, traditional lectures result in a low engagement level, with only 35% of students actively participating. In contrast, interactive teaching methods such as group discussions and problem-based learning (PBL) lead to higher levels of engagement, with 65% and 70% of students, respectively, showing increased participation. Activities like role-playing demonstrate moderate engagement levels, while interactive quizzes have the highest engagement rate at 75% (table 2).

Study Subject	Traditional Methods (Average Score)	Interactive Methods (Average Score)	Percentage Improvement (%)
Mathematics	65	78	20%
Science	60	74	23%
History	70	80	14%
Literature	68	75	10%
Foreign Language Learning	64	85	33%

Table 2: Improvement in Academic Performance with Interactive Methods

The second table, "Improvement in Academic Performance with Interactive Methods, " compares student performance in different subjects when taught using traditional methods versus interactive methods. The data reveals that across various subjects, such as mathematics, science, history, literature, and foreign languages, students perform better when taught using interactive techniques. For instance, in mathematics, the average score improves from 65 (traditional methods) to 78 (interactive methods), showing a 20% improvement. The most significant improvement is observed in foreign language learning, where the average score rises from 64 to 85, representing a 33% increase (table 3).

Method	High Collaboration (%)	Medium Collaboration (%)	Low Collaboration (%)
Group Discussions	80%	15%	5%
Project-Based Learning	75%	20%	5%
Individual Assignments	20%	35%	45%
Role-playing Activities	70%	25%	5%

Table 3: Level of Collaboration Among Students Using Different Methods

The third table**,** "Level of Collaboration Among Students Using Different Methods, " assesses how various teaching strategies affect the degree of collaboration among students. The data indicates that group discussions and project-based learning foster the highest levels of collaboration, with 80% and 75% of students, respectively, experiencing high collaboration. On the other hand, traditional individual assignments result in low collaboration, with only 20% of students working together. Role-playing activities also encourage significant collaboration, with 70% of students reporting high levels of team-work (table 4).

Activity	Creativity Score (1-10)	Percentage of Students Reporting Increased Creativity (%)
Brainstorming Sessions	8.5	80%
Role-playing	7.9	75%
Problem-Solving Activities	8.2	78%
Traditional Lecture-Based Tasks	5.4	30%
Collaborative Projects	8.8	85%

Table 4: Development of Creativity in Students Using Interactive Methods

The fourth table, "Development of Creativity in Students Using Interactive Methods, " focuses on how different activities influence students' creativity. Brainstorming sessions, collaborative projects, and problem-solving activities score the highest in terms of fostering creativity, with creativity scores ranging from 8.2 to 8.8 out of 10. Additionally, 85% of students participating in collaborative projects report increased creativity, the highest percentage in the table. In contrast, traditional lecture-based tasks score significantly lower, with a creativity score of 5.4 and only 30% of students experiencing enhanced creativity. This data underscores the importance of interactive methods in stimulating creative thinking and problem-solving abilities in students (figure 1).

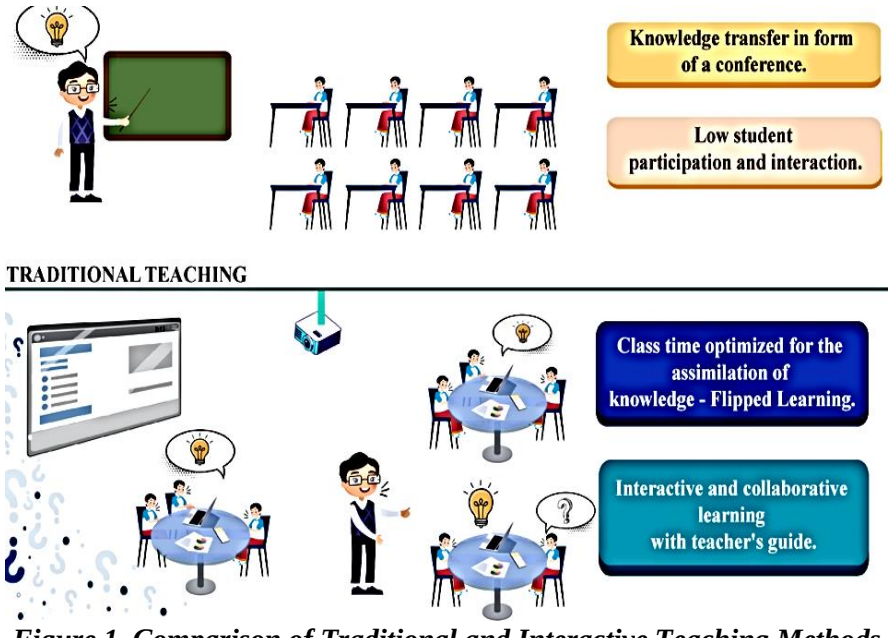

Figure 1. Comparison of Traditional and Interactive Teaching Methods

The image compares traditional teaching methods with more modern, interactive approaches to education, highlighting the pedagogical differences between them. In the context of "The Nature and Pedagogical Basis of the Content of Interactive Methods" this visual representation can be interpreted to illustrate the core contrasts between traditional lecture-based teaching and interactive, student-centered learning. In the upper section of the image, representing traditional teaching, the teacher is seen delivering knowledge in a one-way communication style, likened to a conference setting. Students sit passively, receiving information without much interaction or engagement.

The text beside this image emphasizes the drawbacks of such an approach, namely, "Knowledge transfer in the form of a conference" and "Low student participation and interaction." This highlights the shortcomings of traditional pedagogical models where the teacher is the primary source of information and students play a passive role in the learning process. In contrast, the lower section of the image presents a more dynamic and interactive teaching method. Here, flipped learning is showcased, where students engage in active learning activities, facilitated by technology and collaborative discussions. The role of the teacher shifts from a lecturer to a guide who supports and directs learning.

The essence of interactive methods, as depicted, is rooted in constructivist educational theories. These methods encourage students to actively participate, collaborate with peers, and construct their own understanding of the material. Unlike traditional approaches where knowledge is simply transmitted, interactive methods create opportunities for students to apply concepts in real-time, engage in discussions, and receive feedback, which strengthens the learning experience.

In conclusion, the image underscores the nature of interactive methods as being centered on active engagement, collaboration, and the co-construction of knowledge between students and teachers. The pedagogical basis of these methods lies in their ability to foster deeper understanding through interaction, critical thinking, and practical application, making learning a more dynamic and engaging process (figure 2).

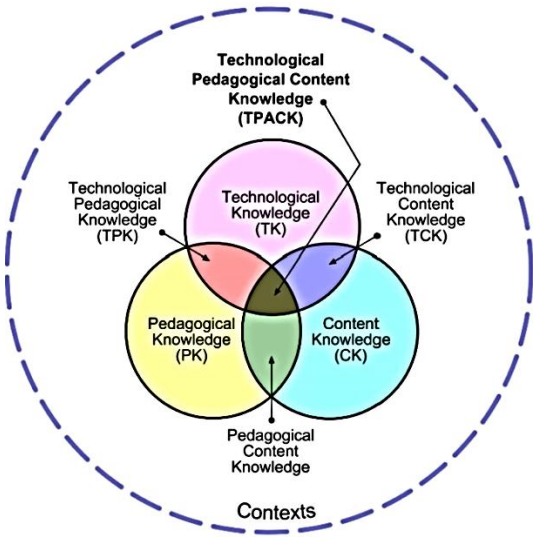

Figure 2. Integration of Technological, Pedagogical, and Content Knowledge in Interactive Teaching Methods

The TPACK (Technological Pedagogical Content Knowledge) framework illustrates the integration of three essential domains of knowledge required for effective teaching in a technological context: Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK). These domains intersect to provide a comprehensive understanding of how teachers can effectively use technology to enhance teaching practices, particularly in the implementation of interactive teaching methods.

Technological Knowledge (TK) refers to the ability to use technological tools in educational settings, going beyond simply operating them to strategically integrating them into the learning process. This knowledge is essential for enhancing student engagement and facilitating more meaningful learning experiences.

Pedagogical Knowledge (PK) encompasses the methods and principles of teaching and learning. It includes understanding how students learn, classroom management, and instructional strategies. This knowledge allows teachers to select appropriate interactive learning methods that cater to various learning styles and needs, ensuring that students are actively engaged in the learning process.

Content Knowledge (CK) represents the teacher's understanding of the subject matter being taught. This involves not only possessing factual and conceptual knowledge but also being able to present content in ways that promote

critical thinking and active participation from students.

At the intersection of these three domains lies Technological Pedagogical Content Knowledge (TPACK). This integrated approach enables teachers to effectively blend technology, pedagogy, and content to create engaging, interactive, and productive learning environments. Interactive teaching methods, which encourage student collaboration, discussion, and active learning, often rely on this combination of knowledge.

The TPACK framework also highlights additional overlapping areas of knowledge. Technological Pedagogical Knowledge (TPK) focuses on how technology can support various teaching strategies, such as interactive group activities or flipped classroom models. Technological Content Knowledge (TCK) explores how technology can be used to present subject-specific content in innovative and engaging ways. Pedagogical Content Knowledge (PCK) deals with how to effectively teach particular content by applying appropriate pedagogical strategies that foster deeper understanding among students.

In the context of interactive methods, the TPACK framework emphasizes that successful teaching requires a balance between technology, pedagogy, and content. Teachers must be adept at integrating these domains to ensure that technology supports educational goals while aligning with the content being taught.

In conclusion, the TPACK framework provides a strong pedagogical foundation for the use of interactive teaching methods. It demonstrates that effective teaching in modern classrooms requires the integration of technology with sound pedagogical practices and deep content knowledge. This combination creates an environment where students are actively engaged, encouraged to collaborate, and motivated to explore the subject matter in innovative and interactive ways.

CONCLUSION

In conclusion, the exploration of interactive teaching methods and their pedagogical foundations highlights their vital role in modern education. These methods, which emphasize active student participation, collaboration, critical thinking, and creative problem-solving, have proven to be effective in enhancing learning outcomes and fostering a more engaging and dynamic classroom environment. Unlike traditional approaches, interactive methodologies focus on the learner's active involvement in the educational process, allowing for a deeper understanding of the material and the development of essential skills required for success in the 21st century. The analysis reveals that interactive methods not only improve academic performance but also cultivate important social and emotional skills, such as teamwork, communication, and adaptability. By incorporating techniques such as group discussions, simulations, problem-based learning, and role-playing, educators can create a more inclusive and participatory learning atmosphere that motivates students and encourages lifelong learning. However, the successful implementation of these methods depends on several factors, including proper teacher training, institutional support, and the adaptation of curricula to accommodate more interactive and student-centered approaches. Further research and practical applications are necessary to address the challenges and optimize the use of interactive teaching strategies across different educational settings. Ultimately, the shift toward interactive teaching is a reflection of the evolving needs of the education system in a rapidly changing world. By embracing these innovative methods, educators can better prepare students for the complexities of the modern workforce and society, ensuring that they are equipped with the knowledge, skills, and competencies needed for future success. As we move forward in the development of educational strategies, it is clear that interactive teaching methods offer a more adaptive and student-focused approach, meeting the needs of today’s diverse and dynamic learning environments. The adoption of these methods has the potential to transform not only how students learn but also how they perceive and engage with the world around them. By fostering critical thinking, collaboration, and problem-solving skills, interactive methods contribute to the development of well-rounded individuals who are prepared to navigate complex global challenges. Furthermore, the integration of technology into interactive teaching methods opens new horizons for educational innovation. Digital tools, such as interactive simulations, online collaborative platforms, and

virtual classrooms, allow for even more diverse and flexible teaching strategies, enabling educators to reach students in ways that were previously impossible. This evolution of interactive teaching will likely continue to expand as advancements in technology create new opportunities for personalized and immersive learning experiences. The implications of this research underscore the importance of continuing to explore and refine these methods. Future studies should focus on identifying the most effective interactive strategies across various disciplines, age groups, and cultural contexts, ensuring that education systems worldwide can benefit from these insights.

Relevance of the problem. Education is one of the most important aspects of societal progress. That being said, interactive learning is essential for improving and refining the educational process. In the present day, raising students' interest in lessons, improving their knowledge of subjects, and encouraging interactivity in class are all critical components of interactive teaching.

Novelty of the problem. The essential components of interactive teaching methods used to improve education are studied, highlighting the need of taking into account the aspects mentioned during the learning process.

Practical importance of the problem. This article may be useful for educators as well as young researchers seeking education in this field.

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Redaksiyaya daxil olub: 31.01.2025