A LINGUISTIC AND CULTURAL STUDY OF CHILD-ORIENTED UNITS OF ADDRESS IN ENGLISH AND UZBEK

Azizova Khilola Egamberganovna
Urgench State Pedagogical Institute Teacher of the Department of "Art History", Uzbekistan

Ozodova Surayekhon Umirbek kizi
Urgench State Pedagogical Institute "Fine Arts and Engineering Graphics" student of group 223 of the educational direction, Uzbekistan

Jumaniyozova Dinora G'ayrat qizi
Urgench State Pedagogical Institute "Fine Arts and Engineering Graphics" student of group 223 of the educational direction, Uzbekistan

Abstract. This scientific article analyzes the conceptual foundations of integrating interactive tools and pedagogical technologies to enhance students' theoretical knowledge. It examines the shortcomings of traditional education and explores the didactic potential of modern technologies (such as interactive whiteboards, AR, and simulations). The article proposes a comprehensive didactic model aimed at increasing students' cognitive activity by combining technologies like project-based learning and problem-based learning, which are rooted in constructivism, with interactive tools.

Keywords: - Interactive, integration, didactic, cognitive, meta-knowledge, competence, cognitive.

INTRODUCTION

In the era of global informatization and the technological revolution, the education system is undergoing fundamental changes. The fact that traditional educational paradigms are mainly focused on information transfer demonstrates limitations in the formation of 21st-century competencies, such as critical thinking, problem-solving, creativity, teamwork, and independent learning, which are required by the modern labor market and society from graduates. This is especially noticeable in the process of assimilating theoretical knowledge, as they are often fragmented and detached from the practical context, as a result of which superficial memorization, and not deep understanding, prevails in the cognitive processes of students.

As a solution to this didactic problem, the systematic and methodologically based integration of interactive tools and innovative pedagogical technologies into the educational process is of current importance. While interactive tools allow visualization of educational materials, optimization of cognitive load, and cognitive-didactic facilitation of knowledge acquisition, pedagogical technologies activate students' cognitive activity, contributing to the development of their self-regulated learning skills. This scientific article is aimed at developing a comprehensive didactic model based on the integration of interactive tools and pedagogical technologies, ensuring a deep and solid assimilation of theoretical knowledge, and highlighting its scientific and methodological foundations.

Cognitive-didactic potential of interactive tools in the development of theoretical knowledge

Interactive tools ensure that the educational process is based on subject-subject relationships, transforming students from passive listeners into active knowledge constructors. Their cognitive and didactic advantages in the development of theoretical knowledge are: Visualization and concretization of abstract concepts: Visualizing complex and abstract theoretical concepts using graphs, animations, 3D models, virtual simulations, and interactive video clips serves to deepen students' understanding of the topic, systematize information in the form of a cognitive map, and increase memorization efficiency. This helps reduce cognitive load and increase data processing efficiency. For example, modeling quantum mechanics concepts in a virtual laboratory or observing the behavior of complex mathematical functions through interactive graphs develops students' conceptual understanding of the topic. Stimulating Cognitive Activity and Increasing Internal Motivation: Interactive tasks, electronic quizzes, gamification elements, opportunities for collaborative work on interactive whiteboards significantly increase students' internal motivation for the lesson. This encourages them to engage in active communication, reinforce theoretical knowledge, and engage in proactive learning. As a result, cognitive activity increases, which is one of the main conditions for deeper and stronger acquisition of knowledge.

Independent learning and formation of meta-knowledge skills: Electronic libraries, online educational platforms (MOOCs, LMS), virtual learning environments provide students with ability and individual approach to the assimilation of educational materials. They will be able to obtain additional information, consolidate their knowledge, and adapt the pace of assimilation to their personal cognitive needs at any time and place. This lays the foundation for developing meta-knowledge skills (learning to learn). Integration of theory and practice: Professional simulators, virtual laboratories, and application software allow students to apply their theoretical knowledge in practical situations in a safe and controlled environment. This plays an important role in integrating theoretical knowledge in fields such as engineering, medicine, economics, and jurisprudence with professional competencies.

Basic Interactive Tools:

- Interactive boards and panels Dynamic lecture presentations, real-time intergroup collaboration.
- Electronic Educational and Methodological Complexes Multimedia Textbooks, Study Guides, Interactive Tests, Hypertext, and Hyperlink Systems.
- Virtual and augmented reality (VR/AR) technologiesCreating an immersive learning environment, realistic modeling of complex systems and processes.
- Simulation and virtual laboratories Conducting scientific experiments in virtual conditions, testing various parameters.
- Online Learning Platforms (LMS) Managing the learning process, distributing materials, assigning tasks, organizing synchronous and asynchronous communication with students.
- Web-based collaborative toolsTeam project work, collaborative document editing, idea sharing.

The transformative role of pedagogical technologies in the development of theoretical knowledge

Pedagogical technologies - a set of methodological approaches aimed at the systematic design, organization, implementation, and evaluation of the educational process, serving to optimize the cognitive and practical activity of students. The main pedagogical technologies that help to deeply master theoretical knowledge and transform it into competencies are: Project-Based Learning (PBL): This method encourages students to work on complex, long-term projects aimed at solving real-life or professional problems. In this process, theoretical knowledge serves as the basis for performing the practical task, students develop skills in conducting research, analyzing information, working effectively in a team, and presenting. This is based on the principles of constructivism, as students build knowledge themselves.

Problem-Based Learning (PBL): Students are given multi-variant, open problem situations with unclear solutions. Students enhance their intellectual activity by analyzing the problem, independently searching for the necessary theoretical knowledge to solve it, putting forward hypotheses, evaluating evidence, and drawing conclusions. This encourages in-depth learning by creating and addressing cognitive dissonance.

Case Study Method: Based on a detailed analysis of real or simulated professional situations. Students, applying their theoretical knowledge, deeply study the given situation, through critical thinking, propose alternative solutions, and make optimal decisions. This method strengthens the contextual link between theory and practice.

Collaborative Learning: Students are divided into groups and complete common learning tasks. This serves to strengthen theoretical knowledge and develop socio-communicative skills through mutual exchange of ideas, discussion, mutual assistance, and listening to different viewpoints. This is a practical expression of the theory of social constructivism.

Blended Learning: Integration of online educational resources and activities with traditional classroom activities. This model provides students with maximum flexibility in mastering educational materials and increases their responsibility for independent learning. The "Flipped Classroom" model is a form of blended learning where theoretical material is studied online at home, and the classroom is dedicated to practical exercises, problem-solving, and interactive discussions. This changes the traditional roles between class and homework.

Model of Integration of Interactive Tools and Pedagogical Technologies in the Development of Students' Theoretical Knowledge

In order to deepen the assimilation of students' theoretical knowledge, the formation of skills for their practical application, and the improvement of general competencies, an "Interactive-Pedagogical Integrated Educational Model" is proposed, which systematically integrates interactive tools and pedagogical technologies. This model, based on a system-activity approach, organizes the learning process as a four-stage cycle:

Model: "Interactive-Pedagogical Integrated Learning Model"

Stage of knowledge formation and initial perception (Interactive Lecture Component) Objective: To systematically form fundamental theoretical knowledge on the topic, awakening students' initial interest and motivation to learn. Interactive tools:

- Interactive whiteboard/panel Dynamic lecture presentations, real-time visualization of key concepts, animation of complex processes.
- Multimedia resources Video lectures, popular science animations, 3D models, infographics.

- Electronic textbooks Quick access to additional, in-depth information through hypertext and hyperlinks. Pedagogical technologies:
- Problem lecture Activate students' thinking and encourage them to seek new knowledge by setting a problem situation at the beginning or during the lecture.
- Brainstorming Formation of initial ideas, stimulating interest in the topic, and activating existing knowledge.
- Visual lecture Presentation of information through systematic visual graphs, diagrams, logical-structural tables. The role of the teacher: Presenting information in a visually and cognitively easy-to-understand form, initiating the cognitive process, and generating interest.

Knowledge Deepening and Reinforcement Stage (Interactive Practical Component) Goal: to deepen the acquired theoretical knowledge, strengthen their understanding, form cognitive schemes, and increase the effectiveness of memorization. Interactive tools:

- Interactive exercises Online tests (with quick feedback), drag-and-drop tasks, map questions, filling in spaces, interactive quizzes.
- Simulation and virtual laboratories Experimental testing of theoretical knowledge, modeling of various scenarios, analysis of results.
- Online quizzes and gamification elements Strengthening knowledge and increasing motivation through competitive and game elements.
- Forums and chats on educational platforms Synchronous and asynchronous discussions, question and answer sessions between students and teacher-students. Pedagogical technologies:
- Case Study Analysis Applying theoretical knowledge to specific situations in small groups and finding alternative solutions.
- Working in groups Solving problem tasks together on the interactive whiteboard, developing a collaborative idea.
- Discussions and debates Exchange of views on theoretical concepts, analysis of opposing viewpoints, and development of argumentation skills.
- Short projects Obtaining quick practical results and consolidating knowledge using theoretical knowledge.
- Elements of "Flipped Classroom" Mastering theoretical material at home, discussion and practical exercises in class. Teacher role: Consultant, organizer of discussion and collaborative activities, observer and guide of the process.

Knowledge Application and Analysis Stage (Project-Research Component)
Objective: To develop skills in the creative application of theoretical knowledge in real or simulated practical situations, research, analysis, and solving complex problems. Interactive tools:

- Specialized software Professional software (CAD/CAM, MATLAB, SPSS, GIS, diagnostic software in medicine, engineering simulators).
- Real databases and analytics tools Analyzing large amounts of data and drawing scientifically based conclusions.
- Virtual reality (VR) environments In-depth study, experimentation, and modeling of complex systems, objects, or processes.

NEXT SCIENTISTS CONFERENCES

- Online collaboration platformsTeamwork on projects, resource sharing, and collaborative documentation (Google Workspace, Microsoft Teams, Zoom, Miro). Pedagogical technologies:
- Project-based learning Long-term research projects, providing students with independent research, planning, and management skills.
- Problem-based learning Independent generation and synthesis of new knowledge by solving complex, open problems.
- Practical exercises Performing specific practical tasks using interactive tools, analyzing the results.
- Collaborative tasks Increase teamwork, role sharing, and responsibility to achieve a common outcome.
- Scientific seminars and conferences Presentation and discussion of the obtained research results in the scientific community. Teacher Role: Project Manager, Research Advisor, Research Guide, Innovation Encourager, and Stimulator.

Knowledge Assessment and Reflection Phase (Systematic Monitoring and Improvement Component)

Objective: objective assessment of the level of assimilation of theoretical knowledge by students, self-assessment and systematic drawing conclusions from the educational process, determining the directions of further study. Interactive tools:

- Online testing systems Automatic assessment, statistical analysis of results, feedback on each question.
- Electronic portfolios Documentation and assessment of the student's academic activity, achievements, growth dynamics, and formed competencies.
- Video Feedback Provide detailed and constructive feedback on project defenses, presentations, and practical exercises.
- Interactive Assessment Criteria and Categories Ensure transparency, objectivity, and clarity for students in the assessment process. Pedagogical technologies:
- Self-assessment (self-assessment) Students' critical approach to their knowledge and skills, identifying their strengths and weaknesses.
- Peer assessment (peer assessment) Increase objectivity and develop critical analysis skills through students evaluating each other's work.
- Project defense and presentations Develop the ability to systematize knowledge, present research results in a scientific manner, and explain them to the public.
- Reflective Discussions Analysis of the learning process, methods, and outcomes, learning from mistakes, and developing strategies for future learning. Teacher role: Evaluator, constructive and developmental feedback provider, continuous optimizer of the learning process.

Didactic advantages of the model and institutional directions of implementation The proposed "Interactive-Pedagogical Integrated Learning Model" will have a number of strategic and didactic advantages through its application in the higher education system: Deep assimilation and contextualization of theoretical knowledge: Not only mechanical memorization of knowledge is formed, but also the ability to understand its logic, critically analyze it, apply it in various contexts, and effectively apply it in practice. This ensures the achievement of high levels of the "pyramid of assimilation" (analysis, synthesis, evaluation). A sharp increase in motivation and cognitive activity: The use of interaction, gamification elements, and modern technologies significantly increases students' interest in the learning process, intellectual participation, and internal motivation for independent research. Formation of 21st Century Competencies: The model integratively develops in students the competencies necessary for the modern labor market, such as critical and creative thinking, problem-solving, information literacy, media literacy, teamwork, effective communication, and digital skills. Flexibility and Individualization of the Educational Process: Through a flexible approach to blended learning opportunities and individual learning pace, it is possible to create an educational environment tailored to each student's individual needs and learning style. This serves to optimize learning outcomes. Competitiveness and Employment of Graduates: The aforementioned in-depth theoretical knowledge and formed competencies ensure high competitiveness of graduates in the labor market and contribute to their faster and more effective employment. Institutional and strategic directions of implementation of the model: Development of Competencies of Teaching Staff: Development and implementation of systematic retraining and advanced training programs for teaching staff on the effective use of interactive tools, practical application of innovative pedagogical technologies, and working in blended and distance learning conditions. This process must be continuous.

Development of the material and technical base and digital infrastructure: Equipping higher education institutions with modern interactive whiteboards, high-speed internet, VR/AR equipment, powerful computers, licensed software, and reliable LMS systems. Pay attention to digital security issues. Creation and integration of innovative educational and methodological materials: Development of electronic textbooks, interactive teaching aids, case studies, project assignments, simulation and virtual laboratory modules corresponding to the proposed integrated learning model. Digitization and conversion of existing materials into an interactive format. Conducting fundamental and applied research on the study of the effectiveness of the integration of innovations, interactive technologies, and pedagogical technologies in education, studying international experience, and systematically implementing research results into educational practice. Improvement of the Assessment System Based on a Competency-Based Approach: Creating a system for assessing the level of assimilation of theoretical knowledge based on a composite and integrated approach, aimed not only at tests but also at project defenses, electronic portfolios, practical work results, and competency assessment. Combination of formative and summative assessment.

CONCLUSION

Developing students' theoretical knowledge through the integration of interactive tools and pedagogical technologies is one of the strategic directions of modern education. The proposed "Interactive-Pedagogical Integrated Learning Model" is an effective solution that encourages students to actively study, increases their cognitive activity, and forms fundamental knowledge and competencies necessary for their future professional activities, abandoning traditional educational approaches. By widely implementing this model in higher education practice, it is possible to improve the quality and competitiveness of the higher education system, as well as train highly qualified, creative, and independent-thinking specialists who will make a worthy contribution to the innovative development of society.

REFERENCES

1. Fullan, M. (2015). The New Meaning of Educational Change. Teachers College Press. (Ta'limdagi o'zgarishlarni boshqarish va texnologiyalarni integratsiya qilish)
2. Jonassen, D. H. (1999). Designing Constructivist Learning Environments. In C. M. Reigeluth (Ed.), Instructional-Design Theories and Models: A New Paradigm of Instructional Technology (Vol. II, pp. 215-239). Lawrence Erlbaum Associates. (Konstruktivistik o'quv muhitlarini loyihalash)
3. Reigeluth, C. M. (1999). Instructional-Design Theories and Models: A New Paradigm of Instructional Technology (Vol. II). Lawrence Erlbaum Associates. (Ta'lim dizayni nazariyalari va modellari)
4. Ausubel, D. P. (1968). Educational Psychology: A Cognitive View. Holt, Rinehart and Winston. (Ma'lumotni o'zlashtirish va avans organizatorlar nazariyasi)
5. Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes. Harvard University Press. (Ijtimoiy-madaniy rivojlanish nazariyasi va yaqin rivojlanish zonasi)
6. Anderson, J. R., & Schunn, C. D. (2000). Implications of the ACT-R Theory for Educational Technology. In J. M. Spector & T. M. Anderson (Eds.), Cognition and Educational Technology (pp. 1–32). Lawrence Erlbaum Associates. (Kognitiv arxitektura va ta'lim texnologiyalari)
7. Flavell, J. H. (1979). Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry. American Psychologist, 34(10), 906-911. (Meta-bilim va uning o'rganishdagi roli)
8. Jabbarov Rustam Ravshanovich, . (2025). Pedagogical Mechanisms for The Development of Students' Creative Activity in Teaching the Subject "Applied Decorative Art" Through Software Products. International Journal of Pedagogics, 5(04), 64–70. https://doi.org/10.37547/ijp/Volume05Issue04-19
9. Jabbarov Rustam Ravshanovich, (2025). Electronic Education and Scientific-Theoretical Foundations of The Integration of Software Products into The Education System. European International Journal of Pedagogics, 5(02), 98–103. Retrieved from https://inlibrary.uz/index.php/eijp/article/view/72394
10. Xolmuratovich, M. X. (2023). OLIY TA'LIMDA MUSTAQIL TA'LIMNI DASTURIY MAXSULOTLAR ORQALI TASHKIL ETISH, BOSHQARISH VA NAZORAT QILISH. Science and innovation, 2(Special Issue 5), 514-517.