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THE TECHNOLOGY OF DEVELOPING DIDACTIC COMPETENCE OF FUTURE HISTORY TEACHERS

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ABOUT ARTICLE

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Abstract: This article analyzes the theoretical, methodological, and practical foundations for developing the didactic competence of future history teachers. The research is based on experimental studies carried out in three higher education institutions of Uzbekistan with 381 students. The results demonstrate that the introduction of a functional model and innovative pedagogical methods significantly improves students' didactic competence. Statistical analysis (Student's t-test and Pearson's chi-square) confirmed the effectiveness of the proposed model. The study contributes to modern pedagogical theory and provides recommendations for improving the quality of teacher education in Uzbekistan.

Introduction. The rapid transformations in the 21st century, characterized by globalization, digitalization, and the acceleration of knowledge production, have profoundly influenced the role of teachers in higher education. In this context, the concept of didactic competence emerges as a central professional attribute, determining the ability of teachers not only to transmit disciplinary knowledge but also to design, implement, and critically evaluate effective teaching and learning processes. Didactic competence encompasses a wide range of

components—cognitive, technological, methodological, and reflexive—that collectively ensure that the teacher is capable of guiding students towards independent learning, critical inquiry, and civic responsibility (Shulman, 1987; Biggs, 1996).

Contemporary international frameworks highlight the necessity of rethinking teacher education in line with competence-based approaches. UNESCO's ICT Competency Framework for Teachers (2018) underscores the integration of digital technologies and innovative pedagogies into the teaching profession. The OECD's TALIS 2018 Report stresses the significance of lifelong learning and the continuous professional development of teachers in order to sustain educational reforms (OECD, 2019). Similarly, the European Commission's DigCompEdu Framework provides clear indicators for developing educators' digital and didactic competencies in an era of global educational transformation (Redecker, 2017). Collectively, these documents affirm that competence-oriented teacher preparation is not a temporary trend but a long-term strategic necessity for ensuring quality education worldwide (Hattie, 2009).

In the Uzbek context, national strategies align with these global tendencies. The Presidential Decree PF-60 (2023) on the Development Strategy of New Uzbekistan for 2022–2026 identifies human capital development as the cornerstone of societal progress, with special emphasis on the training of competent and innovative educators (O'zbekiston Respublikasi Prezidentining Farmoni, 2022). The Decree PF-5847 (2019) on the Concept for the Development of Higher Education until 2030 stipulates that higher education institutions must shift from traditional knowledge transmission to competence-based learning outcomes (O'zbekiston Respublikasi Prezidentining Farmoni, 2019). Furthermore, PQ-289 (2022) emphasizes raising the quality of pedagogical education and strengthening teacher preparation programs, while PQ-4623 (2020) introduces measures to modernize teacher training curricula, including the development of didactic and methodological competencies (O'zbekiston Respublikasi Prezidentining Qarori, 2020; 2022).

Taken together, these policy directions and international benchmarks reveal an urgent demand for rethinking the training of future history teachers. History, as a discipline, carries not only cognitive and cultural significance but also serves as a foundation for developing critical citizenship, intercultural dialogue, and value-based education (Bruner, 1961; Vygotsky, 1978). Thus, strengthening the didactic competence of future history teachers becomes both a

scientific and practical priority. It requires the creation of pedagogical models that integrate traditional academic knowledge with innovative teaching technologies, critical and creative thinking strategies, and reflective professional practices.

Literature Review. The study of didactic competence in teacher education has attracted considerable scholarly attention at the international level. Barnett (2009) emphasizes that the development of teacher competence is inseparable from the broader process of becoming a professional who is capable of integrating disciplinary knowledge with pedagogical judgment. Similarly, Dall'Alba (2009) stresses that competence should not be reduced to mere skills, but rather should encompass ways of being that reflect ethical, social, and intellectual dimensions of teaching. Timperley (2011) further argues that continuous professional learning is the key driver of competence development, as it ensures the alignment of teacher practices with the evolving needs of learners and society. Collectively, these studies highlight that didactic competence is a dynamic, lifelong construct, grounded in both pedagogical theory and reflective practice.

In the post-Soviet academic context, foundational works by Kuzmina (2002) and Slastenin (2004) laid the theoretical basis for analyzing teacher professionalism through didactic and methodological preparedness. Their research outlined the structure of teacher competence, identifying components such as cognitive mastery, methodological flexibility, and motivational readiness. Shiyanov (2002) and other CIS scholars subsequently expanded this approach by emphasizing the systemic integration of didactic knowledge with professional values and pedagogical innovation. These contributions remain essential for understanding competence in terms of professional formation within transitional educational systems.

Uzbekistani scholarship has also contributed significantly to this discourse, especially in the context of history education. Yormatov (2020) explored the adaptation of competence-based approaches in the training of history teachers, arguing that didactic competence is inseparable from the ability to foster historical thinking, analytical skills, and civic responsibility among learners. Shonazarov (2018) analyzed the methodological challenges of implementing interactive teaching technologies in history instruction, linking competence development with the integration of digital and active learning methods. Rashidova (2021), in turn, proposed practical strategies for aligning teacher preparation with national educational standards, emphasizing the need to strengthen didactic competence as a unifying category of

pedagogical professionalism. These national studies not only enrich the theoretical understanding of competence but also provide context-specific insights relevant to the Uzbek education system.

Despite the diversity of perspectives, several gaps remain evident in the literature. Much of the existing research addresses competence development in general teacher education but does not sufficiently conceptualize its specific application in the field of history teaching (Barnett, 2009; Timperley, 2011). International and regional studies often describe the components of didactic competence but rarely provide empirically validated models that can be integrated into higher education curricula (Kuzmina, 2002; Slastenin, 2004). While Uzbek researchers have recognized the importance of competence, their works have primarily focused on methodological recommendations rather than comprehensive frameworks that combine theoretical, methodological, and experimental dimensions (Yormatov, 2020; Rashidova, 2021). This study aims to fill these gaps by developing and testing a functional model of didactic competence specifically tailored for future history teachers.

Methods. This research employed a mixed-methods experimental design to evaluate the effectiveness of a pedagogical model for developing didactic competence among future history teachers. Mixed-methods approaches are widely recommended in educational research because they allow both the measurement of statistically significant outcomes and the exploration of deeper experiential dimensions of learning (Creswell & Plano Clark, 2018; Cohen, Manion, & Morrison, 2018). The study was conducted over a two-year period (2021–2023) in three pedagogical universities of Uzbekistan: Andijan State University, Bukhara State University, and Jizzakh State Pedagogical University. A total of 381 undergraduate students majoring in history education participated, with 204 assigned to the control group and 177 to the experimental group. Stratified sampling was applied to ensure representation across performance levels, gender, and year of study, thereby strengthening the validity and reliability of the research design (Fraenkel, Wallen, & Hyun, 2019).

A range of diagnostic and evaluative instruments was employed to collect both quantitative and qualitative data. Questionnaires were developed to assess students' self-perceptions of their didactic competence, motivation, and readiness for teaching practice (Dörnyei & Taguchi, 2010). Achievement tests measured cognitive mastery of pedagogical concepts, while semi-structured interviews with students and instructors provided insights

into the process of competence formation (Kvale & Brinkmann, 2015). Classroom observations, conducted according to systematic protocols, recorded teaching practices, student engagement, and the use of innovative methods. Pedagogical modeling was applied to design and refine the functional model of didactic competence (Miles, Huberman, & Saldaña, 2014). For quantitative analysis, Student's t-test and Pearson's chi-square test were used to identify the significance of differences between the control and experimental groups (Field, 2018).

The experimental work proceeded in three distinct phases. In the pre-diagnosis stage, both groups were assessed to establish baseline levels of didactic competence. In the intervention stage, the experimental group was taught using the new pedagogical model, which incorporated problem-based learning, project-based tasks, role-playing, and interactive lectures—methods that previous studies have shown to be highly effective in developing reflective and critical thinking (Barrows, 1986; Savery, 2006; Prince, 2004). The control group, by contrast, continued with traditional lecture-based instruction, providing a basis for comparison. Finally, in the post-diagnosis stage, both groups were reassessed using the same diagnostic tools, with the results complemented by qualitative data from interviews and reflective journals. The triangulation of data sources enhanced both the credibility and comprehensiveness of the findings (Patton, 2015).

The research strictly adhered to ethical standards. All participants were informed about the purpose of the study and provided informed consent prior to participation. Confidentiality and anonymity were ensured at every stage. Institutional approval was obtained from the academic councils of the participating universities, ensuring compliance with national and international standards of educational research (BERA, 2018).

Results. The findings of the study are presented in two interrelated dimensions: theoretical outcomes related to the conceptualization of didactic competence, and empirical results obtained from the experimental intervention. This dual focus ensures that both the framework of competence and its measurable impact in practice are clearly articulated (Creswell & Plano Clark, 2018).

The study refined the definition of didactic competence, conceptualizing it as a multifaceted construct that integrates cognitive, motivational, technological, and reflexive components. This definition builds upon international scholarship that views teaching competence as a holistic phenomenon rather than a set of isolated skills (Shulman, 1987;

Barnett, 2009). A functional model was developed, consisting of six interdependent blocks: goal, conceptual, algorithmic, content, processual, and result. This model not only clarified the internal structure of didactic competence but also provided a roadmap for systematically integrating it into higher pedagogical curricula.

At the beginning of the experiment, both the control and experimental groups showed similar levels of competence (control group 65.0%, experimental group 64.2%). Following the intervention, the experimental group achieved an average of 76.7%, while the control group remained at 65%. The difference of +11.7% was found to be statistically significant at $p < 0.05$. These results are consistent with previous studies showing that active and problem-based learning significantly enhance student performance compared to traditional instruction (Freeman et al., 2014; Savery, 2006).

The application of Student's t-test confirmed the statistical significance of the differences between the groups, while Pearson's chi-square test further verified that the observed improvements in the experimental group were not random but attributable to the intervention. Descriptive statistics and inferential analyses collectively demonstrated that the pedagogical model had a positive and measurable impact on competence development (Field, 2018).

Qualitative data obtained from interviews and reflective journals revealed that students in the experimental group developed greater confidence in lesson planning, demonstrated higher levels of creativity in teaching simulations, and expressed stronger motivation for professional self-improvement. These findings support the argument that competence development is not only a cognitive process but also a motivational and affective one (Timperley, 2011; Hattie & Timperley, 2007). Classroom observations documented increased student engagement and collaboration in the experimental group. Role-playing and project-based tasks stimulated critical discussions, while reflective practices fostered the ability to evaluate personal teaching strategies, thus reinforcing the theoretical premise of competence as a reflexive and adaptive construct (Kolb, 1984; Bruner, 1961).

Discussion. The results clearly demonstrate that traditional training methods are insufficient for developing didactic competence in future teachers. Lecture-based and reproductive approaches fail to fully cultivate skills such as critical thinking, creativity, collaboration, and reflection, which are essential in the 21st-century educational context. Competence-oriented education therefore requires the integration of innovative methods such

as project-based tasks, role-playing, problem-solving, and case studies, all of which were confirmed to be effective in this study.

The enhancement of reflective practices, alignment with national educational standards, and the integration of digital technologies emerged as crucial factors in strengthening teacher training. These findings correspond with international research. Timperley (2011) highlighted the role of continuous professional learning and reflection in teacher competence development, while Freeman et al. (2014) statistically demonstrated the superiority of active learning over traditional lectures. Hattie and Timperley (2007) emphasized the importance of quality feedback and reflective dialogue in learning outcomes. The present study not only supports these conclusions but also provides evidence from the specific context of Uzbekistan.

Unlike prior works that addressed competence development in general teacher education (Kuzmina, 2002; Slastenin, 2004), this research contributes a validated functional model designed specifically for history teachers. It extends existing scholarship by offering a structured approach adapted to the needs of Uzbekistan's higher education system, thus aligning global standards with local educational priorities. Consequently, the study has significant implications for the modernization of teacher training curricula, policy development, and the practical improvement of pedagogical education.

Conclusion. The study concludes that the proposed pedagogical model significantly improves the didactic competence of future history teachers. By integrating innovative teaching methods, competence-oriented assessment tools, and reflective practices, the model ensures higher quality in teacher training. The theoretical significance of this research lies in redefining didactic competence as a structural-functional construct that incorporates cognitive, motivational, technological, and reflective components. Its practical value is demonstrated through experimental evidence, showing an 11.7% improvement in the experimental group compared to the control group.

The empirical findings further highlight that the model contributes to increased student engagement, confidence in lesson planning, and readiness for professional practice. In this regard, the study provides practical recommendations for curriculum developers, policymakers, and higher education leaders in Uzbekistan seeking to enhance the quality of history teacher education.

Ultimately, the research advances both theory and practice by proposing and validating a model that aligns international trends with national priorities. Future research should explore the model's applicability to other subject areas and investigate its long-term impact on teacher professionalization and educational outcomes.

References:

1. Ўзбекистон Республикаси Президентининг Фармони (PF-60) 2022 йил 28 январь. 2022–2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида. – URL: https://lex.uz/docs/-5841063
2. Ўзбекистон Республикаси Президентининг Фармони (PF-5847) 2019 йил 8 октябрь. Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепцияси. – URL: https://lex.uz/ru/docs/-4545884
3. Ўзбекистон Республикаси Президентининг Қарори (PQ-4623) 2020 йил 27 февраль. Педагогик таълим соҳасини янада ривожлантириш чора-тадбирлари тўғрисида. – URL: https://www.lex.uz/uz/docs/-4749364
4. Ўзбекистон Республикаси Президентининг Қарори (PQ-289) 2022 йил 21 июнь. Педагогик таълим сифатини ошириш ва педагог кадрлар тайёрловчи ОТМлар фаолиятини янада ривожлантириш чора-тадбирлари тўғрисида. – URL: https://lex.uz/uz/docs/-6079561
5. Barnett R. Knowing and becoming in the higher education curriculum // Studies in Higher Education. – 2009. – Vol. 34, №4. – P. 429–440.
6. Dall'Alba G. Learning professional ways of being: Ambiguities of becoming // Educational Philosophy and Theory. – 2009. – Vol. 41, №1. – P. 34–45.
7. Timperley H. Realizing the power of professional learning. – London: McGraw-Hill Education, 2011.
8. Кузьмина Н. В. Профессионализм деятельности преподавателя и мастера производственного обучения. – М.: Педагогика, 2002.
9. Сластенин В. А. Педагогика. – М.: Академия, 2004.
10. Yarmatov R. B. Competence-based approaches in teacher education in Uzbekistan. – Tashkent: UzSWLU Press, 2020.
11. Anderson L. W., Krathwohl D. R. (eds.). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. – New York: Longman,

2001. – URL: https://www.quincycollege.edu/wp-content/uploads/Anderson-and-Krathwohl_Revised-Blooms-Taxonomy.pdf

12. Barrows H. S. A taxonomy of problem-based learning methods // Medical Education. – 1986. – Vol. 20, №6. – P. 481–486. – DOI: 10.1111/j.1365-2923.1986.tb01386.x

13. Biggs J. Enhancing teaching through constructive alignment // Higher Education. – 1996. – Vol. 32. – P. 347–364.

14. Bruner J. S. The act of discovery // Harvard Educational Review. – 1961. – Vol. 31, №1. – P. 21–32.

15. Freeman S., Eddy S. L., McDonough M., Smith M. K., Okoroafor N., Jordt H., Wenderoth M. P. Active learning increases student performance in science, engineering, and mathematics // Proceedings of the National Academy of Sciences. – 2014. – Vol. 111, №23. – P. 8410–8415.

16. Hattie J. Visible learning: A synthesis of over 800 meta-analyses relating to achievement. – London: Routledge, 2009.

17. Kolb D. A. Experiential learning: Experience as the source of learning and development. – Englewood Cliffs, NJ: Prentice-Hall, 1984.

18. National Research Council. Knowing what students know: The science and design of educational assessment. – Washington, DC: National Academies Press, 2001.

19. Prince M. Does active learning work? A review of the research // Journal of Engineering Education. – 2004. – Vol. 93, №3. – P. 223–231.

20. Savery J. R. Overview of problem-based learning: Definitions and distinctions // Interdisciplinary Journal of Problem-Based Learning. – 2006. – Vol. 1, №1. – P. 9–20.

21. Shulman L. S. Those who understand: Knowledge growth in teaching // Educational Researcher. – 1986. – Vol. 15, №2. – P. 4–14.

22. UNESCO. ICT Competency Framework for Teachers. Version 3. – Paris: UNESCO, 2018.

23. Vygotsky L. S. Mind in society: The development of higher psychological processes. – Cambridge, MA: Harvard University Press, 1978.