ABSTRACT

of the dissertation by Akgul Meirkhanovna Sikhayeva entitled «Professional Training of Future Primary Education Teachers Based on Art Technologies," submitted for the degree of Doctor of Philosophy (PhD) under the educational programme 8D01301 – Pedagogy and Methodology of Primary Education.

Research topic: Professional Training of Future Primary Education Teachers Based on Art Technologies.

Research aim: to provide a theoretical and methodological justification for the professional training of future primary education teachers based on art technologies, develop a corresponding methodological system, and evaluate its effectiveness through a pedagogical experimental study.

Research object: the process of professional training of future primary education teachers.

Research subject: the methodology for the professional training of future primary education teachers based on art technologies.

Research objectives:

— to identify the theoretical and methodological foundations of the professional training of future primary education teachers based on art technologies;

— to characterise digital content as an effective tool for the professional training of future primary education teachers based on art technologies;

— to identify the pedagogical potential of art technologies in the professional training of future primary education teachers;

— to develop a structural and content model of the professional training of future primary education teachers based on art technologies;

— to develop a methodological system for the professional training of future primary education teachers based on art technologies and evaluate its effectiveness through an experimental study.

Research methods: theoretical methods: analysis of scholarly perspectives in pedagogy, psychology, theoretical didactics, teaching methodology and technologies, and digital didactics; synthesis, grouping, formulation of conclusions, generalisation, concretisation, comparison, classification, clarification, outcome design, and modelling. Empirical methods: questionnaire surveys using Google Forms, observation, diagnostic assessment, implementation of an experimental study, monitoring of its results, mathematical and statistical analysis, and expert evaluation.

Justification of the novelty and significance of the findings:

-— the theoretical and methodological foundations of the professional training of future primary education teachers based on art technologies were identified;

— digital content was characterised as an effective tool for the professional training of future primary education teachers based on art technologies;

— the pedagogical potential of art technologies in the professional training of future primary education teachers was identified;

— a structural and content model of the professional training of future primary education teachers based on art technologies was developed;

— a methodological system for the professional training of future primary education teachers based on art technologies was developed. A specialised course entitled “Theory and Methodology of Art Technologies” was designed and introduced into the professional training process. A methodological and technological package for organising the activities of the “Art Club” was created, and practical steps for its implementation were established. A digital teaching resource portfolio entitled “KӨPKEM” was developed, comprising learning resources for the professional training of future primary education teachers based on art technologies. It is intended for students and lecturers teaching the groups participating in the experiment. The effectiveness of the developed methodological system was evaluated through the experimental study.

Propositions Submitted for Defense:

1. The concept of **"art-technology" functions comprehensively as a system of artistic and creative methods, techniques, and tools applied within the didactic process** to support personal self-actualization and development.
2. Art-technology is defined as a pedagogical framework based on the systematic and goal-oriented application of artistic-creative methods, techniques, and practices within the educational process to foster personal self-expression, unlock creative potential, and facilitate holistic development.
3. "Professional training of future primary education teachers based on art-technologies" is a pedagogical process geared toward the integrated development of professional and personal qualities; this process determines the efficacy of students' pedagogical activities in alignment with all constituent components, mechanisms, connections, and relationships of art-technology.
4. The refined essence and structural framework of the concept of "art-technology" and the notion of "professional training of future primary education teachers based on art-technologies" serve as the foundational basis for developing the scientific and methodological framework of educational process organization.
5. The methodological foundation for the professional training of future primary education teachers based on art-technologies comprises systemic, student-centered, activity-based, competency-based, and innovative-technological approaches.

— The pedagogical potential of art technologies in the professional training of future primary education teachers is realised through professionally oriented, theoretical, and professional creative stages. This process involves fostering a commitment to mastering artistic creativity methods; organising humanistic teaching and learning interactions between lecturers and students through the integration of theoretical, subject-specific, and artistic content; and developing a proactive approach to using art technologies for reflective development and the realisation of individual creative potential in accordance with professional training requirements;

— The structural and content model of the professional training process for future primary education teachers based on art technologies constitutes an integrated structure that establishes the theoretical and methodological foundations for achieving the expected outcome. The model comprises interconnected motivational and value-based, cognitive, and activity-based and reflective components, together with their corresponding criteria and indicators, specified implementation methods and tools, and descriptions of outcome levels;

— The specialised course "Theory and Methodology of Art Technologies," the methodological and technological package for organising the activities of the "Art Club," and the digital teaching resource portfolio "KӨPKEM," developed under the theme "Learning Resources for the Professional Training of Future Primary Education Teachers Based on Art Technologies," constitute the content of the developed methodological system. These resources create opportunities to stimulate learners' creative self-expression through art, realise their abilities and personal potential, support their adaptation to future pedagogical activities, develop pedagogical communication skills through artistic creativity, facilitate the acquisition of methods for applying digital resources in the teaching and learning process, and foster motivation to use art in the professional practice of primary education teachers.

Alignment with scientific development priorities and government programmes. The regulatory and strategic foundations of the research comprise the Constitution of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan "On Education," the Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023–2029, and the State Compulsory Standard of Primary Education. The requirements established in these documents provide a basis for investigating the pedagogical potential of art technologies and their integration into the professional training of future primary education teachers.

The Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023–2029, approved by Resolution No. 248 of the Government of the Republic of Kazakhstan dated 28 March 2023, identifies priorities for improving the structure of teacher education programmes, developing fundamental and applied research, and fostering the research competencies of future teachers.

The research topic is also substantively aligned with the State Compulsory Standard of Primary Education, approved by Order No. 348 of the Minister of Education of the Republic of Kazakhstan dated 3 August 2022, taking subsequent amendments into account. The Standard provides for an outcome-oriented approach to primary education, the realisation of learners' creative potential, an understanding of national and universal human values, and the development of an empathetic attitude towards the feelings of others. The educational area "Technology and Art" is implemented through the subjects "Music," "Labour Education," and "Visual Arts."

These requirements establish the need to prepare future primary education teachers to use artistic resources in accordance with educational and developmental objectives. Accordingly, the research addresses the integration of art technologies with subject content, the adaptation of creative tasks to pupils' age-related and individual characteristics, the organisation of collaborative activities, and the assessment of learning outcomes in line with the requirements of the Standard.

Description of the doctoral candidate's contribution to each publication (the dissertation author's contribution is expressed as a percentage of the total text).

Seven scientific publications presenting the content of the research were published, including one article in a journal indexed in the Scopus database; two articles in journals included in the list approved by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan; and four papers in the proceedings of international scientific and practical conferences.

List of publications:

1. The impact of art technologies on teachers professional preparation in fine arts: anexploratory study in the context of Kazakhstan//Journal of Education and e-Learning Research Vol. 13, No. 3, 38-48, 2026 ISSN(E) 2410-9991 / ISSN(P) 2518-0169 https://doi.org/10.20448/jeelr.v13i3.8970 56th percentile (A.M. Sikhayeva 60%, G.Saduakas 10%, A.Kurmanbekova 10%, R.Yelubayeva 10%,, M.Zhailauova 10%).

2. «Арт технологиялар негізінде болашақ бастауыш білім педагогтерін кәсіби даярлауды модельдеу» //μ https://doi.org/10.51889/2959-5762.2025.85.1.014 (A.M. Sikhayeva 80 %, G.Saduakas 10%, N.A. Shyntayeva 10%);

3. «Methodological Framework for Training Future Primary School Teachers Using Art Technologies» // Bulletin of L.N. Gumilyov Eurasian National University. Pedagogy, Psychology, Sociology Series. Vol. 153, No. 4, 2025 (pp. 273–289) doi.org/10.32523/3080-1710-2026-154-1. (A.M. Sikhayeva 80%, G.T. Saduakas 10%, A.S. Mehmet 10%).

4.«Болашақ бастауыш білім педагогтерін кәсіби даярлаудағы ART-технологияларының ролі» // Global Science and Innovation: Central

Asia. International Scientific and Practical Journal. Astana, Kazakhstan, No. 2, April 2024, pp. 97–100. ISSN 2664-2271 (A.M. Sikhayeva 80%, G.T. Saduakas 20%).

5.«Арт-технологиялар негізінде білім беру-кәсіби маман даярлаудағы маңызды фактор»//«Türk Dünyası Eğitim Bilimleri Uluslararası Kongresi-II» conference collection named. 16-18 karasha 2022 year. Pp. 428-436-Ankara, Turkey. A.m. Sikhayeva 80%, G. T. Sadvakas 20%).

6. «Кәсіби маман даярлаудағы ART-технологияларының ролі» // Pedagogy and psychology in the modern world: theoretical and practical research" atta LXX Halykaralyk gylym-tajiribelik conference zhinagi. -Resey, Moscow, No.4(70), April 2023, No. 48-59 b. ISSN 2541-9862

DOI: 10.32743/25419862.2023.4.70.356369 A.M. Sikhaeva 80%, G.T.Saduakas 20%).

7. «Кәсіби маман даярлау заман талабы» // Collection of the LXX international scientific and practical conference" pedagogy and psychology in the modern world: theoretical and practical research".- Russia, Moscow, No. 5 (83), May 2024. 136-142p.ISSN 2541-9862 a.m. Sikhaeva 80 %, G. T. Sadvakas 20%).