

ABSTRACT

of the Doctoral Thesis on the topic: “The scientific-methodical foundations of forming academic writing competence of future foreign language teachers in the context of digitalization” submitted for the degree of Doctor of Philosophy (PhD) in 8D01721 – “Training teachers of a foreign language” educational program by Madina Bolatovna Bekturova

Relevance of the research. In the context of globalization and the rapid advancement of digital technologies, scientific communication has gained particular importance. One of the key conditions for its successful implementation is academic writing, which serves as the primary means of conveying new knowledge and scientific ideas. With the transition to English-medium instruction and the digital transformation of education, the development of academic writing competence becomes especially significant, thereby emphasizing the issue of the quality of training future foreign language teachers. The relevance of this field is also determined by its alignment with the priority directions for the development of science in the Republic of Kazakhstan for 2023–2025, approved by the Higher Scientific and Technical Commission according to the Government Resolution of the Republic of Kazakhstan No. 248 "On Approval of the Concept for the Development of Higher Education and Science in the Republic of Kazakhstan for 2023–2029. " Research in academic writing corresponds to the areas of “Research in Education and Science,” “Research in Social and Humanitarian Sciences,” and “Information, Communication, and Space Technologies,” as it addresses issues related to the modernization of teacher training, the development of critical thinking, academic literacy, and scientific communication amid the transition to English-medium instruction and the integration of digital technologies into the educational process.

Academic writing is recognized as one of the key competencies in the higher education system of the Republic of Kazakhstan. According to Order No. 2 dated July 20, 2022, Chapter 4, Clause 35, Subclause 6, “...*to know the methods of scientific research and academic writing and to apply them in the field of study...*” is one of the fundamental requirements for the level of preparation of undergraduate students in accordance with the Dublin Descriptors. This provision emphasizes that the development of students’ research and academic competence is regarded not as an additional, but as a mandatory component of the educational process.

It is worth noting that in the Order of the Acting Minister of Science and Higher Education of the Republic of Kazakhstan dated March 4, 2025, No. 90, which introduced amendments to the above-mentioned standard, emphasis is placed on the necessity of integrating modern methods of scientific inquiry into educational programs at all levels of higher education, especially in the context of digitalization and innovative development. This approach is also aligned with the direction "50302 – Teaching of Scientific Disciplines," approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated September 30, 2024, No. 466 “On the Approval of the Classifier of Scientific Directions.” Thus, knowledge and application of scientific research methods become an essential condition for the successful professional and academic

development of future specialists, and their formation should begin already at the undergraduate level. This underscores the relevance and demand for scientific and methodological research aimed at developing academic writing as a form of expressing scientific thought and the effectiveness of research activity.

Moreover, in the Address of the President of the Republic of Kazakhstan, Kassym-Jomart Tokayev, to the people of Kazakhstan on September 1, 2023, titled “Economic Course of a Just Kazakhstan,” the strategic importance of digitalization and the implementation of innovations as key factors of sustainable development is emphasized. Special attention is given to the training of IT specialists, the development of artificial intelligence, and the role of universities as centers of scientific generation and personnel training. In this context, academic writing acquires particular significance as a means of scientific communication, reflecting the level of professional preparation and scientific culture of future specialists amid the digital transformation of higher education.

In accordance with the Digital Transformation Concept for 2023–2029, the necessity of transitioning to a digitalization model based on platforms is highlighted, implying the active integration of modern teaching approaches and methods, as well as the development of information and communication technologies and ensuring cybersecurity.

According to the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated November 20, 2023, No. 591, “On Approval of the Professional Standard for Educators (Academic and Teaching Staff) of Higher and (or) Postgraduate Education Organizations,” the main goal of the academic and teaching staff’s activity is “*carrying out academic, scientific-research, scientific-methodological, and social activities in higher and postgraduate education organizations.*” Within this framework, labor functions are defined, such as “*ensuring the required level of academic competencies of students*” and “*scientific-methodological support of macro-processes in higher and postgraduate education.*” Both areas demand a high level of mastery of academic writing and research methods. Academic writing serves as the foundation of scientific communication, publication activity, and the development of critical thinking, while knowledge of research methods is essential for conducting scientific work, developing educational programs, and providing methodological support for the educational process.

Our study confirms that under the conditions defined by current legislative and regulatory frameworks, the development of academic writing competence among future teachers gains special significance and becomes a key component of their professional development. This is driven by the need to prepare specialists who are not only capable of effectively adapting to transformations in the educational environment but also actively engaging in scientific research and methodological activities.

The object of the study is the educational process of training future foreign language teachers.

Subject of the study: the methodology for developing academic writing competence in students enrolled in the master's educational program "7M01711 – Training of Foreign Language Teachers" using digital technologies.

The aim of the research: theoretical justification, practical development, and experimental validation of the effectiveness of the methodology for forming academic writing competence in future foreign language teachers through the use of digital technologies.

Research objectives:

- to reveal the essence and structure of academic writing competence, determine its component composition through the study and comparative analysis of foreign and domestic research in the field of academic writing, and clarify the definition of academic writing adapted to the purpose of this study;
- to consider the academic text as a key unit of scientific and professional communication and as a tool for assessing the level of formation of academic writing subcompetencies based on qualitative indicators;
- to identify the didactic functions and principles of applying digital technologies in the process of forming academic writing competence;
- to develop a methodological model for forming academic writing competence in future foreign language teachers and determine the didactic conditions for its successful implementation;
- to create digital educational content based on the developed model using a cluster of digital educational resources that optimize the didactic process of forming academic writing competence, integrating the fundamentals of academic writing and research methods as a new discipline;
- to conduct experimental training of master's students in the "Foreign Language Teacher Preparation" program using digital educational content based on the developed model for the purpose of testing and proving its effectiveness.

Research hypothesis: The formation of academic writing competence will be effective **if**:

- the essence, component structure, and levels of formation of academic writing competence are revealed through the study and comparative analysis of foreign and domestic research,
- a model and effective methodology for teaching academic writing using digital educational content are developed, integrating the fundamentals of academic writing and research methods as a new discipline,

then the individual's ability and readiness to effectively use academic writing skills in professional activities will be formed, **as** the cognitive, competency-based, content-compositional, and procedural approaches will ensure a comprehensive and purposeful process of forming academic writing competence, taking into account the requirements of the digital educational environment.

Key idea of the research: the formation of academic writing competence in future foreign language teachers is determined by the specific nature of the academic text as a key

unit of scientific discourse, the synergy with scientific research methods, and the intensification of the learning process through the active use of digital educational resources.

The methodological and theoretical foundation of the study is based on seminal works addressing the following issues:

- professional foreign language education, specifically the theoretical and applied aspects of developing professional competence in a foreign language environment: S.S. Kunanbaeva; T.A. Kulgildinova, B.A. Zhetpisbayeva, K.U. Kunakova, A.A. Golovchun, A.A. Zhaitapova, P.K. Yelubaeva, N. Chomsky, I.A. Zimnyaya, Y.G. Tatur, et al.;

- digitalization of foreign language education in Kazakhstan and the integration of digital technologies into the educational process: A.T. Chaklikova; G.K. Nurgalieva; D.M. Dzhussubalieva; E.V. Artykbaeva, A.K. Mynbayeva, R.R. Takhmazov, et al.;

- scientific and theoretical foundations of content-compositional and procedural approaches to teaching academic writing: A. Seow, V. Zamel, A. Rames, J. Emig, T.R. Johnson, I. Leki, N. Sommers, L. Flower, J. Hayes, et al.;

- academic writing: I.B. Korotkina, J. Flowerdew, S. Bailey, N. Murray, G. Ismagulova, K.N. Bulatbayeva, S.Z. Temirgaliyeva, D.B. Shayakhmetova, E. Ruzieva, A. Baigaraeva, E. Ospan, G.K. Kasymova, R.F. Zhussupova, G.Z. Tajitova, A. Mukhtarkhanova, T.Yu. Shelestova, M. Tajik, J.M. Swales, K. Fick, W. Strunk, I. White, et al.

Research methods and techniques. *Theoretical methods:* analysis of normative and program documentation of the Ministry of Higher Education and Science of the Republic of Kazakhstan, comparative analysis of foreign and domestic pedagogical approaches to teaching academic writing, critical analysis and literature review on the research topic, hypothetical research method, modeling. *Empirical methods:* observation and analysis of the scientific process, experimental training, semi-structured surveys using Likert scale and analysis of results in SPSS (descriptive statistics, specifically calculation of Cronbach's alpha to confirm survey validity, calculation of median and standard deviations), qualitative analysis of scientific works by participants of the experiment.

The experimental base of the research: the participants of the control and experimental groups were 102 second-year master's students enrolled in "7M01711 - Training of Foreign Language Teachers" educational program at Ablai Khan Kazakh University of International Relations and World Languages.

The scientific novelty of the research is as follows:

- The concept of academic writing has been refined in the context of training future foreign language teachers, taking into account the requirements of digital and academic literacy;

- The sub-competencies of academic writing significant for master's students in pedagogical fields have been identified and theoretically substantiated, and qualitative indicators of their formation have been determined;

- A model for the development of academic writing competence using digital educational resources has been developed, including structural components, levels of development, and the interrelations between them;

- Didactic principles and functions of digital technologies ensuring the effective implementation of the methodology for teaching academic writing in a digital environment have been defined;

- The role of the academic text as a key unit of scientific and professional communication, as well as the main means of engaging learners in scientific discourse and assessing the level of academic writing competence formation, has been substantiated.

The theoretical significance of this dissertation is presented as an extensive analysis of the theoretical aspects of academic writing competence development in light of the new literacy concept, which includes both digital and academic literacy. It also involves defining the didactic principles and functions of digital educational resources aimed at developing academic writing competence by engaging learners in the context of scientific discourse, thereby contributing to the intensification and substantive deepening of the educational process.

The practical significance of the research lies in the development of a unified practical program called “Integrated Academic Writing”, which represents a synthesis of scientific research methods and the fundamentals of foreign language academic writing. This program can be applied in the educational process to enhance the effectiveness of academic writing competence development, which is intensified through the use of digital technologies in the form of digital educational content.

Provisions submitted for the defense:

- Academic writing competence is an integrative characteristic of the training of future foreign language teachers, represented by the unity of its structural sub-competencies (*metalinguistic, written discursive, communicative-research, and digital*). Its formation is based on *cognitive, competency-based, process-oriented, and content-compositional* approaches.

- The methodology for developing academic writing competence in future foreign language teachers is ensured through the implementation of a methodological model presented as a construct consisting of four blocks: *target, theoretical-methodological, content-process, and evaluation-result*. This methodology adheres to the principles of *contextuality, reflexivity, personalization, and interactivity*, and is realized through the effective use of *digital educational content* within the framework of foreign language-based teacher training, thereby determining the effectiveness of their readiness for professional activity.

- The academic text represents *a key unit* of scientific and professional communication and serves as a means to assess the level of academic writing competence formation, based on *qualitative indicators* that determine the development level of each of the sub-competencies of academic writing.

- The «Integrated Academic Writing» unified practical program, implemented through digital educational content within a cluster of digital educational resources, ensures the effective and systematic development of academic writing competence through the *cognitive-preparatory, compositional-analytical, and transformational-integrative* stages.

Validation and implementation of the research findings. The study's key findings have been reflected in 13 publications, including: 6 articles published in scientific journals indexed in Scopus and Web of Science in first three quartiles in Education category; 4 articles published in journals recommended by the Committee for Quality Assurance in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan:

1. Predicting Kazakhstani TEFL students' continuance intention towards using ChatGPT in academic writing. // Education and Information Technologies. – V.30(19). – 2025. <https://doi.org/10.1007/s10639-024-13306-6>. *Author's contribution:* Research idea, theoretical model development, data collection and analysis, article writing (first author).

2. Digital tools and academic writing: a moderated mediation model of writing self-efficacy. // Journal of Teaching English for Specific and Academic Purposes. – V.12(3). – 2024. <https://doi.org/10.22190/JTESAP240821047B>. *Author's contribution:* Hypothesis formulation, questionnaire development, statistical analysis, writing and editing of the article (first author).

3. Perceptions of digital competence in learning and teaching English in the context of online education. // Contemporary Educational Technology. – 2023. <https://doi.org/10.30935/cedtech/12598>. *Author's contribution:* Participation in the development of the research instrument, interpretation of results, discussion and conclusions (third author).

4. Investigating English medium instruction provision in a Kazakhstani university: the ideals and realities of EMI learning. // Journal of Teaching English for Specific and Academic Purposes. – Volume 12(2). – 2024. <https://doi.org/10.22190/JTESAP240428035T>. *Author's contribution:* Development of tools, participation in data collection, co-authorship of the article (second author).

5. Enriching Experiences: Unpacking Kazakhstani EFL Teachers' Attitudes and Readiness for Intercultural Approach. // Cakrawala Pendidikan. – V.44(1). – 2025. <https://doi.org/10.21831/cp.v44i1.73305>. *Author's contribution:* Analyzing the data, interpreting the results, preparing part of the article (third author).

6. Examining Multimodal Literacy Skills Among EMI Teachers in Kazakhstan. // International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE). – Volume 13(1). – 2025. *Author's contribution:* Analyzing the data, interpreting the results, preparing part of the article (first author);

7. The impact of social and affective factors on the formation of academic writing competence among future EFL teachers // Bulletin of the National Academy of Sciences of the Republic of Kazakhstan. – 2022. – V.55. – №399. – p.33-47. – <https://doi.org/10.32014/2022.2518-1467.356>. *Author's contribution:* Independently conducted research, analyzed data, wrote and designed the paper (first author).

8. The main problems of academic writing competence formation of pre-service foreign language teachers // Bulletin "Ablai khan University of International Relations and World Languages". Series "Pedagogical sciences". – 2023. – №1(68). – p.221-235. – <https://doi.org/10.48371/PEDS.2023.68.1.015>. *Author's contribution:* Full author

contribution: problem statement, literature review, research results and conclusions (sole author).

9. The development of academic writing competence through the instruction of formulaic sequences // Bulletin of Abai Kazakh National Pedagogical University, Series “Pedagogical Sciences.”– 2023. – №1(77). – p.94-100. - <https://doi.org/10.51889/1728-5496.2023.1.76.010>. *Author's contribution:* Conceptualizing the concept, conducting the experiment, interpreting the results, writing the paper (first author).

10. English as a medium of instruction in higher education: an overview of academic policies in Kazakhstani universities // Bulletin "Ablai khan University of International Relations and World Languages". Series “Pedagogical sciences”. – 2024. - № 1(72). – p.182-198. - <https://doi.org/10.48371/PEDS.2024.72.1.013>. *Author's contribution:* collecting data, participating in discussion and formulating conclusions, writing the methodology (third author),

also, 2 papers were presented at international scientific conferences and 1 article was published in a scientific Kazakhstani journal.

Dissertation structure. The dissertation consists of regulatory references, abbreviations and symbols, an introduction, three main chapters, a conclusion, a list of references, and appendices.