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FORMATION OF INTEGRATED COMPETENCE OF FUTURE PROFESSIONALS IN THE CONTEXT OF DIGITAL TRANSFORMATION OF EDUCATION

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The rapid development of digital technologies and the global digital transformation of education have significantly influenced the system of professional training in higher education institutions. Under modern conditions, the formation of integrated competence of future professionals has become one of the key priorities of educational policy and pedagogical practice. Integrated competence is understood as a complex combination of professional knowledge, practical skills, digital literacy, critical thinking, communication abilities, creativity, adaptability, and the capacity for lifelong learning necessary for effective professional activity in the digital society. **The purpose** of this article is to investigate the peculiarities of the formation of integrated competence of future professionals in the context of digital transformation of education and to determine the role of innovative educational technologies and competency-based approaches in improving the quality of professional training. **Methods**. The research employed a combination of theoretical and empirical methods to investigate the formation of integrated competence of future professionals in the context of digital transformation of education. Theoretical methods included analysis, synthesis, comparison, generalization, and systematization of scientific literature. The study demonstrates that digital transformation creates new opportunities for the modernization of higher education through the implementation of online learning platforms, interactive technologies, artificial intelligence tools, virtual learning environments, and blended learning models. It has been established that the effective formation of integrated competence requires the combination of traditional pedagogical approaches with innovative digital methods aimed at developing students' professional, communicative, analytical, and technological skills. **The results** of the research indicate that the use of digital educational technologies contributes to increasing students' motivation, autonomy, flexibility of thinking, collaboration skills, and readiness for professional adaptation in a rapidly changing labor market. The article emphasizes the importance of creating an innovative educational environment that promotes interdisciplinary learning, digital culture, academic mobility, and continuous professional self-development. **Conclusion**. The practical significance of the study lies in the possibility of applying the proposed approaches and recommendations in the process of professional training of future specialists in higher education institutions.

Keywords: *integrated competence, digital transformation, higher education, future professionals, competency-based approach, digital technologies, professional training, innovative learning, digital literacy, educational technologies, blended learning, lifelong learning.*

ФОРМУВАННЯ ІНТЕГРАЛЬНОЇ КОМПЕТЕНТНОСТІ МАЙБУТНІХ ФАХІВЦІВ У КОНТЕКСТІ ЦИФРОВОЇ ТРАНСФОРМАЦІЇ ОСВІТИ

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Стрімкий розвиток цифрових технологій та глобальна цифрова трансформація освіти суттєво вплинули на систему професійної підготовки у закладах вищої освіти. За сучасних умов формування інтегральної компетентності майбутніх фахівців стало одним із ключових пріоритетів освітньої політики та педагогічної практики. Інтегральна компетентність розуміється як комплексне поєднання професійних знань, практичних умінь, цифрової грамотності, критичного мислення, комунікативних здібностей, креативності, адаптивності та здатності до навчання впродовж життя, необхідних для ефективної професійної діяльності у цифровому суспільстві. **Метою** статті є дослідження особливостей формування інтегральної компетентності майбутніх фахівців у контексті цифрової трансформації освіти та визначення ролі інноваційних освітніх технологій і компетентнісного підходу у підвищенні якості професійної підготовки. **Методи.** У дослідженні використано комплекс теоретичних та емпіричних методів для вивчення процесу формування інтегральної компетентності майбутніх фахівців в умовах цифрової трансформації освіти. До теоретичних методів належали аналіз, синтез, порівняння, узагальнення та систематизація наукової літератури.

Дослідження демонструє, що цифрова трансформація створює нові можливості для модернізації вищої освіти завдяки впровадженню онлайн-платформ для навчання, інтерактивних технологій, інструментів штучного інтелекту, віртуальних освітніх середовищ та моделей змішаного навчання. Установлено, що ефективне формування інтегральної компетентності потребує поєднання традиційних педагогічних підходів з інноваційними цифровими методами, спрямованими на розвиток професійних, комунікативних, аналітичних і технологічних навичок студентів. **Результати** дослідження свідчать, що використання цифрових освітніх технологій сприяє підвищенню мотивації студентів, автономності, гнучкості мислення, навичок співпраці та готовності до професійної адаптації в умовах швидкозмінного ринку праці. У статті наголошується на важливості створення інноваційного освітнього середовища, яке сприяє міждисциплінарному навчанню, розвитку цифрової культури, академічної мобільності та безперервного професійного саморозвитку. **Висновки.** Практичне значення дослідження полягає у можливості застосування запропонованих підходів і рекомендацій у процесі професійної підготовки майбутніх фахівців у закладах вищої освіти.

Ключові слова: *інтегральна компетентність, цифрова трансформація, вища освіта, майбутні фахівці, компетентнісний підхід, цифрові технології, професійна підготовка, інноваційне навчання, цифрова грамотність, освітні технології, змішане навчання, навчання впродовж життя.*

Introduction. The purpose of this article is to analyze the process of forming integrated competence of future professionals under the conditions of digital transformation of education, to identify the key factors influencing the development of professional, digital, communicative, and critical thinking skills, and to substantiate effective pedagogical approaches and digital tools that contribute to the preparation of competitive specialists capable of adapting to the challenges of the modern information society. The concept of integral competence in education was gradually formed within the framework of the development of the competency-based approach in the European educational space at the end of the 20th and the beginning of the 21st century. In its modern meaning, this term is primarily associated with the processes of higher education standardization in Europe and the implementation of the competency-based approach within the framework of the Bologna Process.

One of the first international documents that laid the foundation for understanding integrated competences was the project *Tuning Educational Structures in Europe*, launched in 2000. Within this project, competences were considered as a combination of knowledge, skills, abilities, values, and personal characteristics necessary for professional activity. The very idea of integrating different components of professional training became the basis for the further development of the concept of «integral competence».

In European documents, the terms «integral competence» or «integrated competence» began to be actively used in the context of: learning outcomes; qualification frameworks; competency-based educational programs.

In Ukraine, the concept of «integral competence» is officially in: the Law of Ukraine «On Higher Education» (2014); the National Qualifications Framework; the standards of higher education of Ukraine. It was after the adoption of the Law of Ukraine «On Higher Education» that the term gained widespread use in Ukrainian pedagogical science and in the practice of developing educational programs. Article 1 of the Law of Ukraine «On Higher Education» defines integral competence as: «a generalized description of a qualification level that expresses the main competency characteristics of the level regarding learning and/or professional activity».

Theoretical Substantiation of the Problem. The rapid development of information and communication technologies, globalization processes, and the transition to a digital society have fundamentally transformed the modern educational environment. Under these conditions, higher education institutions face the necessity of preparing competitive professionals capable of adapting to technological changes, processing large amounts of information, and functioning effectively in a digitally oriented professional environment. Consequently, the formation of integrated competence has become one of the priority objectives of modern higher education.

The concept of integrated competence is closely connected with the competency-based approach, which emphasizes not only the acquisition of theoretical knowledge but also the development of practical skills, personal qualities, critical thinking, creativity, communication abilities, and readiness for lifelong learning. Integrated competence is understood as a holistic combination of professional, social, digital, communicative, and personal competencies that ensure successful professional activity and self-realization in modern society.

Digital transformation of education significantly changes traditional approaches to teaching and learning. The introduction of *online learning platforms, virtual educational environments, blended learning, artificial intelligence technologies, cloud services, and interactive digital tools* creates new opportunities for the modernization of professional training. These technologies contribute to personalized learning, student autonomy, flexibility of educational processes, interdisciplinary interaction, and academic mobility.

At the same time, digital transformation presents several challenges for higher education institutions, including the need to improve digital infrastructure, enhance teachers' digital competence, ensure equal access to educational technologies, and develop innovative pedagogical methods. Therefore, the formation of integrated competence requires the combination of traditional educational approaches with innovative digital strategies aimed at developing students' analytical thinking, creativity, adaptability, collaboration skills, and professional mobility.

Methodology and Methods. The research employed a combination of theoretical and empirical methods to investigate the formation of integrated competence of future professionals in the context of digital transformation of education. Theoretical methods included analysis, synthesis, comparison, generalization, and systematization of scientific literature and modern educational approaches related to competency-based education and digital technologies. Empirical methods involved observation, questionnaires, interviews, and pedagogical experiments aimed at identifying the effectiveness of digital tools and innovative teaching methods in the development of integrated competence among higher education students. Statistical methods were used to process and interpret the obtained data, determine the dynamics of competence development, and evaluate the effectiveness of the proposed educational strategies.

Results and Discussion. In the contemporary conditions of globalization, digitalization, and the rapid development of science and technology, the educational system is focused not only on the transmission of knowledge but also on the formation of a competent specialist capable of acting effectively in complex professional and social situations. The problem of forming integrated competence in the system of higher education has become one of the central issues of contemporary pedagogical research due to the rapid development of digital technologies, globalization processes, and the implementation of competency-based education. Modern Ukrainian and foreign scholars increasingly emphasize the necessity of preparing future professionals capable of adapting to dynamic social and technological changes, demonstrating professional mobility, digital literacy, critical thinking, and readiness for lifelong learning.

A significant contribution to the study of integrated competence was made by O. Akimova, O. Kuznetsova, and V. Odarchenko (2023), who investigated integrated competence as

an essential component of the professional training of future primary school teachers. The authors substantiate that integrated competence combines professional knowledge, pedagogical skills, values, and personal qualities necessary for effective teaching activity. The innovative aspect of the study lies in the interdisciplinary interpretation of integrated competence within specialty 013 «Primary Education» and the emphasis on its practical orientation in teacher training. The issue of digital competence as a key component of lifelong learning is examined in the work of N. Aristova (2021). The researcher highlights the importance of digital literacy, information management skills, media competence, and online communication abilities in the modern educational environment. The scientific novelty of the study consists in considering digital competence as an obligatory prerequisite for continuous professional self-development in the digital society. Theoretical and practical aspects of integrated competence formation in pedagogical education are also reflected in the studies of O. Bartkov and Ye. Durmanenko (2022), who define integrated competence as a fundamental basis for the preparation of future preschool educators. The authors emphasize the integration of pedagogical, communicative, social, and creative competencies necessary for successful professional activity. Their research demonstrates the importance of a holistic approach to professional training in modern higher education.

The modernization of professional education through interdisciplinary learning is substantiated in the research of O. Glasunova, V. Korolchuk, and T. Voloshyna (2019). The scholars investigate interdisciplinary projects as an effective means of forming integrated competence among future IT specialists. The study proves that project-based learning contributes to the development of teamwork, problem-solving abilities, digital literacy, and professional adaptability. The innovative contribution of the work lies in implementing interdisciplinary digital projects into higher education practice.

The problem of IT competence formation among future specialists was investigated by A. Dobrovolska (2017), who considered the integration of information technologies into professional training as an important pedagogical issue. The researcher identified pedagogical conditions necessary for the effective development of digital and technological competencies in higher education institutions.

An important theoretical basis for competency-oriented education is provided by the Law of Ukraine «On Higher Education» (2014), which establishes the implementation of the competency-based approach as one of the key principles of higher education in Ukraine. The document emphasizes the necessity of aligning Ukrainian educational standards with European qualification frameworks and ensuring the formation of integrated learning outcomes. The issue of integration abilities as a component of professional competence was analyzed by N. Kichuk (2020), who interprets the ability for multivector and multilevel integration as an integrated competence of a successful teacher of the New Ukrainian School. The author emphasizes adaptability, interdisciplinarity, and innovation as essential characteristics of modern professional activity. The formation of integrated psychological and pedagogical competence of university teachers is explored in the study by M. Marusynets (2018). The researcher substantiates that effective teaching activity requires the integration of pedagogical, communicative, psychological, and digital competencies. The study highlights the importance of holistic professional development of higher education teachers under conditions of educational transformation.

The competency-based approach is also reflected in international and national qualification frameworks, particularly in the National Qualifications Framework of Ukraine (2011), the European Qualifications Framework for Lifelong Learning (EQF-LLL), and the Qualification Framework of the European Higher Education Area (QF-EHEA). These documents establish common standards for learning outcomes, professional competencies, academic mobility, and lifelong learning. Their innovative significance lies in ensuring the compatibility of educational systems and promoting competency-oriented educational reforms.

International researchers also make a substantial contribution to the theoretical substantiation of competency-based education. Gruppen, L. D., Mangrulkar, R. S., & Kolars, J. C. (2012) emphasize the effectiveness of competency-based education in improving professional training in health professions through outcome-oriented learning and competence assessment. Holmes, A. G. D., Tuin, M. P., & Turner, S. L. (2021) analyze the theoretical complexity of defining the concepts of «competence» and «competency», highlighting practical difficulties in implementing competency-based education in universities.

J. Kubova-Semaka (2020) proposes an integral approach to understanding competence as a holistic interaction of knowledge, skills, values, and attitudes. Marcotte, K. M. & Gruppen, L. D. (2022) investigate competency-based education as a model of curriculum design and assessment aimed at integrative learning. Potolea and Toma (2015) develop a systemic-interactionist model for competency-based curriculum design, emphasizing the interrelation between educational objectives, teaching methods, and assessment procedures.

Particular attention should be paid to the study conducted by Tahirsylaj, A, & Sundberg, D. (2020),

who analyze the problem of defining competencies for 21st-century curricula. The researchers identify critical thinking, creativity, collaboration, communication skills, and digital literacy as the most significant competencies required in the contemporary labor market. Vitchenko et al. (2022) focus on the design of integrated learning outcomes within competency-based higher education and substantiate methodological approaches to combining theoretical knowledge, practical skills, and personal development in university curricula.

In the article «Evolution of the Term «Transversality» in the Modern Scientific Space: Foreign Experience» (2022), L. Popova investigates the theoretical evolution and contemporary interpretation of the concept of «transversality» within the international educational and scientific discourse. The study focuses on the growing significance of transversal competencies in the context of globalization, digital transformation, and modernization of higher education systems. The author emphasizes that the concept of transversality has gradually transformed from a narrowly specialized interdisciplinary notion into a multidimensional educational phenomenon associated with the development of universal competencies necessary for successful professional and social activity in the twenty-first century. Particular attention is paid to the analysis of European educational strategies and international frameworks that define transversal competencies as essential components of lifelong learning and professional mobility. The research demonstrates that competencies include critical thinking, creativity, communication skills, teamwork, adaptability, problem-solving abilities, intercultural interaction, emotional intelligence, and digital literacy. An important aspect of the study is the analysis of foreign educational experience in implementing transversal competencies into professional training systems. The author examines European approaches to competency-based education and highlights the role of interdisciplinarity, student-centered learning, and innovative pedagogical technologies in developing transversal skills among future professionals. The author emphasizes the necessity of integrating transversal approaches into educational programs in order to improve the quality of professional training and prepare future specialists for rapidly changing labor market conditions.

Therefore, the analysis of scientific literature demonstrates that integrated competence is considered a multidimensional and interdisciplinary phenomenon that combines professional, digital, communicative, social, and personal competencies necessary for effective professional activity in the digital era. The reviewed studies confirm the growing importance of competency-based education, interdisciplinary integration, and innovative digital technologies in the modernization of higher education and the preparation of future professionals.

One of the central categories of the competency-based approach is integral competence, which determines the overall level of a student's professional training and readiness to perform

Table 1

Types of Competencies in the Professional Training of Future Specialists

No.	Type of Competence	Description	Example in Professional Training
1	Key (Core) Competencies	Fundamental competencies necessary for personal development and lifelong learning	Critical thinking, problem-solving, digital literacy
2	General Competencies	Competencies that are not profession-specific but essential across all fields	Communication, teamwork, time management
3	Professional (Subject-specific) Competencies	Competencies directly related to a specific profession or field of study	Teaching methods for teachers, translation techniques for translators
4	Integral Competence	A holistic combination of knowledge, skills, values, and experience ensuring readiness for professional activity	Ability to solve complex professional tasks independently
5	Social Competencies	Abilities required for effective interaction in society and professional environments	Conflict resolution, intercultural communication
6	Communicative Competencies	Skills related to effective oral and written communication	Public speaking, academic writing, negotiation
7	Digital Competencies	Ability to use digital technologies effectively in learning and professional practice	Use of LMS platforms, AI tools, data analysis software
8	Methodological Competencies	Ability to organize, plan, and evaluate professional activities	Lesson planning, research design, project management
9	Reflective Competencies	Ability to analyze and evaluate one's own professional activity	Self-assessment, reflective journals, feedback analysis
10	Intercultural Competencies	Ability to work effectively in multicultural environments	Understanding cultural differences, international cooperation

professional functions. The competency-based approach in modern pedagogy is viewed as a strategic orientation of the educational process toward developing learners' ability to act effectively in various professional and social situations. Its essence lies in the shift from a knowledge-based paradigm to an outcome-oriented model of learning, where the key indicator is the formation of competencies.

Within the European educational space, particularly in the framework of the Bologna Process and the Tuning Educational Structures in Europe project, competence is defined as the integration of knowledge, skills, abilities, values, and personal qualities necessary for professional activity.

In modern pedagogical science, integral competence is considered as the result of the integration of knowledge, skills, abilities, personal qualities, values, and practical experience. The concept of «integral competence» is widely used in both European and Ukrainian educational spaces within the framework of implementing the competency-based approach. According to the Law of Ukraine «On Higher Education», integral competence is defined as a generalized description of a qualification level that expresses the main competency characteristics of a specialist. It reflects an individual's ability to solve complex specialized tasks and practical problems within a particular field of professional activity or study. Researchers emphasize that integral competence is a complex construct that includes: a system of professional knowledge; *practical skills and abilities; critical and creative thinking; communicative abilities; ethical and value orientations; autonomy and responsibility; and the ability for self-education and professional development*.

Thus, integral competence serves as an integrated outcome of the educational process and an indicator of the formation of the future specialist's professional readiness. In pedagogical literature, several structural components of integral competence are distinguished, namely: *Cognitive Component* (presupposes the presence of a system of theoretical knowledge necessary for professional activity; includes professional, methodological, and interdisciplinary knowledge); *Activity-Based Component* (includes practical skills and abilities to apply knowledge in professional activity, as well as the ability to solve problem situations and make effective decisions); *Communicative Component* (involves the ability to engage in effective professional communication, cooperation, teamwork, and intercultural interaction); *Personal and Value-Based Component* (covers motivation, professional values, responsibility, ethical standards, and readiness for self-development); *Reflective Component* (determines an individual's ability for self-analysis, self-assessment of one's own activities, and continuous professional improvement).

Integral competence is a key outcome of professional education, as it ensures the readiness of future specialists for effective activity in the conditions of modern society. Its formation contributes to the development of professional mobility; the ability to adapt to changes; the development of creative and critical thinking; the formation of self-learning skills; and the enhancement of competitiveness in the labor market. Integral competence is especially important in the training of teachers, translators, medical workers, military specialists, and representatives of other professions whose activities require the integrated application of knowledge and a high level of responsibility.

Table 2

Pathways for the Formation of Integral Competence in the System of Professional Training of Specialists

No.	Pathway	Content / Description	Result of Formation
1	Competency-based approach	Orientation of education toward learning outcomes integrating knowledge, skills, values, and experience	Formation of holistic professional readiness
2	Practice-oriented learning	Internships, placements, case studies, simulation of professional situations	Development of practical professional skills and abilities
3	Innovative pedagogical technologies	Interactive, project-based, problem-based learning; digital technologies; VR/AR tools	Development of creativity, critical thinking, and adaptability
4	Interdisciplinary integration	Combination of knowledge from different academic disciplines	Formation of systemic and integrated professional thinking
5	Development of soft skills	Critical thinking, communication, creativity, teamwork, emotional intelligence	Increased employability and competitiveness
6	Motivation for self-education	Encouraging lifelong learning and continuous professional development	Development of autonomy and self-directed learning
7	Academic mobility	Participation in international programs, exchanges, conferences	Development of intercultural competence and global outlook
8	Reflective learning	Self-analysis, self-assessment, and evaluation of professional activity	Conscious and continuous professional improvement

The formation of integral competence in future translators is a complex and multidimensional process that reflects the requirements of modern competency-based higher education. In contemporary educational conditions, translation is no longer viewed as a purely linguistic activity; instead, it is understood as a professional practice that integrates linguistic, cognitive, intercultural, technological, and personal dimensions. Therefore, the development of integral competence becomes a key objective of translator training programmes.

In the context of the European Higher Education Area, particularly within the framework of the Bologna Process and the Tuning Educational Structures in Europe project, competence is interpreted as an integrated combination of knowledge, skills, attitudes, and values. This understanding provides the methodological basis for defining integral competence as a holistic outcome of professional education.

Integral competence of future translators is characterized by the synthesis of several interrelated components. Linguistic competence ensures mastery of source and target languages, while translation competence involves the ability to apply appropriate strategies and techniques for rendering meaning accurately and effectively. Communicative competence enables translators to interact successfully in professional contexts, and intercultural competence ensures adequate interpretation of cultural-specific meanings. In addition, digital competence has become increasingly important due to the widespread use of computer-assisted translation tools, machine translation systems, and artificial intelligence technologies. Reflective competence, in turn, supports continuous professional self-development through self-assessment and critical analysis of one's own translation performance.

A specific feature of forming integral competence in translators is its strong interdisciplinary character. Effective translator training requires the integration of linguistics, translation studies, cultural studies, and information technologies. This interdisciplinary approach allows students to develop a systemic understanding of translation as a complex professional activity rather than a set of isolated skills.

Another important peculiarity is the practice-oriented nature of training. The formation of integral competence is impossible without continuous engagement in real or simulated translation activities. Students are involved in written and oral translation tasks, interpreting exercises, case studies, and project-based learning. Such activities contribute to the development of professional decision-making skills and the ability to work under authentic conditions.

Digital transformation of education also significantly influences translator training. The use of CAT tools, machine translation post-editing systems, and AI-based platforms enhances students' technological competence and prepares them for modern professional environments. At the same time, the development of soft skills such as critical thinking, creativity, teamwork, and stress resistance ensures adaptability in dynamic working conditions.

Intercultural orientation represents another essential aspect of integral competence formation. Translators must be able to mediate between cultures, avoid misinterpretations, and ensure pragmatic and culturally appropriate translation. This requires not only linguistic knowledge but also deep cultural awareness and ethical sensitivity.

Finally, reflective practice plays a crucial role in the formation of integral competence. Through reflection, students analyse their translation decisions, identify errors, and improve their professional performance. This process supports lifelong learning and continuous professional growth.

Thus, the formation of integral competence in future translators is a holistic educational process that integrates theoretical knowledge, practical skills, digital literacy, intercultural awareness, and reflective abilities. Its successful implementation ensures the preparation of highly qualified specialists capable of meeting the demands of modern global communication and professional translation practice.

The formation of integral competence in future primary school teachers is a key objective of modern teacher education, aimed at preparing educators who are capable of ensuring the holistic development of younger learners. In contemporary educational theory, integral competence is understood as an integrated combination of knowledge, skills, values, and professional attitudes that enable effective pedagogical activity.

Within the European educational context, particularly the Bologna Process and the Tuning Educational Structures in Europe framework, competence-based education emphasizes learning outcomes and the development of professionally oriented abilities. This competence in future primary school teachers is characterized by several specific features. First, it is strongly practice-oriented, as teaching practice in schools plays a central role in transforming theoretical knowledge into real pedagogical skills. Second, it integrates pedagogical, psychological, methodological, and communicative components, ensuring a holistic approach to teacher preparation. Third, it involves the development of digital competence, which is essential for the use of modern educational technologies in primary education.

In addition, soft skills such as empathy, communication, teamwork, and creativity are crucial for effective interaction with young learners. Inclusive education also plays an important role,

Table 3

Algorithm for the Formation of Integral Competence in Future Translators

Stage	Name of Stage	Aim	Main Activities	Expected Result
1	Diagnostic and Orientation Stage	Identify students' initial competence level	Language proficiency testing, assessment of translation skills, identification of strengths and gaps	Clear profile of students' starting abilities
2	Goal Setting and Competence Design	Define expected learning outcomes	Formulation of integral competence, alignment with standards, setting professional and soft skills goals	Structured competence-based learning objectives
3	Theoretical and Linguistic Foundation Formation	Build theoretical base for translation	Study of translation theory, linguistics, terminology, contrastive analysis	Strong linguistic and theoretical foundation
4	Practical and Activity-Based Training	Develop translation skills through practice	Written/oral translation, interpreting exercises, case studies, simulations	Formation of basic and advanced translation skills
5	Integration of Digital and Innovative Tools	Develop digital translation competence	Use of CAT tools, AI translation systems, post-editing, online platforms	Digital and technological competence in translation
6	Soft Skills and Intercultural Development	Strengthen personal and social competencies	Intercultural communication, teamwork, critical thinking, ethics in translation	Intercultural and professional adaptability
7	Reflective and Research Activity	Develop self-evaluation and analytical skills	Reflective journals, peer review, error analysis, mini research projects	Ability to self-assess and improve performance
8	Integration and Professional Simulation	Combine all competencies into holistic practice	Complex translation projects, real-life simulations, interdisciplinary tasks	Formation of integral professional competence

Table 4

Algorithm for the Formation of Integral Competence in Future Primary School Teachers

Stage	Name of Stage	Aim	Main Activities	Expected Result
1	Diagnostic and Orientation Stage	Identify initial level of pedagogical competence	Diagnostic testing, analysis of communication skills, observation of teaching aptitude, assessment of motivation	Individual profile of students' pedagogical readiness
2	Goal Setting and Competence Design	Define expected learning outcomes for teacher training	Formulation of integral competence of primary school teacher, alignment with educational standards, setting professional and soft skills goals	Structured competency framework for teacher education
3	Theoretical and Psychological-Pedagogical Foundation	Build knowledge base for teaching profession	Study of pedagogy, psychology of child development, teaching methodologies, inclusive education principles	Solid theoretical foundation for teaching activity
4	Methodological and Didactic Training	Develop teaching methodology skills	Lesson planning, classroom management, development of teaching materials, subject methodology (math, language, science, etc.)	Ability to design and conduct effective lessons
5	Practical Teaching Experience	Develop real teaching skills through practice	Teaching practice in primary schools, micro-teaching, simulation of classroom situations, mentoring	Formation of practical teaching skills
6	Integration of Digital and Innovative Technologies	Enhance digital pedagogy competence	Use of ICT tools, interactive platforms, educational apps, blended and distance learning technologies	Digital teaching competence
7	Soft Skills and Inclusive Education Development	Strengthen personal and social competencies	Communication with children, parents, teamwork, conflict resolution, inclusive teaching strategies	Social, communicative, and inclusive teaching competence

Продовження таблиці 4

Stage	Name of Stage	Aim	Main Activities	Expected Result
8	Reflective and Research Activity	Develop self-evaluation and professional growth skills	Reflective diaries, lesson analysis, peer feedback, small-scale pedagogical research	Ability to reflect and continuously improve teaching practice
9	Integrated Teaching Practice	Combine all competencies in real professional activity	Conducting full lessons, interdisciplinary teaching, participation in school projects	Formation of integral professional competence of primary school teacher

as future teachers must be prepared to work with diverse student groups and adapt teaching methods to individual needs.

Reflective practice further supports the formation of integral competence by enabling future teachers to analyze their teaching experience, identify areas for improvement, and continuously develop professionally. In conclusion, integral competence in future primary school teachers is formed through the integration of theory and practice, the development of professional and personal skills, and continuous reflective learning, ensuring readiness for effective pedagogical activity in modern primary education.

Digital transformation has become a defining factor in modern higher education, significantly influencing the content, methods, and outcomes of professional training. In this context, the formation of integral competence gains particular importance, as it ensures the ability of future specialists to combine knowledge, skills, values, and digital literacy for effective professional performance. However, its role differs depending on the professional field, especially

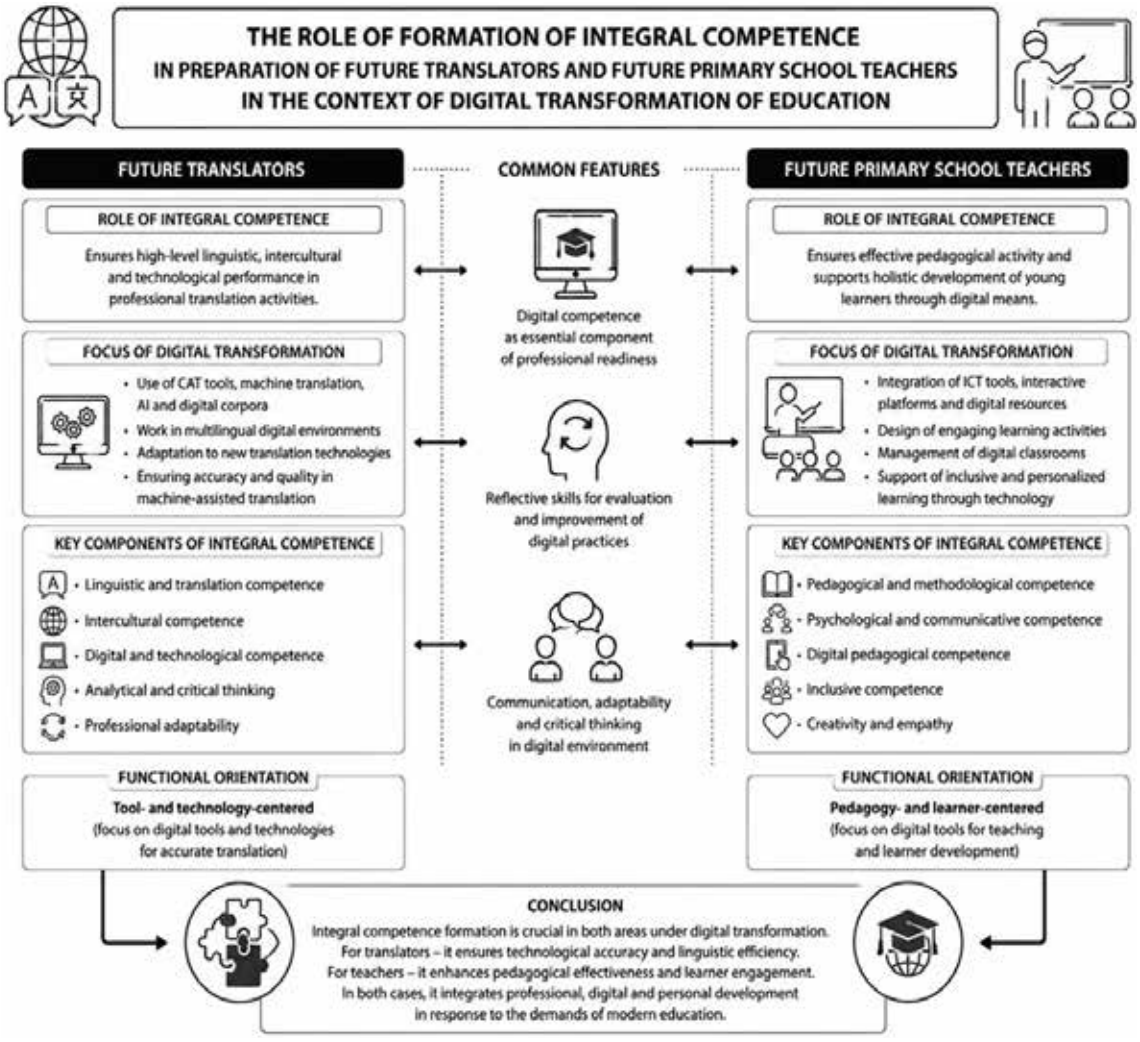

Fig. 1. Role of integral competence formation in future translators and primary school teachers in the context of digital transformation of education

in the training of future translators and primary school teachers.

In the preparation of future translators, integral competence is primarily oriented toward ensuring high-level linguistic, intercultural, and technological performance in professional translation activities. Digital transformation in this field is closely associated with the use of Computer-Assisted Translation (CAT) tools, machine translation systems, artificial intelligence, and digital corpora. Therefore, integral competence for translators is strongly technology-driven, as it requires not only language proficiency but also advanced digital skills for working in complex multilingual environments. The translator must be able to adapt quickly to new digital tools, ensure accuracy in machine-assisted translation, and critically evaluate automated outputs. Thus, digital transformation significantly enhances the technical and analytical dimensions of integral competence in translation education.

In contrast, in the preparation of future primary school teachers, integral competence has a more pedagogical and socio-educational orientation. Digital transformation in this field focuses on the integration of ICT tools, interactive platforms, digital learning environments, and blended learning technologies into classroom practice. Teachers are expected to use digital tools not only for instructional purposes but also for supporting pupils' cognitive, emotional, and social development. Consequently, integral competence in teacher education emphasizes digital pedagogy rather than technical specialization. It includes the ability to design engaging learning activities, manage digital classrooms, and ensure inclusive and personalized learning through technology.

Despite these differences, both professional domains share several common features in the formation of integral competence under digital transformation. First, in both cases, digital competence becomes an essential component of professional readiness. Second, both translators and teachers must develop reflective skills to evaluate and improve their digital practices. Third, soft skills such as communication, adaptability, and critical thinking remain crucial in both professions.

However, a key difference lies in the functional orientation of digital competence: for translators, it is primarily tool- and technology-centered, while for primary school teachers, it is pedagogy- and learner-centered. Translators interact with digital systems to produce accurate and contextually appropriate texts, whereas teachers use digital tools to facilitate learning processes and support pupil development.

Conclusions. In conclusion, the formation of integral competence in both future translators and primary school teachers is significantly influenced by digital transformation, but its role is profession-specific. In translation education, it ensures technological accuracy and linguistic efficiency, while in teacher education, it enhances pedagogical effectiveness and learner engagement. Nevertheless, in both cases, integral competence serves as a holistic framework that integrates professional, digital, and personal development in response to the demands of the modern digital educational environment.

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