

**НАЦІОНАЛЬНА АКАДЕМІЯ ПЕДАГОГІЧНИХ НАУК УКРАЇНИ  
ІНСТИТУТ ПЕДАГОГІЧНОЇ ОСВІТИ І ОСВІТИ ДОРΟΣЛИХ  
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**ХМЕЛЬНИЦЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ  
ЦЕНТР ПОРІВНЯЛЬНОЇ ПРОФЕСІЙНОЇ ПЕДАГОГІКИ**



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**ПОРІВНЯЛЬНА  
ПРОФЕСІЙНА  
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## ІНФОРМАЦІЙНІ ПОВІДОМЛЕННЯ

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#### TEACHERS' PROFESSIONAL IDENTITY FOR INCLUSIVE EDUCATION: AUSTRALIAN AND UKRAINIAN APPROACHES

##### ABSTRACT

*The paper is devoted to analysing teachers' professional standards in Australia and Ukraine to reveal the essence and role of inclusive competence as a significant component of quality teacher professional identity. This study aims to examine and compare current policies and practices in both countries to explain why social justice is such a critical element in preparing qualified teachers and is crucial for enhancing quality teaching. According to the current research, quality teaching for inclusive education in Australia, as in Ukraine, has long been a hotly debated national issue – a subject of concern for politicians, lawmakers, the media, and society. A comparative analysis allows us to compare the Ukrainian and Australian contexts in inclusive education by considering professional teacher standards and policy documents that have impacted quality education. An analysis of Australia's theoretical and practical achievements in defining the professional competencies and personal characteristics of a quality teacher capable of successful work in an inclusive school setting allowed us to map out favourable ways to enhance teacher training and promote inclusive education in Ukraine. The research results may have broad applicability in improving quality teaching in Ukraine as it reaches global education.*

**Keywords:** *teacher professional identity, inclusive education, diverse educational environment, professional teacher standards, teacher inclusive competence, Australia, Ukraine.*

##### АНОТАЦІЯ

*Стаття присвячена аналізу професійних стандартів вчителів в Австралії та Україні з метою розкриття сутності та ролі інклюзивної компетентності як важливої складової якісної професійної ідентичності вчителя. Це дослідження має на меті вивчити та порівняти сучасну політику та практику в обох країнах, щоб пояснити, чому соціальна справедливість є таким важливим елементом у підготовці кваліфікованих учителів і має вирішальне значення для підвищення якості навчання. Згідно з дослідженням, якісне навчання для інклюзивної освіти в Австралії, як і в Україні, вже давно є гостро актуальним національним питанням – предметом занепокоєння політиків, законодавців, ЗМІ та суспільства. Порівняльний аналіз дозволяє співставити український і австралійський контексти розвитку інклюзивної*



*освіти, розглянувши професійні стандарти вчителів та політичні документи, які вплинули на її якість. Аналіз теоретичних і практичних досягнень Австралії у визначенні професійних компетентностей та особистісних характеристик вчителів, здатних успішно працювати в умовах інклюзивної школи, дозволив авторам окреслити сприятливі шляхи підвищення рівня підготовки вчителів та популяризації інклюзивної освіти в Україні. Результати дослідження можуть мати широке застосування для покращення якості шкільної та педагогічної освіти в Україні.*

**Ключові слова:** професійна ідентичність вчителя, інклюзивна освіта, різноманітне освітнє середовище, професійні стандарти вчителя, інклюзивна компетентність вчителя, Австралія, Україна.

## INTRODUCTION

Quality education has long been seen as a strategy for attaining socio-cultural harmony and economic growth by the world community. At the beginning of the twenty-first century, the significant difficulties of educational advancement were efficiency, accessibility, and quality. No country in the world is entirely satisfied with the quality of its education system today. Everyone is looking for new ideas that will provide results.

Continuing efforts to define and promote excellence in teaching in Australia and Ukraine are being made by establishing national frameworks for professional teaching standards, which have considerable advantages in terms of quality assurance. Ensuring the quality of school and pedagogical training is especially important in today's diverse educational environment, which is marked by a wide range of ethnic, economic, educational, gender, psycho-physical, and the various capabilities of learners in the teaching practice. The building of inclusion-based education systems is intended to harmonize such a learning environment and ensure all participants' achievement.

The phrases "difference" and "diversity" are commonly used in current scientific discourse to refer to pupils who are not the same as those defined in the literature as mainstream (Boethel, 2003). However, a specific class or school population does not always imply a diverse collection of pupils in education. Legislation prohibiting discrimination based on race or ethnic origin, religion, age, or sexual orientation has considerably impacted educational policy combatting prejudice in Europe. As a result, teachers' roles in the control of discrimination are becoming increasingly important. With teachers' assistance, students' engagement from diverse backgrounds in school can help them become active participants and explore the environment based on their interests and requirements.

The principal value of a person and maintaining equal rights are the world's developed countries' goals for social growth. Yet, while many nations appear to be devoted to inclusive education in their discourse and legislation and regulations, practice frequently falls short. The reasons for the policy/practice gap in inclusive education are numerous and include societal values and principles; economic factors; a lack of steps to ensure policy compliance; the distribution of responsibility for education; socially moderate traditions among teachers; parental resistance; an inadequate training among teachers; tight curriculum design and examination systems; weak democratic institutions; insufficient educational infrastructures, especially in rural and remote areas. It implies classroom management, opposition from the inclusive education sector (exceptional schools), and a top-down integration of inclusive education without sufficient training of communities and schools.



### **THE AIM OF THE STUDY**

In light of both nations' continuously changing educational policies, this article examines modern interpretations of "inclusive education" in Ukraine and Australia. The initiatives are defined by their emphasis on increasing kids' academic performance and closing the achievement gap between typical "high achievers" and children who have received less benefit from public education. The demand for educational performance equality is redefining educational equality in both countries. The paper investigates the similarities and differences between Ukraine and Australia regarding how inclusive education policy and practice are evolving within the shifting concept of equity. In particular, with a focus on how policies are curbing the uncertainties about the idea of "inclusive education" and how the requirements of inclusive settings influence teacher professional identity. Both nations' educational policies for students with disabilities are powerful affirmations of educational equality and individual rights. Both countries have profound cultural norms that encourage employee efficiency, competition, social awareness.

### **THEORETICAL FRAMEWORK AND RESEARCH METHODS**

Teachers of the 21st century face challenges in their classrooms, not the least of which is meeting the varied learning needs of all their students, including those with typical, outstanding, and different exceptionalities. In addition, students with special needs face a range of learning difficulties, requiring teaching staff with advanced experience and understanding of the issues associated with inclusive education. Educational policymakers believe that through redeveloping and reforming the school system, current teaching practices will radically alter (Ball, Maguire, Braun & Hoskins, 2011). As a result, they tend to disregard the reality that policy enactment is dependent mainly on teachers' sense of ownership over the policy and the many interpretations they attach to it based on their beliefs, expertise, and experiences (Alfrey, O'Connor & Jeanes, 2017). In this study, we suggest that for the successful implementation of inclusive agendas, policy and research should recognize that teachers' professional identities impact. Their actions and how they understand educational policies, create images of their environment, and then conceive and evaluate artificially imposed policy plans based on these images. Teachers' professional identities are typically concerned with how teachers perceive themselves based on their judgments of their ongoing engagement with their setting. This interaction, it is believed, expresses itself in teachers' job satisfaction, professional commitment, self-efficacy, and change in motivation level. These categories are frequently identified as relevant to teacher behaviour in the literature, where it reflects a personal viewpoint on how instructors see themselves as professionals in their work (Watt and Richardson, 2008).

In this paper, "identity" is defined as how teachers view themselves based on the significance, they assign to their ongoing engagement with their working environment at a given time. The authors conducted a detailed examination of related literature on professional identity to examine this idea. According to this comprehensive literature study, various empirical research studies identity and focused on a specific area linked to professional identity. Specifically, numerous studies have looked at teacher identity related to their commitment, autonomy, motivation, attitudes, satisfaction, sensitivity, and self-efficacy (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2011). Furthermore, while many studies have looked at teachers' identities connected to their job, little study has examined teachers' identities concerning current educational policy. We consider that the professional identity is expressed through a set of professional competencies and is laid





down at the level of state policy and public demand in the professional standards of a teacher.

The study's findings are based on integrated literature evaluations on particular subjects, which R. Torracco created as a research approach. It enables the integrated review, study, critical analysis, and synthesis of representative literature in order to develop new conceptual ideas and exciting areas of research challenge (Torraco, 2005). A comparative study allows us to evaluate the inclusive education environments in Ukraine and Australia by considering yearly state assessments and policy directives that influence quality teacher education. Examining Australia's theoretical and practical achievements in defining a quality teacher's professional competencies and personal characteristics capable of working successfully in an inclusive school setting enabled us to map out good ways to improve teacher education and promote inclusive education in Ukraine.

## RESULTS

### *A pedagogical discourse of inclusive education in Ukraine*

Ukraine is stepping up its efforts to reform national pedagogical education, intending to create an environment for the growth of each child's aptitude, including the tools of inclusive education in the introduction of the New Ukrainian School (MON, 2016). The importance of inclusive education in Ukraine stems mainly from the fact that the number of children who require physical and mental development correction is continuously increasing. According to current statistics, 19345 children with special educational needs will be enrolled in inclusive courses in January 2020. This figure is seven times greater than it was five years ago. In Ukraine, 13,782 inclusive classrooms were formed at the beginning of 2020. Inclusive education was implemented at 35 % of public secondary school institutions for the 2019/2020 academic year. Apart from this, the issue of educating highly trained teachers to engage with inclusive education in Ukraine is acquiring national and governmental relevance. However, the reality of implementing inclusive education in secondary schools is exceptionally complex, owing to general education teachers' lack of training (didactic, psychological, and personal) for inclusive education and teaching of students with special educational needs (MON, 2020).

The current situation in Ukraine concerning teachers who work in an inclusive educational environment does not satisfy social demands. The quality of inclusive education in secondary schools is inadequate, schools lack specialists (psychologists, speech pathologists, speech therapists), and their rates are high. The problems associated with overworked school psychologists are a methodological and psychological lack of preparation of teachers, both in primary and general secondary school. Secondary school teachers' motivation to implement inclusive education is low due to inadequate salaries and workload.

On the other hand, Ukraine's recognition of international standards for ensuring access to high-quality education for all children serves as an effective mechanism for intensive development of domestic legislation to ensure the development of inclusion. The outlined in the UN Conventions on the Rights of the Child (1989) and "On the Rights of Persons with Disabilities" (UN, 2006), as well as the final document of the UN General Assembly's Special Session for Children "A World Fit for Children" (UN, 2002). These include the arrangements governed by Ukraine's legislation "On Complete General Secondary Education" (MON, 2019), "Law on Education" (MON, 2017), "On Higher Education" (MON, 2014); in the instructional documents of the Ministry of Education and Science of Ukraine, in particular, "Concept of Inclusive Education Development" (MON,



2010). The study of these documents concluded that they intended to improve the legislative framework for inclusive education in Ukraine. They highlight the implementation of the constitutional rights of people with special educational needs; strengthening all social institutions' actions to attract public attention to the challenges of inclusive education; and enhancing teachers' professional and pedagogical training by providing social justice and equality, providing a suitable environment for getting pedagogical education.

Quality teacher training for inclusive education, in our opinion, should take into account two significant factors: requirements for the educational process organization of professional training, also known as "input" indicators, and requirements for teacher professional competence, also known as «output» indicators.

The following indicators were considered in Ukraine's contemporary continuing pedagogical education system. The first is the state higher education standards in the field 01 "Education / Pedagogy", and the requirements for accreditation of higher education educational programs wherein teacher training is performed. The second includes the professional standards for the following areas of work: "Primary school teacher of general secondary education", "Teacher of general secondary education", and "Primary education teacher (with a junior specialized certificate)" (Profesiinyi, 2020).

Considering that higher education training standards are based on professional standards, which reflect vital stakeholders' demand for specialist qualifications for practical work in society, we regard commitment to working in an inclusive education to be specified in this professional standard as specific and professional capabilities. As a result, the document declares that a teacher's professional activity aims to arrange students' training and education throughout their primary, secondary education. Furthermore, students are acquiring essential skills and perspectives based on universal and national values and cognitive, creative, and physical abilities necessary for effective identity and future education. Therefore, particular focus is placed on encouraging the development of students' talents, developing healthier lifestyle skills, and building respect for public morals and social ideals such as truth, fairness, humanism, and tolerance. Simultaneously, the emphasis is on preserving the integrity of the teaching, education, and growth processes due to educators' general and professional skills (Profesiinyi, 2020).

For our research, it is critical to examine the professional competencies that enable the quality of job requirements in a diverse educational setting. For example, the professional standard for «Primary school teacher of general secondary education», "Teacher of general secondary education", and «Primary education teacher (with a junior specialized certificate)" includes five primary job functions, namely: educating students; partnering contact with children, parents, and other teachers; involvement in the construction of a safe, healthy, inclusive educational environment; administration of the educational process; and ongoing professional growth.

The second job function distinguishes inclusive competence, which incorporates the threefold requirement for teachers' professional identity. Specifically, the ability to perform in an inclusive educational environment, to provide pedagogical support to people with special educational needs, and the ability to provide a comfortable climate in the academic environment for each student based on their individual needs, attributes, skill sets, and interests, to collaborate with children, parents, and other teachers. Teachers are generally required to understand their own emotions, the emotions of students, and the emotions of others. Teachers should be able to respond and consider the ability to cooperate



on a partnership and teamwork; to engage in the management of a safe, healthy, inclusive educational environment. Teachers should have the ability to consider the needs and appreciate the individual characteristics of each student, care for his health and safety, participate in the organization of a safe, inclusive educational environment, and enhance teaching methods (Profesiinyi, 2020).

An evaluation of the State Standards for Primary and Elementary Schools revealed intended for all pupils. The only thing that should be established for each student is a particular educational path, its route that corresponds to its talents, needs, and capacities. As a result, teachers must understand and be able to use the following concepts in their everyday work:

- inclusive education tools (inclusive culture, inclusive policy, inclusive practice);
- universal design principles and techniques in education and equality of opportunity
- appropriate forms and methods of assistance for persons with special educational needs; forms of adjustments/changes in the educational process as a result of pupils' specific academic requirements;
- individual and differentiated learning tools;
- strategies to identify students' talents, interests, and real-world learning prospects (Profesiinyi, 2020).

As previously stated, professional standards are one of the elements in the reform of pedagogical education, as claimed in the Ministry of Education and Science of Ukraine's Concept for the Development of Pedagogical Education (2018). According to the same legislation, higher education standards are developed based on professional standards. As a result, higher pedagogical education institutions should modify existing teacher training programs and establish programs for their professional growth in the framework of ongoing professional development.

The Regulations on the Accreditation of Educational Programs (2019), which provide training for higher education, commit to the first essential steps in monitoring the consideration of individual requirements in teacher training (Pro zatverdzhennia, 2019). Ukraine's National Agency for Quality Assurance in Higher Education developed this document. It establishes compliance with the quality of the educational program and educational activities under this program with specific criteria applied while taking into account the Standards and Recommendations on Quality Assurance in the European Higher Education Area (2015). According to Criterion 7, "Educational environment and material resources", the financial and material resources of institution of higher education ensure the attainment of the educational program's goals and program learning outcomes. At the same time, the academic environment is safe for the lives and health of higher education students participating in the educational program, and it allows them to satisfy their needs and interests. Furthermore, the intention of a higher education institution to create sufficient conditions for acknowledging the right to education for persons with special educational needs who are enrolled in the educational program is emphasized (Standards, 2015).

In the analysed document we can observe the shift in the priorities of Ukraine's state policy in higher pedagogical and inclusive education, the democratization of educational policy, and citizens' awareness of their civil rights attest to the relevance and prospects of research to ensure quality teacher training study. In addition, the professional standards of pedagogical staff outline the requirements for their professional qualification.



### ***Australian policy and practice of teaching in an inclusive environment***

In Australia, comprehensive schooling is an educational initiative rather than a policy, and it has been implemented in various ways by both state and territory education authorities.

Recent data show that in 2018, 7.7 percent of children under the age of 15 were reported to have a handicap, up from 6.9 percent in 2012 (ABS, 2019). After 45 years old, the proportion of persons living with a disability rises fast, despite a reduction in the prevalence of autism and other particular forms of impairment (ABS, 2019). From childhood until middle age, the incidence of persons with disabilities fluctuates. Around one in twenty-two (4.5 %) of children in Australia have a cognitive disability; other frequent forms of disability affecting school children include sensory and speech difficulties (3.1 %), psychosocial (2.7 %), and physical (1.8 %) (ABS, 2019). Statistics from several sources show that students with disabilities (and their families) experience exclusion and, in some cases, victimization in Australian schools. Concerns about mental health, suicide, bullying, and emotional abuse were more significant among these young people than those who did not identify as having a disability. This study also demonstrates that young people with disabilities are knowledgeable about their own lives and needs. When questioned about their postsecondary intentions, young people with disabilities wish to go to university (48 %), obtain a job (40 %), attend TAFE or college (20%), or acquire an apprenticeship (15 %) (Hall et al., 2020).

The Disability Discrimination Act (1992) and its state branches provide good enforcement laws, making it unlawful to discriminate against people with disabilities. The DDA refers to impairments that individuals face, have faced in the past, or may face in the future. After nearly ten years of discussion, the Act was extended in 2005 to adopt Disability Standards for Education, which give more information about educational providers' objectives. The Act extends to all forms of schooling, from nursery to university (but not child-care providers). It refers to public sector schools, schools licensed by private sector registration institutions, post-compulsory education and training providers, and higher education providers (DDA, 1992). The aspects specified by the guidelines are:

- enrolment and admission – a person with a disability must seek admission and receive advice and support as a person without a disability and discrimination;
- participation – students with a disability must be able to take part in courses or programs without discrimination;
- curriculum development, delivery, and accreditation – all students must participate appropriately in gaining learning experiences;
- provision of student support services – a student with a disability must use specialized services if necessary;
- harassment and victimization procedures must be developed to prevent harassment or victimization of students with a disability.

The Disability Standards for Education (2005) comprise seven criteria, ranging from «complete or partial loss of a physical component» to “a condition, sickness, or disease that impairs the person’s mental processes, sense of reality, emotions, or judgment, or that results in disordered behavior” (DEEWR, 2005, p. 9). Teachers, schools, and support systems all share responsibilities for educating a student with a disability. Teachers participate in the precise, day-to-day cycle of planning, teaching, and assessing their students’ progress as part of executing agreed-upon plans and modifications. Because children arrive in the classroom with a wide range of learning requirements, teachers



require various techniques to address these needs. The methods listed below can be intended to enable in delivery of education for students with disabilities.

It was agreed that the Australian governments, in collaboration with all school sectors under the Melbourne Declaration on Educational Goals for Young Australians (2008), must provide all students with access to excellent education opportunities that allow each young Australian to accomplish his or her highest capability, without regard to gender, language, sexual orientation, pregnancy, culture, ethnicity, religion, health, or disability (MCEETYA, 2008). The Melbourne Declaration demonstrates inclusive ideas and values by employing terms such as equality, diversity, and respect sprinkled throughout the declaration and related to words or phrases such as excellence, every/all students, full potential, and high standards. Indeed, in the preamble, education is entrusted with the fundamental function of “creating a democratic, equitable, and fair society” (p. 4) related to the growth of prosperity, cohesion, and cultural variety, with Indigenous culture being integral to these activities. The connection between equality, type, and wealth is of particular relevance here and throughout the text. We can observe the overlap of democratic, humanistic, and economic rationalisms, all of which are interdependent. To be democratic and wealthy, Australians must accept their society’s variety, with education serving as a medium for fostering these ideals. However, there are improvements to be made in the Australian education system if equity and excellence are to be achieved. These are identified as enhancing outcomes for Indigenous Australians and those from lower social classes, particularly regarding Year 12 completions.

The educational goals of the Melbourne Declaration and the resulting emphasis on educator professional learning have resulted in the development of several official national documents to embrace and support the professional education of school leaders and teachers. The Australian Charter for the Professional Learning of Teachers and School Leaders (Australian Institute for Teaching & School Leadership AITSL, 2012), which sets the tone for professional learning and teacher quality in Australia, is central to these documents. It was created following extensive international and national consultations. The charter “describes the significance and features of high-quality professional development in enhancing the practice of teachers and school leaders” (AITSL, 2012). The charter emphasizes three critical aspects of professional learning: the importance of professional education in improving student outcomes; the expectation that teachers and school leaders actively participate in professional learning; and characteristics of a high-quality professional learning culture and effective professional learning. The Australian Teacher Performance and Development Framework works with this charter. Among these are a focus on student outcomes; a clear understanding of effective teaching; leadership; and coherence and flexibility (AITSL, 2012).

In 2009, Australia became one of the 92 nations to sign the Optional Protocol, which compels the Committee on the Rights of Persons with Disabilities to accept communication from individuals who believe they have been the victim of a violation of the Convention (UNGA, 2006).

### ***Recommendation 3***

Australian education systems need to increase efforts to provide appropriately resourced inclusive education to all students with disabilities. Students with learning needs may constitute around 30 % of the school-age population.



#### ***Recommendation 4***

Teacher development for inclusive education needs to position teaching as a clinical-practice profession, in line with many allied health professions. In addition, it should prepare teacher candidates for interventionist and inclusive pedagogy.

#### ***Recommendation 5***

The concept of universal design, rather than reasonable accommodations, should be promoted in future UN instruments and other documents.

In Australia, there have been several policy statements on educational inclusion at a national level. For example, the *Adelaide Declaration on National Goals for Schooling in the Twenty-First Century* (2006) reached the following conclusion:

#### ***Goal 3.1:***

School education should be socially fair. As a result, students' educational results are free of the impacts of harmful forms of discrimination based on gender, language, culture and ethnicity, religion, or disability, and variations based on students' socioeconomic background or geographic location.

Each area specifies the rights of students with disabilities in education and training, educational providers' legal obligations or responsibilities, and feasible ways to meet the standards criteria. Educational providers are obligated to make «fair adjustments» to meet the requirements of students with disabilities. People with disabilities perceive their full potential via inclusion in an inclusive, high-quality education system that is attentive to their needs, according to the Australian Council of Governments (COAG) National Disability Strategy for Australia 2010–2020. To improve the ability of all education providers to provide inclusive, high-quality educational programs for persons of all abilities from early infancy through maturity, reduce obstacles to and simplify access for persons with disabilities to a high-quality inclusive education system that includes early childhood education, child care, school, and postsecondary education.

The research shows that, the National Curriculum Plan in Australia has developed a different framework for supporting inclusive practice. According to Berlach and Chambers, the Curriculum Framing Papers for English had nine inclusive descriptors, Mathematics had eight, History had six, and Science had two. The framework papers served as the foundation for developing the Curriculum (Berlach & Chambers, 2011). The Australian Curriculum, Assessment, and Reporting Authority (ACARA) have expressed a strong commitment to inclusive practice. The document recently stated its strong commitment to inclusive approach: “ACARA is dedicated to producing a high-quality curriculum for all Australian students, one that fosters consistency and equity in education” (ACARA, 2015). All children are eligible for comprehensive, relevant, and challenging learning programs chosen from a rigorous curriculum that suits their learning requirements. Notwithstanding these issues, it is undeniable that significant progress has been made in shifting students with disabilities from a situation in which they are either not educated or receive separate education to one in which they are far more likely to be educated in a regular school and receive the necessary support to maximize educational and social outcomes.

Teachers adopt the Australian Curriculum to create teaching and learning programs based on students' interests, strengths, objectives, and learning requirements and address all students' cognitive, emotional, physical, social, and aesthetic needs. All children have the right to rigorous, relevant, and engaging learning programs chosen from a demanding curriculum that meets their specific learning requirements. The principles that



influence the Australian Curriculum's development set expectations that the Australian Curriculum is acceptable for all pupils. Among these propositions are:

- that each student can learn and that each student's needs are crucial;
- that every student is entitled to learning, understanding, have skills that pave the way for effective and lifelong learning, as well as participating in the Australian community;
- that high expectations be established for each student, with teachers taking into consideration each student's present level of learning as well as the varied pace of study;
- that students' needs and interests will differ;
- Schools and teachers will develop curriculum-based activities that address such needs and interests (ACARA, 2015).

We can identify that Professional Standards for Teachers were introduced in Australia, and all states and territories have recognized them. All instructors are expected to be able to deliver inclusive education programs under these standards. The Focus area of Standard 1.6 is strategies to support full participation of students with disabilities, in particular, to demonstrate broad knowledge and understanding of legislative requirements and teaching strategies that support participation and learning of students with disabilities. For example, proficient teachers in Australia are now required to be able to:

- develop teaching activities that incorporate differentiated strategies to meet the specific learning needs of students across the full range of abilities;
- design and implement teaching activities that support the participation and learning of students with disabilities and address relevant policy and legislative requirements;
- establish and implement inclusive and positive interactions to engage and support all students in classroom activities.

Analysis of the document showed its development orientation, because the requirements for inclusive teacher competence increase with each qualification level. Thus, highly accomplished teachers must be able to: collaborate with colleagues to get access to expert information, as well as applicable policy and law, and create instructional programs that promote the involvement and learning of students with disabilities. Initiate and direct the school review. A lead teacher should be able to encourage the engagement and full participation of students with disabilities and ensure compliance with legislation and system regulations. Professional Standard 4 focuses on establishing and maintaining supportive and secure learning environments by identifying ways to encourage inclusive student involvement and engagement in classroom activities (AITSL, 2012). Policymakers, teachers, school leaders, and school communities can help all students succeed by paying much attention to each student's learning progress and making needed adjustments. Creating an inclusive culture is a critical step in eliminating discrimination against students with disabilities in Australian schools.

Examining, reconsidering, and summarizing the achievements of leading countries that Australia relates to and the implementation of inclusive education against the background of the social human rights movement allows us to adjust its development in Ukraine, prevent mistakes, predict results, and streamline the process of effectively implementing principles, the direction of promoting an inclusive society.

The core values of equity, diversity, and respect were identified throughout the documents from both countries: equity in that «all» students be treated equally; diversity in that teachers must be aware of their students' backgrounds and individual learning needs;



and respect in that teachers acknowledge, value, and allow for these individual differences. However, while the Australian documents focused on inclusion in a societal sense, the Ukrainian documents concentrated more on the inclusion of the individual student. Although neither of these would be considered bad traits, they may imply that the two nations may be in different stages of their path toward inclusive education. International engagement between scholars, teacher training institutes, and Ministries of Education demonstrates the importance of exchanging ideas and advancing inclusive policy and practice. Thus, analysing and comparing policies and procedures across nations is essential. Despite legislation and corresponding documents in Australia and Ukraine expressing support for inclusive education, both governments have significant problems creating an appropriate implementation of teaching standards that support this idea. In both countries, identified challenges include insufficient professional development programs to help inclusive policy and practice leadership, gaps in pre-service and in-service training that support inclusive pedagogical practice, regional differences in teacher quality and quantity, and teacher training courses that overemphasize theory with insufficient practical application and gaps in policy and practice. The authors of this paper suggest the establishment and strengthening of international collaborations work towards developing inclusive practices in Ukraine and Australia, and other areas of the world. The power of these collaborations resides in the joint questioning of the underlying assumptions that underlie inclusive education policy and practice. To implement inclusive practices and pedagogies for «all» students, educators throughout the world must continue to discuss, collaborate, and communicate. This paper was attributed to the synergy of a professional development program shared by academics from Ukraine and Australia: a step forward in the movement toward global inclusive education.

#### **CONCLUSIONS**

An analysis of the theoretical and practical achievements of Australia in defining the professional competencies and personal characteristics of a quality teacher capable of successful work in an inclusive school setting allowed us to map out favourable ways to enhance teacher training and promote inclusive education in Ukraine. The research results may have broad applicability in improving quality teaching in Ukraine as it reaches the global education environment standard competencies professional standard. Professional standards for teachers are a relatively recent topic in both Australia and Ukraine, with the potential to impact teachers' thinking on inclusion and practice. Using critical discourse analysis, we examined the professional standards of teaching and important policy papers underpinning the professional standards in Australia and Ukraine and found evidence of an emerging inclusive education discourse backed by inclusive ideas and values. The pedagogical discourses about inclusive practice reflect an expectation of Curriculum for all and respect for a diversity of learners. The constraints of adopting an inclusive approach in classrooms in Australia and Ukraine persist, and we observe the deficit-based paradigm of special education progressing in teacher attitudes and practice. Nevertheless, it is encouraging that both nations focus on inclusion in supporting materials and professional standards for teaching that serve as a foundation for professional learning. A comparison of professional standards enabled us to compare the Ukrainian and Australian contexts in inclusive education by considering teacher competencies based on teacher professional identity, which are prerequisites for a contemporary teacher. Who prioritizes their students' education and is held accountable for upholding the highest possible standards of performance and behaviour? Teachers behave with honesty and integrity; have excellent





subject knowledge; maintain their knowledge and abilities as teachers up to date and are self-critical; establish healthy professional relationships, and collaborate with parents in the best interests of their students.

Further research should aim to find out the essential peculiarities of the problem in question in the EU countries.

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## **A BRIEF OVERVIEW OF THE CHINESE EDUCATION SYSTEM**

### **ABSTRACT**

*The article offers a brief overview of the structure and main areas of development in the Chinese education system. The transition period in China's education system can be characterized by the following slogan: "On the way to modernization, world and future". Indeed, systemic reforms pave the way in which the state's policy is playing a guiding role and schools and universities a leading role in the gradual search for special Chinese ways of education development. The focus of the article is mainly on the types of education in China and the conditions for obtaining education (preschool, primary, secondary, upper secondary and postgraduate education). Besides, it is crucial to consider the structure of vocational education, which is implemented in the following types: primary, secondary, higher vocational education and vocational training. Moreover, the article describes the features and forms of education for children with special needs as an important part of general education. Emphasis is placed on the level and conditions of higher and postgraduate education in China (bachelor's, master's, doctoral degrees). It must be noted that the article highlights several specialized projects and comprehensive plans in the field of education aimed at reforming and improving the status of education, including "Project No 211" and "Project No 985". It also outlines the main milestones of "The Implementation Plan" and "The Plan until the Year of 2035", as well as the measures taken to realize many other goals despite the COVID-19 pandemic. Particular attention is paid to the support provided by the Chinese government to the education system during the COVID-19 pandemic. It has affected all its levels to not allow the educational process to become radically different and manage to strengthen in the global crisis. Finally, the article addresses several controversial issues in China's education sector, including reforming the system of education quality assessment and reformatting private education.*

**Keywords:** education, China, preschool and primary education, secondary education, education for children with special needs, higher education, professional education, adult education, educational projects, "gaokao".

### **АНОТАЦІЯ**

*Стаття пропонує огляд структури та основних напрямів розвитку системи освіти КНР. З'ясовано, що перехідний період перетворень в освітній галузі Китаю здійснюється під гаслом «Повернутися обличчям у бік модернізації, до зовнішнього*



*світу та майбутнього», де системні реформи прокладають шлях завдяки виваженому політичному курсу держави щодо пошуку особливого «китайського шляху» розвитку освіти. Проаналізовано види освіти в КНР та умови їх здобуття, зокрема: дошкільна, початкова, середня, вища освіта. Розглянуто структуру професійної освіти (початкова, середня, вища професійна освіта і професійне навчання). Описано особливості та форми навчання дітей з особливими потребами, як важливої складової базової освіти. Зосереджено увагу на умовах організації вищої та післядипломної освіти в Китаї (бакалавр, магістр, доктор). Схарактеризовано спеціалізовані проекти та комплексні плани в освітній галузі, спрямовані на реформування та підвищення статусу освіти у КНР, зокрема «Проект 211» та «Проект 985». Окреслено основні напрями Плану модернізації освіти до 2035 року, робота над багатьма цілями та завданнями яких розпочалася у 2019 та на початку 2020 року, незважаючи на пандемію COVID-19. Окрему увагу приділено заходам, які запроваджено китайським урядом для підтримки системи освіти під час пандемії COVID-19, зокрема удосконаленню навчального процесу та консолідації зусиль всіх зацікавлених сторін в умовах глобальної кризи. Окреслено суперечливі питання та проблеми, які мають місце в освітній галузі КНР, зокрема реформування системи забезпечення якості освіти та переформатування шляхів здобуття освіти в приватних закладах освіти.*

**Ключові слова:** *освіта, КНР, дошкільна та початкова освіта, середня освіта, освіта дітей з особливими потребами, вища освіта, професійна освіта, освіта дорослих, освітні проекти, «гаокао».*

## INTRODUCTION

Throughout the written history of mankind, China has always been on the world stage. At the same time, its role and significance in different periods of history were completely different. The Chinese, as people, and China, as a country, is a nation with the oldest culture, as well as an integral part of the world community. During the last two decades of the 20<sup>th</sup> century, the world has witnessed not only an impressive strengthening of China's position in politics and economics but also modernization in all domains of human life. Nowadays, almost no one doubts the primacy of China in the international arena.

China's teacher education has come a long and glorious way. In all historical periods, it has been closely linked with the socio-economic structure of the country, the values of society, laws and legislation in the field of education, historical and pedagogical development in the world. Starting with the pedagogical ideas of Confucius, the system of teacher training gradually acquired the features that are still groundbreaking today.

The analysis of China's education system has been the subject of several studies. As a result, a vast experience has been gained: relevant information on the content, structure and functions of teacher education; the features of the multilevel education system; the organization of the educational process and postgraduate education; the main trends in higher education.

## THE AIM OF THE STUDY

China is one of the countries, with the oldest traditions in the education field. Therefore, the article aims to analyze the features of China's educational policy, structure,



content and trends throughout its history and explore the problems and prospects of its development.

#### **THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The authors of the article have processed the accumulated data via the methods of analysis and synthesis, hermeneutic interpretation and searching, deduction and induction, generalization, systematization, interpretation, comparative analysis. It has allowed them to present their findings within the scope of this article. Moreover, they have conducted a theoretical analysis of the data contained in relevant scientific sources.

Nowadays, researchers pay more attention to the specifics of the Chinese education system, which makes this topic increasingly important.

A detailed analysis of scientific literature shows that several studies have been devoted to the problem of China's education. The Chinese educator Huang Yan Pei (1985) was the first to propose the theory of the education system and put it into practice in 1917. The gained experience in reforming the education sphere for the last 30 years has led to diverse results on the development of pedagogical doctrine and education in China. The scientific works of the following researchers are quite influential: Tao Xinji (1991), Yuan Zhenguo (1998), Zhao Yun (2017), Chen Zhaoming (2010), Zhang Xulan (2008), Yunxin Zhu (2021), Su Xiaohuan (2002), Huang Zhongjing (2020).

Chen Zhaoming (2010) notes that "China, as one of the fastest-growing countries in the world, is actively reforming its education system". Determining the direction of reforms, the Chinese government assume that education should be considered as a part of the development of the nation. They have also presented several slogans, such as "science and education lead the nation to prosperity", "human potential will ensure the power of the country", "to the world and the future". Besides, "reforms in China are a good way to transform the education system. Being rather consistent, they reflect the combination of development and stability, current trends and theories with their national tradition" (Zhaoming, 2010).

#### **RESULTS**

To pursue the course of science and education in China, the Chinese government did not solely follow bare political orders but recognized the need to create constitutional and legislative guarantees. As a result of twenty years of efforts, the country established a legal structure in the field of education. In 1980 and 1986, the National People's Congress of the People's Republic of China and Standing Committee enacted the academic degree law and compulsory education law, followed by the "Teacher's Law of the People's Republic of China" (1995), "The Compulsory Education Law of the People's Republic of China" (1996), "Vocational Education Law of the People's Republic of China" (1996), "Higher Education Law of the People's Republic of China" (1998), "Law on the Standard Spoken and Written Chinese Language of the People's Republic of China" (2000), "Non-State Education Promotion Law of the People's Republic of China" (2002). The State Council of the People's Republic of China has also published "Working Regulations on the Elimination of Illiteracy", "Regulations on the Management of Preschool Institutions", "Regulations on Education for the Disabled People", "Regulations on Teacher Qualifications", "Regulations on the Establishment of Public Institutions by Public Forces", "Sino-Foreign Cooperative Universities in China".



The Ministry of Education has developed approximately 200 normative instructions, which almost completely cover all aspects of education. The regions have also elaborated about 150 regulations on local education. These laws, regulations, provisions and guidelines have provided a solid legal basis for activities in all major areas of education. These radical changes have played an important role in the course of the country's revival based on science and education.

In China, there are such types of educational institutions as regular public schools, private schools and international schools. The last two institutions are most preferred by foreigners since they provide an opportunity to gradually learn the culture and linguistic features of the country together with native speakers.

The Chinese education system includes preschool (学前班), primary school (小学), incomplete secondary education (九年义务教育), complete secondary education (普通高级中学) and higher education (高等教育). The state organizes the education system on a scientific basis. It is the State Council or education administration with appropriate authorities that determine forms of education, duration of study, enrollment, objectives of education, as well as other components of the educational system.

Preschool education is currently represented by two- or three-year education, implemented in kindergartens and preschool groups. At the same time, parents are expected to pay tuition fees for kindergartens and preschools, both in public and private schools.

General education is provided at the level of preschool, primary and secondary education. Preschool education involves studying in kindergartens or preschools. Primary education takes place in primary schools and private training centres. Secondary education is associated with general secondary schools (first and senior levels). Education for children with special needs refers to general basic education in primary and secondary special (correctional) schools.

In China, the education of children with special needs is an important part of basic education. There are two forms of education for this social group. The first one includes special schools for children with vision and hearing conditions. It must be noted that such schools were established after the proclamation of the People's Republic. The second one encompasses special classes at regular schools or in general groups, which is a more common case. For a long time, the government have been organizing special classes in regular primary and secondary schools, as well as arranging for children with special needs to attend school in the general flow. All these regulations have significantly influenced the development of special education. They also cover large rural areas, especially mountain villages and poor suburbs, where there are serious obstacles for such children to attend schools. Classes for people with special needs have already become a major form of compulsory education.

In China, they implement compulsory nine-year education (Education Law of the People's Republic of China (article 18), "The Law of Nine-Year Compulsory Education"). Nine-year education is compulsory, universal, free of charge and uniform (in terms of educational resources, teaching staff and educational levels) throughout the country). After graduating from general secondary school of the first level (receiving nine-year education), students can enter the general secondary school of higher education or obtain vocational education.



The Education Law of the People's Republic of China also provides for vocational education (技工教育) and adult education (成人教育). There are the following levels of vocational education: primary, secondary, higher vocational education and vocational training. In cities, vocational school graduates usually work as technicians, accountants, paramedics, nurses and technicians. In villages, professional technical training is closely connected with the popularization of agronomic equipment and directly serves agricultural production.

Vocational training at the primary level means vocational training at the first stage. This involves acquiring educational and non-educational qualifications within vocational schools. The system of education for educational qualifications is scheduled for three or four years. Students mainly pass the basic educational subjects of the lower secondary school, along with vocational training and technical skills during one year. This is one of the forms of promoting compulsory nine-year education. Training for non-educational qualifications prepares workers who have certain basic professional knowledge of the first stage and certain professional technical skills.

Secondary vocational training is based on compulsory nine-year education, which refers to the teaching of the secondary school stage of higher education. It aims to train employees with comprehensive professional skills on a diverse level that can be used directly on the first line of service, technology and management. Currently, vocational secondary education can be obtained within secondary vocational schools, technical colleges, vocational secondary schools and vocational secondary schools for adults. Secondary vocational schools mainly enrol low secondary school graduates (the term of study is 4 years). It must be noted that some schools accept high school graduates (the term of study is 2 years). Technical schools (the term of study is from 2 to 3 years) accept high school graduates, as well as train employed and unemployed youth. Vocational high schools of higher degree accept graduates from secondary schools of a lower level (the term of study is from 2 to 4 years).

The purpose of higher professional education is to train specialists who are specially used in technical fields and universities. This training is an integral part of higher education in China. Undoubtedly, higher education is at the forefront of China's national priorities.

The reforms in the higher education system are determined by the main world trends, according to which education becomes a source of development of society and the nation, thus ensuring a high rate of economic development. In the context of the focus on the global educational space in the Chinese higher education system, the key trend is to spread innovations while preserving national traditions and national identity.

China's higher education is represented by such educational institutions as universities and vocational colleges.

In China, students take the National College Entrance Examination, called "gaokao" (高考) to enter university. High scores can help students to enter the best educational institution and thus give them a chance to climb the social ladder.

The main levels of higher education study are as follows:

– The first level – bachelor's degree (本科) with the term of study of 4 years (medical degrees – 6 years). To apply for a bachelor's degree, applicants must have a document of 12 years of compulsory education. Students receive an associate's degree or a bachelor's degree, depending on the chosen programme. An associate's degree can be





obtained after 2–3 years of study. A bachelor's course lasts from 4 to 6 years. Medical students must study for a year more and have another year of practice;

– The second level – master's degree (硕士) with the term of study from 2 to 3 years.

At this stage, students must obtain profound knowledge of particular subjects. Before enrolling in the master's programme, students choose the field of study and the topic of the future dissertation, which should correspond to the chosen field of knowledge. During the study, Master students prepare projects and scientific publications. Each activity is evaluated by the appropriate number of points required to obtain the right to obtain a PhD;

– The third level – doctoral degree (博士) with the term of study from 2 to 4 years.

Doctoral students can have a full-time job or part-time job. Education of specialists of the first category lasts up to 3 years. As a rule, the age of the applicant should not exceed forty years. The term of study of a specialist with a doctorate is 3 years, and age restrictions are up to 45 years. The preparation of the dissertation is supervised by the curator. At the same time, the intervention of the supervisor in the work must be minimized. The main requirement for the finished dissertation is its uniqueness. Works containing more than 15% of plagiarism are not allowed. Even though doctoral studies are not free of charge, current students can count on government grants.

Education reforms in China have affected all major areas of university education: admission requirements; models of education; the content of the pedagogical process; forms and methods of teaching and learning; the features of the educational process and research.

The main priorities of the Chinese government in the field of education are the following: establishing several universities under advanced international standards; turning them into platforms for developing the most important and prioritized scientific disciplines and innovative research; providing them with additional funding. The most famous are “Project No 211” (The Ministry of Education of the People's Republic of China, 1995), aimed at creating hundreds of the best universities in the country, and “Project No 985” (The Ministry of Education of the People's Republic of China, 1998), which covers 39 universities to bring them to a world-class level and get into the first hundred in the world rankings. Other leading projects for which the government allocates special-purpose budget funds are “The Plan of Scientific and Technical Innovations in Higher Education”, “The Project to Improve the Quality of Education and Its Reform in Higher Education”, “The Innovative Project of Postgraduate Education” and some others.

An important milestone in the reforming of China's higher education system became the decision on 21<sup>st</sup> of September, 2017, to approve the number of the universities in the “世界一流大学和一流学科建设” project, translated as “The World-Class Universities and First-Class Professionals”. A total of 42 first-grade universities and 465 first-class disciplines were selected from 140 universities (Wikipedia, 2022).

In 2015, the Central Committee of the Chinese Communist Party and State Council of the People's Republic of China announced a new stage in higher education reforms. Priority was given to the plan for developing world-class universities and first-class disciplines. Initially, it was planned that the “World-Class Universities and Disciplines” project would gradually replace “Project No 211” and “Project No 985”. So far, they continue to operate simultaneously.

In 2019, the State Council of the People's Republic of China published two important plans to advance reforms and develop China's education sector based on several



previous reforms since China's opening in 1978. These documents (China's Education Modernization Plan till 2035 (2035) (Australian Government, 2020), Implementation Plan for Accelerating Education Modernisation (2018–2022) (2019)) are aimed to substantially modernize China's education system by 2035. It follows that the country intends to fulfil socialist modernization and become a centre of education.

The Comprehensive Vocational Education Reform Plan (plan till 2035) seeks to raise the status of vocational education. The country attempts to eradicate the common belief that vocational education is the “second choice” after obtaining a degree. With this plan, China intends to reform the entire vocational education system, including professional standards, assessment and evaluation mechanisms, teacher education and recruitment. The reform has been monitored by the National Vocational Education Guidance Advisory Committee (“国家职业教育指导咨询委员会”), established by the State Council.

In 2019, the coronavirus pandemic suddenly and dramatically changed the lives of people around the world and caused significant changes in the educational process, too. Many high-ranked universities have been actively developing online courses and systems. Qinghua University in China continues working only online. In a short time, they have developed 4000 courses that are widely available throughout China. The Ministry of Education has funded top universities to develop and implement online programmes in the country. Particular attention is paid to informing students and applicants about the peculiarities of the new format of education.

Creating an environment for distance education and online learning in the higher education sector was a priority during the pandemic. The main principle of public policy was to do everything possible to ensure the continuity of educational activities. This has led to initiatives in four areas: the creation of specialized platforms, teacher training, the transition to digital content and access to digital resources for both teachers and students. The main part of support in this area was the introduction of emergency technological solutions to ensure continuity of learning. The focus was mainly on supporting universities without virtual educational platforms, technological solutions and resources for teaching courses remotely.

In February 2020, to support the transition to online learning, the Ministry of Education of China published “The Guide to the Organization and Management of Online Teaching and Learning in Higher Education Institutions”. The document contains a list of 22 digital educational resources offering 24000 free online courses recommended for use in Chinese universities. At the request of the Ministry of Education, a platform for the National Project of Virtual Modeling of Experiments, offering more than 2000 experimental modelling courses, has been opened for wide use. Private institutions were recommended to provide free online resources to universities and offer individual solutions for online learning. Distance learning institutions were expected to provide technical assistance and resources to facilitate online learning in universities.

Besides, the Ministry of Education has prepared a list of actions aimed at protecting and supporting teachers during the pandemic. It was announced that they would be trained in new educational software based on MOOC and other resources. Lecturers of the National Open Online Courses were asked to create model classes to help teachers improve their online learning skills. Chinese students studying abroad during the COVID-19 pandemic were faced with the fact that their qualifications, obtained online, might not be



confirmed by the Chinese Service Center for Scholarly Exchange (CSCSE) affiliated with the Ministry of Education in China. On the 19<sup>th</sup> of March, 2021, the CSCSE announced that the qualifications of Chinese international students, who were forced to partially or fully finish online courses due to the impact of COVID-19, might be validated (recognized) in the usual manner if they met the foreign degree requirements. This was the first time that the CSCSE had made an exception for qualifications obtained through online learning (Australian Government, 2021).

During the pandemic, China has become a relatively safe country. The country's higher education system has recovered much faster than those in Europe or North America.

As noted by Huang Zhong Jin (2020), there is now widespread criticism of education assessment, represented by the entrance examination to higher education and the unified national university entrance examination. China's education is constantly criticized as "exam-oriented education", "memorization-based education", given that memorization is considered to be enough to obtain good exam results. Concerning admission to universities, tests are mainly used to check students' knowledge with the help of the questions that must be answered in a certain time. As a result, a method of teaching with the help of many tasks appeared. Since ancient times, China has had a tradition of learning and repeating what has been learned, which emphasizes the role of exercises in the learning process, because exercises can significantly increase the effectiveness of answering questions. Task-based teaching is a product of exam-oriented education. Furthermore, it is a method that teachers use under the pressure or to meet the demands of exam-oriented education. Traditionally, teachers, students and their parents believe that mastery is born in hard training: the more exercises you do, the higher the accuracy and speed of answering questions will be (Zhong Jin, 2020).

The current reform of private education is also controversial. According to the order of the State Council of the People's Republic of China No 741-2021 "Law on the Promotion of Non-public Schools of the People's Republic of China", which came into force on 1<sup>st</sup> of September, 2021, several measures restricted educational activities of private institutions. It follows that educational programmes of private schools should now be almost the same, as in public schools; foreign organizations are prohibited from owning part of the property of private schools; adherence to national educational programmes is required; schools are prohibited to use foreign textbooks; private schools can continue to exist but with stricter restrictions on income (Education Law of the People's Republic of China (2015 Amendment), 2015).

### **CONCLUSIONS**

Thus, among the many areas that were reformed in the 1980s and 1990s, Chinese education stands out for its achievements. After recovering, it gained rapid and long-lasting achievements, made a leap-frog, due to the comprehensive changes that have taken place since 1993. China's policy to increase the competitiveness of national education is in line with global trends in education policy. However, the analysis of China's education policy shows that the country's leadership has quite ambitious goals: to turn China's elite universities into global centres for leading scientists from around the world by creating the most favourable working, research and living conditions for foreign professionals. China has created a highly effective mechanism for attracting Chinese experts who have studied abroad and is skillfully selecting the best graduates of their universities.



At the same time, the country's leadership pays great attention to the formation of a sense of patriotism and national dignity among students of Chinese universities. Available data on the development of human capital and innovation potential of the country shows that China is actively involved in international competition for "talents". Promoting Chinese education is becoming an important factor in China's geopolitical influence.

Further research should aim to analyze didactic principles of specialist training in China.

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### **PROFESSIONAL DEVELOPMENT OF TEACHERS IN FORMAL AND NON-FORMAL EDUCATION: UKRAINIAN AND FOREIGN CONTEXTS**

#### **ABSTRACT**

*The article summarizes Ukrainian and foreign experience in delivering teacher professional development in formal and non-formal education. It shows that Ukraine has taken certain effective measures to improve the system of continuing teacher education (legally regulating professional development in both formal and non-formal education; expanding opportunities for continuing professional development in distance learning; providing material encouragement to teachers based on the results of certification, internships, advanced training, project activities; focusing on the effective development of teacher professional competencies (digital, ICT, innovation); elaborating teacher professional standards). A detailed analysis of the relevant foreign experience has allowed the authors to select valuable educational practices and determine the prospects for improving the system of teacher professional development. These are the following: introducing a gradual trajectory of teacher professional development which contributes to an increase in wages and promotes various social benefits; providing state grants; considering the regional context (including the needs of individual schools); creating appropriate research sites at schools; motivating novice teachers to participate in project activities; organizing effective training of mentors who provide support to students during teacher placement, as well as novice teachers at universities and practical training facilities; developing diversified (in terms of duration and forms) programmes on professional development; providing financial incentives under the results of advanced training, internships; organizing compulsory certification to confirm the teacher's license; promoting partnership between teacher associations and different organizations, such as the Regional Commonwealth of*



*Schools and Universities and committees for teacher professional development in the regions; enhancing non-formal learning in distance and full-time formats; creating virtual platforms, centres of methodical support in individual fields (language, mathematics, natural sciences) in cooperation with research institutions and universities.*

**Keywords:** *continuing teacher education, teacher professional development, formal education, non-formal education, foreign experience, Ukraine.*

#### **АНОТАЦІЯ**

*У статті узагальнено український і зарубіжний досвід професійного розвитку вчителів в умовах формальної і неформальної освіти. З'ясовано, що нині в Україні у сфері неперервного професійного розвитку вчителя спостерігаються тенденції законодавчо-нормативного врегулювання процесу підвищення кваліфікації в умовах як формального, так і неформального навчання, розширення спектру можливостей для неперервного професійного удосконалення в дистанційному форматі; матеріальне заохочення вчителів за результатами проходження сертифікації, стажування, підвищення кваліфікації, участі у проєктній діяльності; спрямованість на регулярний розвиток професійних компетентностей учителів, зокрема цифрової, інформаційно-комунікативної, інноваційної; розроблення професійних стандартів учителів тощо. Узагальнення зарубіжного досвіду формального і неформального навчання педагогів уможливило виокремити цінні освітні практики, а також визначити перспективи удосконалення професійного розвитку педагогів-практиків: ступенева траєкторія професійного розвитку вчителя, що сприяє збільшенню заробітної плати та поширенню різних соціальних пільг; грантова підтримка держави; урахування регіонального контексту під час підвищення кваліфікації (зокрема, потреб окремих шкіл); створення відповідних дослідних майданчиків на базі шкіл; заохочення молодих педагогів до участі у проєктній діяльності; підготовка учителів-наставників, що забезпечують педагогічний супровід студентів під час практики, а також молодих учителів в університетах, у центрах шкільної практичної підготовки вчителів; створення диверсифікованих програм професійного розвитку, різних за тривалістю, формою навчання; фінансове заохочення за результатами підвищення кваліфікації, стажування; обов'язкова сертифікація для підтвердження учительської ліцензії; заснування і партнерська взаємодія у межах діяльності асоціацій учителів, а також організацій типу Регіональної співдружності шкіл і університетів, комітетів професійного розвитку педагогів у регіонах; активізація неформального навчання у дистанційному й очному форматі; створення віртуальних платформ, центрів методичного супроводу за окремими дисциплінами (мовні, математичні, природничі тощо) у взаємодії з науковими інституціями та університетами тощо.*

**Ключові слова:** *неперервна педагогічна освіта, професійний розвиток учителя, формальна освіта, неформальна освіта, зарубіжний досвід, Україна.*

#### **INTRODUCTION**

One of the leading trends in teacher education is innovative changes in continuing professional development of practising teachers. Today, they should strive for self-development in formal, non-formal and informal education, self-fulfilment and continuing professional development to be able to overcome the contradiction between current



requirements for teachers as the competitive actors in the educational process and insufficient levels of their professional competence.

Continuing professional development is the latest trend. It is associated with constant changes in education, such as enhancing teaching via innovations, focusing on self-development in the professional environment by realizing the potential of formal and non-formal education. Therefore, it is crucial to study how formal and informal learning of practising teachers is organized in Ukraine and abroad. It will allow one to improve the Ukrainian system of advanced training and teacher professional development based on the best foreign practices.

According to Art. 59 of the Law of Ukraine “On Education” (Pro osvitu, 2017), professional development of teaching research staff involves continuous self-education, participation in advanced training programmes and any other related types and forms. Advanced training includes various types (internships, certification programmes, seminars, workshops, webinars) and forms (institutional, dual, in-service). In Ukraine, formal and non-formal education is regulated by law with the aim of teachers’ continuing professional development. At the same time, it is advisable to focus on innovations and traditions established in educational practices abroad. A detailed study of effective foreign experience will promote the establishment of partnership in continuing teacher education, expand opportunities for professional development via various providers and accelerate the elaboration of a strategy for continuing teacher development at the state and regional levels.

#### **THE AIM OF THE STUDY**

The article aims to summarize Ukrainian and foreign experience in delivering teacher professional development in formal and non-formal education.

#### **THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The problem of formal and non-formal learning of practising teachers has been covered in many aspects. They are as follows: conceptual principles of continuing professional development in teacher education (S. Honcharenko, V. Kremen, V. Luhovyi, L. Lukianova, N. Nychkalo et al.); foreign practices of teacher training (N. Avsheniuk, L. Diachenko, O. Ohienko, N. Paziura, N. Postryhach et al.); the potential of formal and non-formal education in teacher professional development (O. Anishchenko, O. Dubaseniuk, L. Khomych, O. Kucheriavyi, O. Semenoh, T. Sorochan, H. Sotska, V. Sydorenko et al.). However, it is crucial to summarize the foreign experience in delivering professional teacher development via formal and non-formal education to select the best educational practices in this area for Ukraine.

In this regard, research methods include *a theoretical analysis* (to specify such concepts as “teacher professional development”, “formal education”, “non-formal education”), *surveying* (to prove teachers’ focus on continuing professional development in formal and non-formal education), *a comparative analysis* (to study how Ukraine and other countries organize formal and informal learning of teachers in terms of professional development), *a prognostic method* (to determine the prospects for improving formal and non-formal education of practising teachers).

#### **RESULTS**

A review of relevant literary sources has made it possible to specify the concept of *teacher professional development* as continuous improvement of professional qualities, professional competencies in formal, non-formal and informal education. It involves acquiring theoretical knowledge and practical experience, learning to use the latest technologies and methods of pedagogical influence on pupils, students and adult learners.





At the legislative level, teacher professional development is regulated under the provisions of the Laws of Ukraine “On Education” (Pro osvitu, 2017), “On Higher Education” (Pro vyshchu osvitu, 2014), “On Centres for Professional Development of Teachers” (*Pro Tsentry profesinoho rozvytku pedahoha*, 2020).

To begin with, it is essential to define such terms as “formal education”, “non-formal education” and “informal education”. It will allow one to consider the most effective practices of teacher professional development more holistically. According to the International Standard Classification of Education (1997), *formal education* is provided by schools, colleges, universities and other official educational institutions. Together, they traditionally form the hierarchy of daytime education for children and youth, starting from the age of 5 to 7 and lasting until the age of 20 to 25. In some countries, this “hierarchy” involves programmes that combine part-time employment with some participation in the regular school or university system (International Standard Classification of Education, 1997, p. 41). *Non-formal education* implies any organized and continuous educational activity that does not fit into the above-mentioned definition of formal education. Being accessible to people of all ages, this type of education can be provided inside and outside educational institutions. It encompasses adult literacy programmes, basic education for out-of-school children, as well as life skills, work skills and general culture programmes. Non-formal education programmes do not necessarily follow a certain hierarchy and vary in duration (International Standard Classification of Education, 1997, p. 41). The OECD Glossary defines informal education as unorganized. Informal learning can be intentional (attendance at individual lectures or reading books, journals) and incidental (Education at a Glance 2009, 2009). As noted by Luhovyi, & Nychkalo (2010), informal education is daily extracurricular education, rather than its individual type. Under certain conditions, however, intentional informal education can be considered as self-education, given that intentionality requires certain personal focus and appropriate organization (Luhovyi, & Nychkalo, 2010). Generally, a generic feature of informal education is its situationality, spontaneity, largely unsystematicity (Luhovyi, & Nychkalo, 2010).

**In Ukraine**, formal learning of practising teachers involves institutionalized forms of advanced training, internships at the institutes of graduate teacher education. In 2020, the network of graduate teacher education consisted of the following institutions: State Institution of Higher Education “The University of Educational Management” of the National Academy of Educational Sciences of Ukraine, 24 institutes of graduate teacher education (continuing education academies) of communal ownership, as well as structural units of graduate education in higher education institutions. Importantly, graduate teacher education aims to meet the individual needs of teachers for personal and professional growth, fulfil the social order for highly qualified specialists who perform professional functions competently and responsibly, apply innovative technologies and promote further socio-economic development of society. The current trends of graduate pedagogical education are as follows: ensuring continuing and systematic development of teacher professional competence; providing access to education; promoting innovation and flexibility; focusing education and its individual components on creativity; employing a competency-based approach to self-development and self-fulfilment; nurturing innovative thinking; implementing lifelong learning. The Law of Ukraine “On Education” (Pro osvitu, 2017) stipulates for increasing and expanding teachers’ opportunities in terms of improving pedagogical skills and engaging in continuing professional development. The Decree of the Cabinet of Ministers of Ukraine No 800 as of August 21, 2019, approved the procedure for



professional development of teaching and research staff. The latter defines the types, forms, scope (duration), frequency and conditions of professional development of teaching and research staff from educational institutions of all forms of ownership and spheres of activity, including the payment mechanism, conditions and procedure for recognizing the results of professional development. The main types of advanced training are advanced training programmes; internships; participation in seminars, workshops, webinars (Deiaki pytannia pidvyshchennia kvalifikatsii pedahohichnykh i naukovo-pedahohichnykh pratsivnykiv, 2019).

The priority tasks of advanced training are as follows: to develop professional competencies (subject-specific knowledge, professional methods, technologies); to consolidate the knowledge about developmental psychology and andragogy; to create a safe and inclusive educational environment; to apply information and communication and digital technologies in the educational process, including e-learning, information and cyber security; to improve public speaking skills; to enhance subject-specific professional competencies (Deiaki pytannia pidvyshchennia kvalifikatsii pedahohichnykh i naukovo-pedahohichnykh pratsivnykiv, 2019).

The Decree of the Cabinet of Ministers of Ukraine No 800 as of August 21, 2019 “The Procedure for Professional Development of Teaching and Research Staff (with changes adopted under the Decree of the Cabinet of Ministers No 1133 as of December 27, 2019) has created preconditions for diversifying the market of educational services in the system of graduate education and eliminating contradictions between formal (aimed at fulfilling social, regional, sectoral order, financed from the relevant budget levels) and non-formal graduate education (more flexible, dynamic and differentiated) (Nychkalo, Lukianova, & Khomych, 2021).

As shown by Fig. 1, advanced training courses mostly cover such aspects as subject-specific knowledge, pedagogical skills and assessment of educational attainment (Instytut osvitoi analityky, 2020).

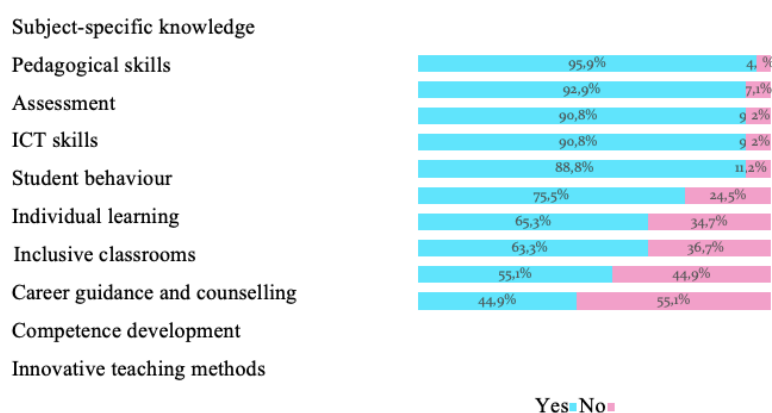


Fig. 1. Distribution of teachers by areas of advanced training courses

As noted by the respondents (teachers), classes aimed at developing ICT skills turned out to be the most useful. More than 40 % of teachers are most satisfied with the knowledge on how to develop students' competencies and use innovative teaching methods



(Diyalnist uchyteliv zahalnoosvitnikh navchalnykh zakladiv, 2017)). It is logical to conclude that there are some contradictions between topics of advanced training courses and those within the subject-specific framework in the educational institution. Therefore, it is crucial to update teaching technologies and methods following the reforms in educational practice.

The essential problems of formal learning in graduate teacher education are the following: establishing virtual laboratories and libraries; creating digital virtual resources of professional development at the regional level; introducing innovative forms and methods of teaching; using interactive technologies; providing wider options for teacher professional development in rural areas.

Recently, Ukraine has been promoting non-formal education of practising teachers and developing mechanisms of recognizing its results. In turn, it may lead to pragmatic results from participation in non-formal activities. In the context of distance and blended learning as recent educational trends, teachers can acquire professional skills and competencies through the digital environment and network technologies. The most common forms and methods of non-formal learning are as follows: educational tourism, internships, specialized conferences, seminars, presentations, training courses, studies, workshops, creative workshops, round-table discussions, video lectures, professional networks/associations; creation and use of online libraries, Internet services and digital resources; organization of joint activities; sections and clubs; volunteering; cultural initiatives, theatres, amateur art groups; street-based universities, dialogue groups, public discourses; participation in social movements and organizations; Sunday schools; distance learning, online learning, career change courses, field trips; motivational programmes aimed at socio-personal development (e.g., courses on personal development, public speaking, effective communication, yoga, relationships). The above-mentioned forms of non-formal education are reinforced with dialogical methods: discussions (free, panel, structured), debates, case studies; modelling of problematic situations; portfolios; readings; games (business, role-playing, educational, close-to-practice, research-based, project-based), consultations; simulation of professional / socio-cultural processes and phenomena; innovative educational technologies (open-space, world-cafe, peer-education).

Quite noteworthy are the 2018–2020 results of experimental work by research fellows from Ivan Ziaziun Institute of Pedagogical and Adult Education of the NAES of Ukraine on *adult learning technologies in formal and non-formal education*. They conducted a survey of 185 teachers engaged in continuing professional development in formal and non-formal education at three levels (imitative-generative, interpretive, innovative-interactive). The survey revealed the following motives, needs and values of teachers: awareness of the need for continuing professional development in accordance with educational needs (25 % – imitative-generative, 53 % – interpretive, 12 % – innovative-interactive); the need to use innovative technologies, forms and methods (16% / 61%/23 %); motivation to create author's technologies and innovate (17 %/52 %/31 %); the need to combine formal, non-formal and informal education for professional and personal development (14 %/41 %/45 %). Below are the organizational forms of non-formal education familiar to the respondents: training sessions, problem-based seminars, conferences, webinars, video lectures (29 %/45 %/26 %); interactive and innovative forms, methods and technologies of formal education, such as brainstorming, role-playing games, quests, analyzing problematic situations, case technologies (41 %/25 %/34 %); the introduction and adjustment of innovative experience and technologies used abroad to the



educational process in Ukraine and the development of author's programmes as the important ways of improving professional competence (42 %/33 %/25 %); the creation of favourable conditions for experience exchange, the acquaintance with pedagogical findings of teachers (pedagogical workshops), the development of effective technologies, the introduction of effective training programmes, the organization of author's seminars (27 %/ 31 %/42 %).

As can be shown from the obtained results, the majority of respondents are at the imitative-generative level. Nevertheless, most of them strive for self-improvement, self-development and innovation in formal and non-formal education. Besides, they aim to consolidate their knowledge of relevant foreign and national education practices and show a high level of reflection (Vovk, Sultanova, Filipchuk, Solomakha, & Hrishchenko, 2020, pp. 44–53).

Thus, it is crucial to apply the most effective **foreign** educational practices to improve formal and non-formal education of practising teachers in Ukraine. Leading comparativists indicate a tendency towards diversifying the types of providers of educational services and training programmes in the context of continuing teacher education. The following are the institutions that officially provide formal learning services: institutes for adult learning (Hungary, the Czech Republic); professional teacher associations (Spain, Italy); professional development schools (the USA); teachers associations, independent advisory groups (the UK); universities, teacher institutes (France, Germany); advanced training centres, teacher associations (the UK, Ireland, Poland, Hungary, Italy, Spain); regional centres for teacher training, training centres (Austria, Spain, Ireland, the UK, Hungary, Germany, Finland); secondary schools (Germany, Finland); teacher training centres at universities (Germany, the USA). At the same time, one can observe how various forms of non-formal education are promoted to expand options for professional development: training sessions (Austria); training workshops (Poland); study tours across the home country (Germany); participation in international educational programmes and projects (Slovenia, Hungary); training courses and programmes on pedagogy (Spain); teacher exchange between schools, as well as international exchange (the UK) (Diachenko, Marusynets, Paziura, Postryhach, & Pylynskyi, 2016, pp. 242–244).

In **the UK**, there is a five-level programme of advanced training corresponding to teacher's qualification levels (a newly appointed teacher – a young teacher – a specialist teacher – an experienced teacher – a master teacher). A type of advanced training programme depends on the approved professional development plan accorded with the state's educational priorities within teacher professional competence. The characteristic features of advanced teacher training in the UK are as follows: the centralized management of teacher training; the diversification of advanced training providers (universities; schools; local education authorities; professional teacher associations; private companies; teacher training centres); the integration of in-school and out-of-school models of advanced teacher training based on continuous search activities of school teams, as well as long-term cooperation with university teachers regularly; the focus of advanced teacher training programmes on meeting schools' needs; the promotion of subject-specific professional development in which teachers can choose an area of interest and obtain the full package of services, including in the format of distance and open learning (Avsheniuk et al., 2018, pp. 17–18, 20).

In **Poland**, the five-level model of continuing teacher education was implemented under the Teacher's Charter, a legal document that defines the rights and duties of school



teachers, in the early 1990s. Certain teacher's qualifications (a trainee teacher, a contract teacher, an appointed teacher, a graduate teacher, an honorary professor of education) were introduced. To some extent, it strengthened the teacher's status, social role and authority in Polish society. This five-step "path" of teacher professional development stabilizes the teacher's financial situation through an increase in wages and the delivery of various social benefits. Consequently, this motivated teachers towards professional development and enhanced their innovative research-methodical activities (Vozniuk, 2012).

Concerning formal and non-formal learning of teachers in **Denmark**, the following characteristics are the most valuable for Ukraine: the continuity of each teacher's individual educational trajectory; the accordance of education content with education reforms, requirements of central governing bodies or individual schools, as well as with specific individual needs of teachers; professional development providers are Danish School of Education, the Ministry of Education, pedagogical colleges, higher education centres and teacher associations; grant support by areas from the state (professional skills; new national educational programmes and relevant assessment; the use of information technologies; national professional qualifications; inclusive education); taking into account the regional context during professional development (including the needs of individual schools) (Avsheniuk et al., 2018, pp. 24–25).

In **Germany**, effective practices of formal learning in terms of professional development are the following: taking into account the regional context; two types of advanced training and professional development centres for secondary school teachers (*teacher training centres* as a structural unit of the university that ensures the interaction between higher education institutions and schools, initiates and coordinates interdisciplinary research projects in teacher training; relevant research sites in schools; advanced training of comprehensive school teachers; practical training of teacher mentors); *centres for teachers' school practical training* as the institutions subordinated to the Land Ministry of Education that provide pedagogical support to interns and trainees; analyzing lessons during internships; providing consultations and individual support on teacher professional development (Avsheniuk et al., 2018, pp. 45–58).

**The USA** is famous for its achievements in formal teacher education. They are as follows: the diversity of higher education institutions; different duration of advanced training programmes under full-time and distance learning; the implementation of programmes in educational institutions; teacher associations aimed at enhancing education quality and improving educational attainment, promoting teacher professional development, providing teachers with opportunities for free publications, subscriptions to newsletters and professional publications; introducing grant programmes from the government, in particular through New Leaders for New Schools (an organization which implements a policy of effective leadership across the country); financial incentives based on learning outcomes; compulsory certification to confirm the teacher's license, which requires continuing professional development (Kovalchuk, 2016).

Quite representative is **the Canadian** experience of formal and non-formal learning in terms of teacher professional development. Canada's success in enhancing continuing teacher education lies in improving teachers' skills and holding various events aimed at professional growth (Avsheniuk et al., 2018, pp. 32–33). Below are the characteristic features of the Canadian system of continuing professional development for teachers: the lack of general requirements for professional development programmes for teachers in all provinces; the right of school boards to initiate short-term courses; the



activities of the Regional Community of Provincial Schools and Universities Leaders; subsidies from school leaders on teacher professional development; the activities of Canadian Teachers' Federation aimed at providing conditions for professional and personal development; promoting non-formal learning with the participation of teachers' federations (workshops, short-term courses, summer institutes, professional conferences); developing digital competencies via distance learning and innovation centres in individual provinces; the activities of the Virtual Learning Centre for all teachers; maintaining partnerships with colleagues from different schools and provinces (e.g., Manitoba government has introduced the Strategic Technology-Assisted Professional Learning Environment (STAPLE) to expand the range of teacher professional development and incorporate information technologies in professional development programmes. Mukan (2019) also claims that Canadian authorities pay considerable attention to the national policy aimed at supporting continuing professional development of teachers. In the country, there are universities offering bachelor's, master's, doctoral and teacher certification programmes; ministries / departments of education updating curricula and regulating the national education policy; school boards (official employers of teachers) implementing programmes on compulsory and voluntary professional development; regional teaching centres analyzing the current state of the teaching profession, determining its pros and cons; volunteer subject-specific teacher associations offering various forms of professional development (seminars, pedagogical workshops, newsletters, websites); teacher unions and private providers of professional development services that organize advanced training in schools (learning environment management, education strategies and technologies); distance learning (Télé-université) which operates in Quebec; forms of professional development for teachers with special goals (The Yukon Native Language Centre), centres for teaching and learning in the North-West territories (Mukan, 2019).

### CONCLUSIONS

Therefore, Ukraine has taken certain effective measures to improve the system of teachers' continuing professional development (legally regulating professional development in both formal and non-formal education; expanding options for continuing professional development in distance learning; providing material encouragement to teachers based on the results of certification, internships, advanced training, project activities; focusing on the effective development of teacher professional competencies (digital, ICT, innovation, communication); elaborating teacher professional standards). A detailed analysis of the relevant foreign experience has allowed the authors of the article to select valuable educational practices and determine the prospects for improving the system of teacher professional development. These are the following: introducing a gradual trajectory of teacher professional development which contributes to an increase in wages and promotes various social benefits; providing state grants; taking into account the regional context (including the needs of individual schools); creating appropriate research sites in schools; motivating novice teachers to participate in project activities; organizing effective training of mentors who provide support to students during teacher placement, as well as novice teachers at universities and practical training facilities; developing diversified (in terms of duration and forms) programmes on professional development; providing financial incentives under the results of advanced training and internships; organizing compulsory certification to confirm the teacher's license; promoting partnerships between teacher associations and different organizations, such as the Regional Community of Schools and Universities and committees for teacher professional development in the regions; enhancing



non-formal learning in distance and full-time formats; creating virtual platforms, centres of methodical support in individual fields (language, mathematics, natural sciences) in cooperation with research institutions and universities.

Further research should aim to study options for teacher professional development in the context of distance learning, associated with the promotion of non-formal education in terms of professional development and the recognition of its results in the system of continuing education.

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**TRENDS IN THE DEVELOPMENT OF EDUCATION  
AND UPBRINGING OF ORPHAN CHILDREN IN CHILDREN’S HOUSES  
OF THE CHINESE PEOPLE’S REPUBLIC**

**ABSTRACT**

*The article analyzes the trends in the development of education and upbringing of orphans in orphanages in modern China. Leading researchers have identified orphanages as the main form of social care for orphans and their education and upbringing in China. Most orphanages in cities have several departments: an orphanage (for children from 0.3 to 3 years old), an orphanage (children from 3 to 14 years old), a department for the disabled and a nursing home. China's education system consists of compulsory preschool education, primary education, incomplete and complete secondary school, higher education, and higher education. All levels of the education system for orphans are free in China. Orphans also have the right to receive the level of education they need for their age. China's 9-Year Compulsory Education Act was passed in 2004. The organization of educational and upbringing processes in educational institutions for orphans is in accordance with the norms and programs developed by the relevant Ministry and departments for secondary schools. The article proves that the main focus in the country is on education, not training, as the priority is still to master the vast majority of the population in working professions. The purpose of the article is to theoretically analyze the trends in the development of education and upbringing of orphans in orphanages of the People's Republic of China. As a result of the analysis of works of foreign and domestic scientists we can state that the main trends in the maintenance, education and upbringing of orphans in modern China are adaptation to the social structure of China, state control of educational institutions, age-appropriate orphans in orphanages, creating conditions for the education of orphans according to age, promoting ideological, moral, patriotic, economic education.*

**Keywords:** orphans, education, upbringing (moral, labor, patriotic, aesthetic), orphanages, compulsory preschool education, primary education, incomplete and complete secondary school.

**АНОТАЦІЯ**

*У статті проаналізовано тенденції розвитку освіти і виховання дітей-сиріт в дитячих будинках сучасного Китаю. Провідними дослідниками визначено, що дитячі будинки є основною формою закладів соціального піклування про дітей-сиріт*



*та їхньої освіти й виховання у Китаї. Більшість дитячих будинків у містах мають у своєму складі кілька відділень: будинок дитини (для дітей від 0,3 до 3 років), дитячий будинок (діти від 3 до 14 років), відділення для інвалідів і будинок престарілих. Освітня система Китаю складається з обов'язкової дошкільної освіти, початкової освіти, неповної й повної середньої школи, вищої школи, вищої освіти. Всі рівні освітньої системи для дітей-сиріт безоплатні в Китаї. Також діти-сироти мають право отримати той рівень освіти, який для них потрібний за віком. В 2004 році прийнято «Закон про обов'язкову 9-річну освіту» в Китаї. Організація освітнього і виховного процесів у освітніх закладах для дітей-сиріт йде відповідно до норм і за програмами, розробленими відповідними Міністерством та відомствами для загальноосвітніх шкіл. У статті доведено, що основна увага в країні приділяється саме вихованню, а не навчанню, оскільки пріоритетом все ще залишається оволодіння переважною кількістю населення робітничими професіями. Мета статті – теоретично проаналізувати тенденції розвитку освіти і виховання дітей-сиріт в дитячих будинках Китайської Народної Республіки. Унаслідок аналізу праць зарубіжних та вітчизняних науковців можемо констатувати, що основними тенденціями утримання, освіти та виховання дітей-сиріт в сучасному Китаї є адаптація до суспільного укладу Китаю, контролю діяльності освітніх закладів з боку держави, проведення відповідної до віку дітей-сиріт діяльності в дитячих будинках, створення умов освіти дітей-сиріт відповідно віку, сприяння ідеологічному, моральному, патріотичному, економічному вихованню.*

**Ключові слова:** діти-сироти, освіта, виховання (моральне, трудове, патріотичне, естетичне), дитячі будинки, обов'язкова дошкільна освіта, початкова освіта, неповна й повна середня школа.

## INTRODUCTION

The orphanage as the main form of state maintenance, education and upbringing of orphans in modern China is based on universal values and the best pedagogical traditions. The work of foreign scholars shows that the Chinese do not single out orphans in a special group of the population that requires special treatment or additional privileges. It is believed that due to the maximum integration of orphans into public and public life, it is possible to avoid prejudiced attitude of society towards children in orphanages, as well as to build a society of equal opportunities and avoid discrimination on the basis of origin. Also, “neither Chinese science nor the official authorities recognize the problem of social orphanhood in the country, although the number of children who due to various circumstances (parental divorce, but mostly – employment) is not raised in a biological family ranges from 15 % (in large cities) to 65 % (Gansu Province)” (Yitao Wang, 2008: pp. 37–39).

## THE AIM OF THE STUDY

The purpose of the article is to theoretically analyze the trends in the development of education and upbringing of orphans in orphanages of the People's Republic of China.

## THEORETICAL FRAMEWORK AND METHODS

The question of certain aspects of trends in the development of education and upbringing of orphans in orphanages of the People's Republic of China is the subject of research by such Chinese scientists and practitioners Pi Aichin, Mae Xinglin and others. The main attention in their works is paid to attracting foreign experience in organizing the educational and production process in orphanages. Important for our study is the scientific



research of Professor Wang Itao (2008) on the organization of the education system of “children raised abroad” (analog of the Ukrainian term “social orphans”). In his writings, Wang Xuetai (2006) reveals general information about Chinese education and upbringing. Among the Ukrainian researchers should be noted the scientific works of N. Dzhgun (2012), devoted to the organization of the system of training future teachers for educational work at school; scientific research of the modern Ukrainian scientist L. Kalashnik (2012, 2013, 2014) on the system of education and upbringing of orphans in modern China. One of the directions of scientific research of the author’s team M. Yevtukh, M. Nosko, S. Hryshchenko (2016) is the study of care for orphans, their education and upbringing in orphanages in modern China. O. Tyrkalova (2020) analyzes school education in China and interesting facts about it.

Research methods include analysis, synthesis, systematization and generalization.

## RESULTS

Under Chinese law, only children whose parents have died are officially recognized as orphans. The People’s Republic of China reserves the right to build its own policy on orphans based on its own historical traditions and economic situation (Lian, 2010).

Today, China has a figure of “573,000 orphans, of whom 66,000 live in state-funded social welfare institutions”. Orphanages are the main form of social care for orphans in China. “Most orphanages in cities have several departments: an orphanage (for children from 0.3 to 3 years old), an orphanage (children from 3 to 14 years old), a department for the disabled and a nursing home” (Jevtukh & Nosko & Ghryshhenko, 2016; Kalashnyk, 2014).

It is believed that such a structure helps orphans feel needed, eliminates their inferiority complex (there are even more unhappy than those who need their help), teach them to care for others, give them a sense of love and gratitude from adults (elderly), to preserve the vertical of generations, which is traditionally present in the family. It is the responsibility of the older children of the orphanage to take care of the younger ones (for this purpose, 1–2 older children (aged 0.5 to 8 years old) are «fixed» for each older child (aged 10–14 years), change their diapers together. Most of the orphanage work, cooking assistance (jointly with senior trips to local markets for purchases inclusive) are also performed by older pupils. In Chinese orphanages, the age of children living there ranges from 2 to 14. Children under the age of 2 are more likely to be eligible for national adoption programs. “More than 50 % of children are children aged 8–10. Usually, they have a rather low level of development due to pedagogical neglect, as they ended up in an orphanage after some time spent on the street. orphanages have congenital or chronic diseases” (Kalashnyk, 2013).

China’s education system consists of “compulsory preschool education, primary education, incomplete and complete secondary school, higher education, higher education” (Shkola ranok, 2020).

It should be noted that all links for orphans are free in China. Orphans also have the right to receive the level of education they need.

The orphanage is the place of residence of an orphan. For education, children are sent to regular secondary schools (with the exception of children with disabilities who cannot attend medical school. They are taught basic Chinese and math courses in the orphanage itself. This practice exists in “rich” orphanages. Where such courses are not available, children are taught to read, write and count by older pupils or dependents of the home for the elderly). After the adoption of the Law on Compulsory 9-Year Education in 2004, the threshold for obtaining a workbook for children in orphanages (from 14 to



16 years old) was raised at the same time. “If a child cannot continue his / her education (after the obligatory 9 years, exams are taken and no more than 55 % of the total number of students who have completed compulsory school continue their education), he / she can start working (full-time work)” (Jevtukh & Nosko & Ghryshhenko, 2016; Kalashnyk, 2013).

The only chance for those who start working at the age of 16 are short-term specialized courses in the field of work, where a person is sent from the main place of work (enterprises in the agricultural sector). The most talented children at the request of the orphanage can be recommended by higher authorities in the field of education to transfer them to specialized boarding schools (sports, creative orientation). “Orphans in schools are exempt from paying for textbooks, enjoy food benefits and excursions. The percentage of orphans who continue their education in gaoxue and gaojong xue is quite high – about 65 %”. Also, after reaching the age of 18 on the recommendation of an orphanage and the school where the child was educated (if he or she failed the gaojong xue exam), he or she may be recommended to enter vocational schools or start working. More than 50 % of orphans become nurses or nursing staff. “About 12–15 % of orphanage graduates receive higher education on a general basis. Privileges and state targeted programs for orphans are aimed at supporting those who have been able to enter higher education institutions on their own” (Jevtukh & Nosko & Ghryshhenko, 2016: p. 133).

The state also organizes the labor activity of children in orphanages, and quite often physical labor and its results are a condition for diversifying the nutrition of children. 100% of orphanages in rural areas have agricultural areas where pets grow vegetables, most have poultry (chickens and ducks), eggs and meat of which also fall on the table of pets (Jevtukh&Nosko&Ghryshhenko, 2016: p. 138; Kalashnyk, 2014).

All other forms of education in the People’s Republic of China today are viewed through the prism of patriotism. In orphanages, the educational component of patriotic education is quite significant. Children are instilled with the idea that they are children of China from an early age, and that they have lost their parents is not a great grief – they have a Chinese state that will take care of them because they are its children. This is also facilitated by the existence of a special status for orphans in the People’s Republic of China – a child of the people (in the column “parents” in the birth certificate of such children write: the people of China). Love for one’s own people and China is brought up on vivid historical examples: orphans who were brought up by labor collectives and military units during the resistance to the Japanese occupation (XX century) (Jevtukh & Nosko & Ghryshhenko, 2016: p. 141).

However, since orphanages also hold children from an early age, there are some measures in this system. «In ordinary orphanages, the child often receives the first knowledge as a result of work – the child is explained what he should do and why it is necessary, what should come out in the end. The main task in practice is to equip the child with a basic set of skills that he will need at school, and the rest is the task of the education system. Rural children tend to have more knowledge of the agricultural sector, while urban children have more knowledge of “general knowledge» and what television has to offer. Of course, there are “exemplary” orphanages (Beijing, Shanghai, Nanjing), which are shown to international commissions and observers” (Jevtukh & Nosko & Ghryshhenko, 2016: p. 142).

These houses are equipped with special playrooms with educational toys and classrooms, where children are taught the latest practices and technologies. But most of the



country's orphanages are deprived of this opportunity due to underfunding and China's traditional view that «mental education» and «education» are the same thing (Jevtukh & Nosko & Ghryshhenko, 2016: p. 143).

Involving children from an early age in household chores, as well as in decorating the home, in orphanages is one of the main forms of aesthetic education in social care institutions for orphans in modern China. A characteristic feature of the Chinese is a caring attitude to history, historical and cultural monuments, and they raise it in their children. Traditions and rituals associated with folk festivals are also very educational. In preparing for them, children unnoticed for themselves master not only work skills, folk morals, but also aesthetic, household culture, norms of behavior. In the system of aesthetic education, Chinese pedagogy also gives an important place to music, singing, dancing, national and world art, literature.

Ukrainian scientist L. Kalashnyk states that “the corps of teachers and educators for social care institutions for orphans in modern China is formed mostly of university graduates who graduated from pedagogical educational institutions or took pedagogical skills courses (from 3 months to 1 month, 5 years)”, organized for persons with secondary or higher education, at pedagogical higher educational institutions of the country. Unfortunately, all these specialists do not have the appropriate level of training on the psychological characteristics of orphans and practical skills of working with this category of children, as psychology (even age) is mostly not taught in universities (Kalashnyk, 2014).

Orphans, both preschoolers and schoolchildren, have a huge workload. “The school day lasts from 7 am to 4 pm. It is divided into two parts: in the first half the children study the main disciplines, in the second – additional. The school year is divided into two semesters, starting in September and ending in July. During the holidays, children receive a large amount of homework” (Shkola ranok, 2020). From 8 to 11.30 students in Chinese schools have lessons in important subjects – native and foreign languages and mathematics. From 11.30 to 14 children have a rest have a break for lunch. From 14 to 16 there are classes in secondary subjects – physical culture, work, art (Tyrkalova, 2020).

According to domestic scientist L. Kalashnik: “The Chinese Law on Education” was adopted on March 18, 1995 and deals only with issues related to the educational process of any public schools and other types of educational institutions. There are no provisions in the Law concerning orphans as a special category of the population. According to this Law, the organization of educational and upbringing processes in educational institutions for orphans is in accordance with the norms and programs developed by the relevant Ministry and departments for secondary schools. Special educational institutions for orphans are not considered specialized educational institutions and operate on a general basis (Kalashnyk, 2012).

Chinese researcher Wang Xuetai argues that “Education reforms in the late 1980s and early 1990s posed the need for China's pedagogical science to create a unique, unique system of education that took into account three important factors: borrowing international experience and making the most of traditional Chinese pedagogy and taking into account the requirements of the official ideology of the country. The main focus in the country is on education, not training, as the priority is still to master the vast majority of the population working professions” (Van Sjujetaj, 2006: pp. 78–79).

Scientist N. Zhgun in his scientific works analyzed some aspects of Chinese pedagogical practice. He stated that “the lack of narrow specialization among graduates of



Chinese pedagogical institutions of higher education (primary school teacher, high school teacher, social educator) at the same time forces professionals to be versatile professionals to cope with any work on teaching and education children” (Dzhghun, 2012). Chinese practice of training young teachers involves their 2-year internship as a junior teacher (whose responsibilities include attending lessons in the subject, to maintain supervisory documentation on the psychological and pedagogical situation in the classroom, to perform the duties of a teacher’s assistant for selection and practical development of lesson materials, to conduct educational work with students).

Each orphanage has an amateur creative team, the most talented children have the opportunity on the recommendation of the orphanage to pass exams and study in specialized boarding schools (ballet, Beijing Opera, circus). A certain kind of creativity in orphanages (as well as sports) is considered an effective method of reducing aggression in children, children’s creative achievements – a chance to draw public attention (through the media) to the problems of orphanages and find sponsors (or get additional funding from the state and local governments). Of course, aesthetic education in orphanages has its own specifics given the financial capacity of the institution and the organization of life in the educational institution (Jevtukh & Nosko & Ghryshhenko, 2016: p. 143).

The main educational tool is to involve the child in the work of adults and the example of educators without explanatory and preparatory work. The only exception is the system of moral (ideological education), in the implementation of which, in addition to employees of children’s institutions, youth organizations also participate and which is strictly controlled by the government and local governments. As for other areas of educational activities, orphanages tend to rely more on educational institutions than on their own. A society is considered to be of good quality, where 75% of the population adheres to this balance at least, and the income that a person brings to the state is 2.5 times greater than the funds that the state has spent on this person. It is this economic idea that is actively instilled in the pupils of institutions of the state system of social care for orphans. It is especially emphasized that they are the future of the nation, because the country spends more money on them than on “family” children, and therefore hard work for the glory of his homeland, joyful performance of its most difficult tasks, ignoring their own inconveniences; This is the task and honorable duty of every inmate of the social care system.

#### CONCLUSIONS

As a result of the analysis of works of foreign and domestic scientists we can state that the main trends in the maintenance, education and upbringing of orphans in modern China are adaptation to the social structure of China, state control of educational institutions, age-appropriate orphans in orphanages, creating conditions for the education of orphans according to age, promoting ideological, moral, patriotic, economic education.

We consider the study of methods of preparing future teachers for educational work with orphans in the People's Republic of China to be prospects for further scientific research.

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#### **DEVELOPMENT OF PRIMARY STUDENTS' EMOTIONAL INTELLIGENCE: ANALYSIS OF FOREIGN EXPERIENCE**

##### **ABSTRACT**

*The article is devoted to the development of primary school students' emotional intelligence. The concept of "emotional intelligence" is quite new to pedagogical science, it was first introduced in the 1990s in the studies of American psychologists J. Mayer and P. Seloway. It was analysed that the understanding of scientists of emotional intelligence is based on the emotional component of personality and is the ability to understand own and others' emotions, the ability to control them and interpret them correctly through non-verbal signals. It has been found that the American journalist D. Goleman's approach to understanding emotional intelligence is based on a combination of cognitive abilities and personal characteristics of the individual. The author reveals the main results of education that need to be considered in the process of developing the content of emotional intelligence education in educational institutions, such as: awareness of their own emotions, self-control or control of their own emotions, personal motivation, empathy, management of social relations. Examples of tasks that can be used in primary school to develop students' emotional intelligence are presented in the article. The views of foreign scientists on the development of emotional intelligence of primary school students are given. The international educational program of social and emotional learning (SEL) aimed at the implementing of emotional learning in general secondary education institutions and the results of its work are analysed. The purpose of SEL is to form five basic competencies in the field of emotional education, namely: self-awareness, self-organization, social consciousness, building relationships and making responsible decisions. Early school age is characterized by sensitivity and emotionality, which is a favourable condition for the development of emotional intelligence. It is proved that the child's understanding of their own emotions has a positive effect on the socialization and self-realization of students, as well as on their academic success.*

**Keywords:** *emotional intelligence, development of primary school children's emotional intelligence, social and emotional learning, SEL, primary school students, emotions, empathy, intelligence.*

##### **АНОТАЦІЯ**

*У дослідженні обґрунтовано необхідність виховання емоційного інтелекту учнів початкової школи. Поняття «емоційний інтелект» є досить новим для*





педагогічної науки, вперше його було введено у 1990-х роках у дослідженнях американських психологів Дж. Майєра та П. Селовея. Проаналізовано погляди науковців на сутність емоційного інтелекту та зроблено висновок, про те, що емоційний інтелект будується на емоційній складовій особистості та являє собою вміння розуміти власні та чужі емоції, контролювати їх та правильно інтерпретувати завдяки невербальним сигналам. З'ясовано, що у американського журналіста Д. Гоулмана підхід до розуміння емоційного інтелекту базується на поєднанні когнітивних можливостей та персональних характеристик особистості. Автор розкриває основні результати виховання, які потрібно враховувати у процесі розробки змісту виховання емоційного інтелекту у закладах освіти, а саме: усвідомлення власних емоцій, самоконтроль або контроль власних емоцій, особиста мотивація, емпатія, управління соціальними відносинами. У статті розглянуто приклади завдань, які можуть бути використані у початковій школі, для виховання емоційного інтелекту учнів. Наведено погляди зарубіжних учених на виховання емоційного інтелекту учнів молодшого шкільного віку. Проаналізовано міжнародну освітню програму соціального та емоційного навчання (SEL), націлену на впровадження емоційного навчання в закладах загальної середньої освіти та результати її роботи. Метою SEL є формування п'яти основних компетентностей у сфері емоційного виховання, а саме: самоусвідомлення, самоорганізація, соціальна свідомість, побудова стосунків та прийняття відповідальних рішень. Молодший шкільний вік характеризується чутливістю та емоційністю, що є сприятливою умовою для виховання емоційного інтелекту. Доведено, що розуміння дитиною власних емоцій позитивно впливає на соціалізацію та самореалізацію учнів, а також на їх академічну успішність.

**Ключові слова:** емоційний інтелект, виховання емоційного інтелекту молодших школярів, соціальне та емоційне навчання, SEL, учні початкової школи, емоції, емпатія, інтелект.

## INTRODUCTION

At the present stage of education reform in Ukraine, the question about formation of social and emotional skills of new Ukrainian school students arises. These skills are the key to successful socialization of students, and preparation for individual life.

The concept of the New Ukrainian School (2016) is aimed at personality-oriented learning, the formation of the child's personality, character, attitude to the world. The reformed content of education focuses not only on the child's knowledge of the outside world, but also on the processes of interaction with the world, understanding the meanings of their own activities. Therefore, an important component of the process of education is self-understanding, the development of emotional intelligence, which is the ability to accurately identify emotions and related needs outside of thoughts, physical condition, appearance, behaviour.

In the State Standard of General Primary Education (2018) the content guidelines for the harmonious development of the primary school students' personality are defined, and cross-cutting skills are formulated, namely: problem solving, critical and creative thinking, cooperation, effective communication, development of own emotional intelligence, research, organization of own activities, reflection, thoughtful reading. Thus, the development of primary school children's emotional intelligence is one of the priorities of modern education.



### **THE AIM OF THE STUDY**

The article aims to analyse the development of primary students' emotional intelligence based on the views of foreign researchers.

### **THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The notion of "emotional intelligence (EI)" is used in science relatively recently. The concept and theory of emotional intelligence (ability), emotional competence as an important condition for the success of the individual has been used since 1990 by P. Salovey and J. D. Mayer. Since then, numerous studies have been carried out to conceptualize the topic, develop an EI measure, and explore EI as a key competency in education and training to improve performance in different areas. However, there are several approaches to defining the concept of "emotional intelligence", which indicates the complexity of this concept.

P. Salovey and J. D. Mayer (1990) define emotional intelligence as "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p.189). Their understanding is aimed at comprehending the content of emotions. In their model of emotional intelligence, a number of components that emphasize the ability to know and analyse emotions are represented: 1) to perceive and determine emotions; 2) evoke and control a certain emotion; 3) interpret the meaning of emotions, analyse the causes of their occurrence; 4) reduce the intensity of negative emotions, manage emotions and control emotional states (Mayer, Di Paolo & Salovey, 1990).

Researchers identify four components of emotional intelligence.

- Perception of Emotion. It is important to understand the emotions (one's own and others') related to both internal changes and external events. It is the ability to identify emotions by thoughts, physical condition, appearance, and behaviour.

- The use of emotions to facilitate thinking. How and what we think depends on how we feel. Emotions affect the mental process and prepare us for certain actions. This ability helps to understand how to use emotions and think more effectively. By controlling emotions, person can look at the world from different angles and solve problems more effectively.

- Understanding of emotion. This means that a person is able to identify the source of emotions, classify them, recognize the relationship between emotions and words, interpret the meaning of emotions, understand complex feelings, transitions between emotions and their further development.

- Emotion management. Emotions affect thinking, so they must be taken into account when solving problems, making decisions, and choosing behaviour. The ability to manage one's own and others' emotions allows people to use information (provided by emotions), as well as to cause or remove from them (Brackett, Delaney & Salovey, 2021).

The structure of emotional intelligence of D. Goleman (1996) is characterized by a combination of cognitive abilities with individual personality traits: persistence, the ability to enter into emotional states that contribute to success. Important personal characteristics, identified by D. Goleman (1996), are the ability to enter into interpersonal relationships with other people and to be sensitive to their emotions, to use empathy.

American researcher emphasises that the optimal functioning of emotional intelligence in relation to the optimal functioning of intellectual intelligence is the key to the success of primary school students. The development of two types of intelligence has a positive effect on the socialization of the child in society and the formation of understanding of their own feelings.



According to the model created by D. Goleman (1996), educational programs focused on the development of emotional intelligence should take into account the following results:

- the awareness of own emotions (the ability to recognize and name them, the ability to determine the causes of emotions, the ability to anticipate possible behaviour and actions);

- the self-control or control of one's emotions (the ability to control negative emotions, the ability to adequately express emotions, the ability to charge yourself with positive emotions, the ability to cope with stress to your own favour, the ability to avoid depression and anxiety);

- the personal motivation (the ability to productively use emotions, the ability to concentrate on task, the ability to manage your impulsivity);

- the empathy (the ability to understand the thoughts, emotions and actions of others, the ability to listen to the others with all your senses);

- the management of social relations (the ability to understand interpersonal relationships, solve conflicts, the ability to be open, assertive and positive, to cooperate).

The following methods were used to realize the aim of the study: analysis and synthesis of psychological and pedagogical scientific sources, generalization, and systematization of the obtained results.

## RESULTS

The development of emotional intelligence becomes especially important in the early school years, because during this period there is an active emotional growth of the individual. Learning activities help to improve self-awareness and the ability to reflect. The school period of life is characterized by significant sensitivity and flexibility of mental processes, as well as a deep interest in the inner world.

Hypersensitivity of primary school students is a result of the artistic type of their personality, which is characterized by: a tendency to aesthetic and artistic activity; susceptibility, emotionality, visual perception. The level of children's aesthetic experiences also grows, their feelings are enriched, and the general culture increases. Sensory openness, emotional sensitivity, special receptivity of primary school students to art become the basis for the development of their observation, aesthetic feelings, which is necessary for the development of emotional culture.

Exercises for the development of primary school students' emotional intelligence do not take much time and can become everyday habits in the learning process. E. Mulvahill (2021) in her article "Simple Ways to Integrate Social-Emotional Learning Throughout the Day" gives such examples of actions:

1. Teachers may start the day with a check-in. It doesn't need to be a time-consuming or elaborate procedure. It could be as simple as giving a warm greeting to welcome each person as they arrive in the morning or asking a question, even if you are teaching online.

2. Do lots of partner activities. Working with a partner helps kids learn to cooperate and builds community in your classroom.

3. Practice lots of role-playing. Sometimes you have to put yourself in someone else's shoes to truly understand a situation. Taking time to role-play tricky or troubling situations helps kids develop empathy and understand other people's feelings.

4. Build social-emotional vocabulary. It gives students positive phrases they can use to foster their resilience and overcome failure.



5. Set up a calm-down corner. a special place in classroom for kids to take a break when they are upset or angry or need to calm themselves. This space should have a peaceful atmosphere and might include comfy pillows to sit on, noise-canceling headphones and calming images.

To develop emotional intelligence in early school age it is necessary to start with the basic emotions and gradually move to their shades. Teachers can perform the following tasks:

- read books with an analysis of the mood and feelings of the characters;
- use different types of theaters;
- use game exercises “Guess the mood”;
- analyze situations in children’s lives;
- show photos, drawings of people with basic emotions and later with shades of emotions;
- draw “own mood”, as well as relatives, friends and analyze the causes of mood;
- watch and analyze the emotions of cartoon characters.

Based on research conducted by D. Goleman at Yale University (New Haven, Connecticut, USA) and the University of Illinois at Chicago (Illinois, USA), the SEL (Social and Emotional Learning) program was developed. SEL is defined as an integral part of education and human development. SEL is the process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. Social-emotional learning describes the mindsets, skills, attitudes, and feelings that help students succeed in school, career, and life. At its core, SEL focuses on students’ fundamental needs for motivation, social connectedness, and self-regulation as prerequisites for learning. SEL develops five core competencies:

1. Self-Awareness: The abilities to understand one’s own emotions, thoughts, and values and how they influence behavior across contexts. This includes capacities to recognize one’s strengths and limitations with a well-grounded sense of confidence and purpose.

2. Self-Management: The abilities to manage one’s emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations. This includes the capacities to delay gratification, manage stress, and feel motivation and agency to accomplish personal and collective goals.

3. Social Awareness: The abilities to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts. This includes the capacities to feel compassion for others, understand broader historical and social norms for behavior in different settings, and recognize family, school, and community resources and supports.

4. Relationship Skills: The abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups. This includes the capacities to communicate clearly, listen actively, cooperate, work collaboratively to problem solve and negotiate conflict constructively, navigate settings with differing social and cultural demands and opportunities, provide leadership, and seek or offer help when needed.

5. Responsible Decision-Making: The abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations. This



includes the capacities to consider ethical standards and safety concerns, and to evaluate the benefits and consequences of various actions for personal, social, and collective well-being (Buckle, 2020).

Thorough research shows that SEL programs promote academic achievement and positive social behavior, reduce behavioral problems, substance abuse, and emotional stress. SEL is a methodology that helps students from an early school age better understand their emotions, fully experience those emotions, and show empathy for others. It is then used to help students make positive, responsible decisions; create conditions to achieve their goals and build positive relationships with others.

Although SEL is not a separate subject, such as history or mathematics, it can be introduced into the structure of the school curriculum. Teachers should make lessons more personal and accessible to students, and students would be more interested in participating and less likely to be mentally overwhelmed when studying subjects. By cultivating a sense of empathy, self-awareness and security in the classroom, SEL has a positive impact that will last a lifetime.

According to the research of J. Peyton (2008) the results of SEL programs, which were implemented in the educational process and conducted in extracurricular activities, showed that these programs significantly affected a wide range of results in various fields in children with identified emotional and behavioural problems, and without them. These programs achieved significant results in all six categories studied: improved emotional learning skills; attitude to oneself and others; formed positive social behaviour; reducing behaviour problems; emotional distress; and improved academic achievement by 11 percent (p. 16).

### CONCLUSIONS

Therefore, studies of emotional intelligence in foreign sources show that the introduction of emotional intelligence education in primary school should be connected with the development of intellectual abilities of students, which, according to American scientists, not only improve students' academic achievement but also helps them build social ties and prepare children for further life.

Further research should be dedicated to a more detailed study on the peculiarities of applying abroad experience of developing primary school students' emotional intelligence in general educational system of Ukraine.

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### **PECULIARITIES OF “INTEGRATED DESIGN” MASTER’S DEGREE PROGRAM AT COLOGNE UNIVERSITY OF APPLIED SCIENCES**

#### **ABSTRACT**

*The paper is aimed at studying “Integrated Design” Master’s degree program at Köln International School of Design (KISD) that is a part of Cologne University of Applied Sciences. The program offers project- and student-oriented study in inspiring and contextualized environment that is suitable for implementing problem-solving practices and techniques and provides students with high level of flexibility and independence. The key component of the program is the completion of the thesis within one of the thematic sections: Urban Intensity and Resources, Material Systems and Laboratory Culture, Social and Public Innovations, and Visual Culture and Politics. Curriculum of the program has been thoroughly studied and it has been defined that the duration of the program is 3 semesters. During the first semester, students develop their vision and explore issues related to the thematic section that they have chosen for thesis writing and have 3 types of courses: 1) KISD short-termed, medium-termed and long-termed projects and scientific seminars; 2) courses with master-classes (MethodLab, Design Approaches, Mentoring); 3) courses with students of the same thematic section. During the second semester, they start their designing process and apply observation, exploration, experimentation and practical designer work to deal with their thesis. The third semester is dedicated to in-depth work on the thesis and its presentation. It has been determined that the curriculum of the “Integrated Design” program presupposes 90 ECTS credits for the whole study with 30 credits for each semester. Each semester includes compulsory modules the completion of which is verified by module examinations. Curriculum provides information on the quantity of credits attributed to each module, to Master’s thesis and final exam which is actually the defense of the thesis. The procedure of assessing the exam has been described and the calculation of the final exam cumulative grade has been outlined. Students complete Master’s degree program if they obtain 90 ECTS credits. The requirements for their obtaining have been characterized in the paper.*

**Keywords:** *Integrated Design, design, Master’s degree, curriculum, module, Germany, Master’s thesis, Cologne University of Applied Sciences, Köln International School of Design.*

#### **АНОТАЦІЯ**

*У статті досліджено особливості розробки та реалізації магістерської програми «Інтегрований дизайн» у міжнародній школі дизайну (KISD) при Кельнському університеті прикладних наук. Програма забезпечує проєктно- та студентоцентроване навчання у сприятливому та контекстуалізованому середовищі, спрямованому на впровадження різних форм та методів дизайну, а також прийомів вирішення поставлених завдань, що надає студентам високий рівень гнучкості та*



незалежності. Ключовим компонентом програми є виконання дипломної роботи, тематика якої може стосуватися одного з чотирьох основних тематичних блоків: «Матеріальні системи та лабораторна культура», «Інтенсивність та ресурси міста», «Соціальні та суспільні інновації» та «Візуальна культура й політика». У процесі дослідження ретельно вивчено навчальний план освітньої магістерської програми. Визначено, що тривалість програми становить 3 семестри. У першому семестрі студенти розвивають своє дизайнерське бачення та досліджують питання, що стосуються тематики написання дипломної роботи, а також вивчають 3 типи курсів: 1) короткострокові, середньострокові та довгострокові проекти та наукові семінари KISD; 2) курси з майстер-класами («MethodLab», «Дизайнерські підходи» та «Наставництво»); 3) спільні курси зі студентами, які пишуть магістерську роботу з того ж самого тематичного блоку. У другому семестрі студенти розпочинають процес проектування та застосовують спостереження, дослідження, експерименти та практичну роботу дизайнера для вирішення завдань своєї дипломної роботи. Третій семестр присвячений поглибленій роботі над дипломним проектом та його презентацією. Визначено, що навчальний план програми «Інтегрований дизайн» передбачає 90 кредитів ECTS (30 кредитів за кожен семестр). Семестр включає обов'язкові модулі, завершення яких перевіряється модульними іспитами. Навчальний план містить інформацію про кількість кредитів, наданих за кожен модуль, за магістерську роботу та випускний іспит, який є одночасно захистом дипломної роботи. Описано процедуру оцінювання випускного іспиту та розрахунок сукупної оцінки за іспит. З'ясовано, що студенти закінчують магістерську програму, якщо вони отримують 90 кредитів ECTS. Вимоги до зарахування кредитів охарактеризовані у статті.

**Ключові слова:** Інтегрований дизайн, дизайн, ступінь магістра, навчальний план, модуль, Німеччина, магістерська робота, Кельнський університет прикладних наук, Кельнська міжнародна школа дизайну.

## INTRODUCTION

In contemporary fast changing reality, design is an integral part of every aspect of material and virtual world. It is through design that goods and services in social, political, economic and cultural contexts are presented and perceived. Design is a way of interfering into all the processes that take place in these contexts, but at the same time, it is a way of producing, acquiring, communicating and documenting the knowledge that can be gained in all these aspects of life. In modern technological and ever-changing realities, these features of design are especially attractive to young generation that is on the edge of choosing the direction of their vocational training and future profession. In Europe, "Design" specialty is gaining popularity and it is considered to be one of the most prestigious study programs in many higher educational establishments of Germany, France, Sweden, the Netherlands, Italy, Spain and other countries.

## THE AIM OF THE STUDY

The aim of the paper is to analyze specific features of "Integrated Design" Master's degree program at Köln International School of Design in order to outline aspects of positive experience that can be borrowed by developing countries for implementing similar study programs aimed at future designers' vocational training.

## THEORETICAL FRAMEWORK AND RESEARCH METHODS

Theoretical and practical issues concerning design, its role in modern world, different aspects of its application have been an interest to many scholars and scientists and





are presented in works of R. Deutch (2011), who studied design strategies for architectural practice; C. Eastman (2001), who dedicated his research to cognition in design education; S. Gramlich and P. Groche (2017), whose works present issues related to manufacturing integrated design. M. Keeler (2016) studied fundamentals of integrated design for sustainable building and Ch. Koch (2013) considered integrated design process as a concept for green energy engineering. H.-L. Park (2010), S. Vajna (2020), D. Wahl (2016), and K. Wallace (2000) studied integrated design engineering in terms of interdisciplinary and holistic product development.

Nevertheless, current scientific works and literature do not provide enough information concerning professional training of future designers ready to work in contemporary ever changing professional environment. That is why our attention was drawn to the peculiarities of this process at higher educational establishments of Europe where effective and qualitative training of future specialists is successfully implemented. In the course of our research, we paid special attention to Köln International School of Design (KISD) that is a part of Cologne University of Applied Sciences, one of the largest public universities in Europe, and is well known for its Bachelor's degree program in "Integrated Design" and subsequent Master's degree program.

While doing the research we have used a range of general scientific methods (study and analysis of reference, scientific and educational resources), as well as systematization and generalization. Our research is qualitative (descriptive) and includes observation, document analysis, and narrative inquiry.

### **RESULTS**

Master's degree program at KISD offers its students a vast range of critical, experimental and inventive researches in dynamic structure. Project- and student-oriented study in inspiring and contextualized environment is suitable for implementing problem-solving practices and techniques and provides students with high level of flexibility and independence. Graduates of the "Integrated Design" Master's degree program take on different roles and positions in spheres directly or indirectly related to design all over the world. They become directors of design studios, art directors, project managers, publishing editors, researchers, public relation specialists, lecturers, museum assistants, marketing managers, entrepreneurs, etc.

KISD is aimed at breaking traditional limits of designing through combination of diverse approaches, perspectives and practices used to solve issues and problems which are impossible to be solved within a single branch of designing knowledge and skills. The program encourages students to learn how design can influence the issues of modern culture, media, ecology, politics, and urban studies. The main component of the program is the completion of the thesis within one of the following thematic sections: "Urban Intensity and Resources", "Material Systems and Laboratory Culture", "Social and Public Innovations", and "Visual Culture and Politics". Pursuing their own research interests, students are involved in different branches of science, extend and develop their competence and concentrate on their research (Köln International School of Design: KISD, 2021). Students are welcomed to cooperate, explore and implement within the defined thematic sections, which provide environment for in-depth research and are aimed at extending, transforming and reconsidering the limits of design, theory and practice, as well as interdisciplinary methodologies. Master's degree students have a unique opportunity to immerse into integrated, intercultural and interdisciplinary atmosphere and be a part of research and practice-based designing processes.



A person willing to study the program must have a Bachelor's degree in Design or related science that presupposes 3.5 academic years (210 ECTS credits) and/or work experience in design branch. The language of studying is English and applicants must provide a certificate of the language knowledge (TOEFL, IELTS etc.). The program starts in summer semester and lasts for 3 semesters, includes 90 ECTS credits and requires an aptitude test.

Master's degree in "Integrated Design" gives students a great opportunity to get the experience of international studying and carry out transcultural research within the theme of their diploma paper. Students can take advantage of Erasmus or Double Degree exchange student programs in affiliated universities. Double Degree is a three-semester course of studying. In terms of this program, students can apply to Tongji University in Shanghai (China) and Chiba University in Japan. Students who study on Double Degree Program leave KISD after two semesters to study two other semesters in the accepting university. Thus, they prolong their course of study for 1 more semester. After completion of the thesis and its presentation in the accepting university, students of KISD come back to Cologne to take their final exam.

Besides, if students want to study one semester abroad, they can apply to one of the partner-universities if it is consistent with their individual plan of studying and Master's thesis. However, it will prolong their studying at KISD for the time spent abroad. Such students come back to Cologne and complete their master's degree paper during one semester.

At KISD, master's degree students work on their thesis throughout the course of study. During the first semester, they develop their vision and explore issues related to the thematic section they have chosen (Material Systems and Laboratory Culture, Urban Intensity and Resources, Social and Public Innovations, and Visual Culture and Politics).

During the second semester, they start their designing process and apply observation, exploration, experimentation and practical designer work to deal with their thesis.

The third semester is dedicated to in-depth work on the thesis and its presentation.

The first semester comprises 3 types of courses:

1. KISD projects and seminars: short-termed projects (2 weeks); medium-termed projects (6 months); long-termed projects (during the whole course of study) as well as scientific seminars (during the whole course of study). Practically all the projects and seminars refer to one or two thematic sections for thesis writing. All the information about courses and projects offered for each semester as well as the information about thematic section of the projects can be found in the catalogue of KISD courses.

2. Courses with master-classes:

– "MethodLab" which consists of 3-4 block seminars distributed throughout the semester;

– "Design Approaches" is a kind of introduction to KISD and takes place during first two weeks of the semester. Students get acquainted with the head of the study program, thematic sections, seminars, laboratories and everything they need to know to study at KISD;

– Mentoring: every semester is accompanied with a mentoring program that is closely related to educational process. During the first semester, mentoring program covers issues of feedback between students and mentors and their determination about Master's



degree thesis. Students start creating their own register in KISD space where they reflect their experience, share ideas etc.

3. Courses with students of the same thematic section. For each thematic section there are organized progress colloquiums where students meet KISD professors and students of the same thematic section to discuss some common vision of design perspectives in their branch of research, give feedback to other students, discuss section-related content and follow one's progress in the work on thesis (Köln International School of Design: KISD, 2021).

Selection of courses and the registration on the chosen courses can be performed online on a special KISD online platform where students can find a detailed description of registration process and course selection. Students are to register for scientific seminars and projects only. They do not need to register for master-specific courses as it is done automatically.

Extracurricular activities at KISD include Culture Lectures that are delivered every Wednesday evening by different KISD professors. Besides, there are so-called KISDTalks dedicated to design history and design research, design theory, including historical development of design, its social, cultural and economic aspects and their impact on design. They are diverse in terms of themes and speakers. International experts in different branches of science and designers are regularly invited there to be speakers (Hochschule Anhalt, 2021).

Curriculum of "Integrated Design" Program is presented in Table 1:

Table 1

**Curriculum of the "Integrated Design" Master's degree program**

Semester 1 (summer term) 30 ECTS credits		Semester 2 (winter term) 30 ECTS credits		Semester 3 (summer term) 30 ECTS credits	
<b>"Integrated" modules:</b>	<b>25 ECTS credits:</b>	<b>"Interdisciplinary" modules:</b>	<b>25 ECTS credits:</b>	<b>"Elaborated" modules</b>	<b>25 ECTS credits:</b>
Integrated Design Studio	9	Interdisciplinary Exploration	7	Individual Thesis Work	20
Prototyping and Modelling Studio	7	Individual Project/ Thesis Brief	9	Presentation	3
Emerging Design Issues	3	Teaching Assistance	5	Thesis Defence	2
Professional Opportunities	6	Professional Opportunities 2	4		
<b>"Relate and Reflect 1" modules:</b>	<b>5 ECTS credits:</b>	<b>"Relate and Reflect 2" modules:</b>	<b>5 ECTS credits:</b>	<b>"Relate and Reflect 3" modules:</b>	<b>5 ECTS credits:</b>
Social Class Project	2	Mentoring 2	2	Mentoring 3	2
Mentoring 1	2	Progress Colloquium 2	3	Progress Colloquium 3	3
Progress Colloquium 1	1				

All the compulsory modules enlisted in the curriculum must be completed and verified by means of module exams. All the module examinations are listed in the module catalogue as well as the information concerning the selection of modules and courses. Curriculum and exams are organized in such a way that all the exams are to be held till the end of the last semester in accordance with standard duration of the study program. Students can take exams in more modules than it is required for the obtaining of the



necessary quantity of modules. The results of these optional modules can be presented in the certificate if the student wishes so. However, they are not taken into account while calculating the final cumulative grade.

Similar to Bachelor's program, Master's degree program is divided into 2 separate courses of study – "Interdisciplinary Studies in Design" and "European Studies in Design". Their module exams differ slightly (TH Köln (University of Applied Sciences), 2021).

Students following "Interdisciplinary Studies in Design" must take the following module exams:

Module exam	Percentage of the final cumulative grade (%)	ECTS credits
"Integrated"	15	22
"Interdisciplinary"	20	25
"Relate and Reflect 1"	5	5
"Relate and Reflect 2"	5	5
"Relate and Reflect 3"	5	5

Students following "European Studies in Design" must take the following module exams:

Module exam	Percentage of the final cumulative grade (%)	ECTS credits
"International"	15	25
"Interdisciplinary"	20	25
"Relate and Reflect 1"	5	5
"Relate and Reflect 2"	5	5
"Relate and Reflect 3"	5	5

For "International" module exam students obtain credits during their first semester in the partner-university on the basis of different courses offered there. Partner-universities have to verify the quantity of the obtained credits. The head of the exam board makes a decision concerning the recognition of the module exams taken at partner-universities abroad.

Credits are assigned to each component of the master's degree program according to European Credit Transfer System. Credits are a quantitative indicator of the workload necessary to complete a component of the program successfully. This workload includes courses, preparation to them and further work, self-didactic research, exams and preparation to exams. Workload that is necessary for successful completion of the Master's program is 60 ECTS credits for an academic year (full-time study). Students get credits only if they successfully complete the module. It means that students obtain the general quantity of credits for each module if they pass it at least with the grade "sufficient" irrespective of the grade for the exam. For successful completion of Master's program students need to obtain 60 ECTS credits in general. Curriculum provides information on the quantity of credits assigned to each module, to Master's thesis and the final exam. More detailed information is presented in module catalogue (TH Köln (University of Applied Sciences), 2021).

Module content can be studied within one course or different courses with different teaching methods. Each module exam can be divided into some separate exams but, in any case, the aim of the exam(s) is to determine whether students have knowledge of



the main topics, if they possess necessary competencies and if they are able to apply obtained knowledge and skills independently. Requirements to module exams must correspond to learning outcomes defined specially for each module and presented in module catalogue. During the exam, students' knowledge of the previous modules content can be tested.

There are different types of module knowledge testing but the dominant form is exams which can be written (and last from 1 to 3 hours), oral (last for 10-30 minutes for each student) or conducted in other forms or their combination. The type of the exam is determined for each module by examination board at the beginning of each semester with consideration of module structure and after consultation with appropriate experts. If the testing of students' knowledge includes several components, examination board has to decide how to assess these components. They may use special system of assessment with different indicators; otherwise, the final grade is calculated as the arithmetic mean of individual grades. As a rule, the examination board announces exam schedule one month before the examinations (Examination regulations for the Master's program in Integrated Design with the study courses "Interdisciplinary Studies in Design" and "European Studies in Design", 2021).

Master's thesis has to be submitted as a written project work. The student has to prove that he/she can independently fulfill tasks related to his/her branch of science during a definite period of time presenting specific features of the subject of the thesis in interdisciplinary contexts with the help of scientific and subject-related methods.

Thematic sections for Master's thesis are quite diverse in their content:

1. **Material Systems and Laboratory Culture.** This section is related to problems caused by anthropogenic climate changes and the excessive use of natural resources, which produce harmful effect on ecosystems all over the world. It considers the need of changes in terms of renewable materials and resources, their distribution, sustainable way of thinking (instead of short-term income) and refusal from orientation onto a human in favor of diverse and inclusive perspectives, critical reflection of life cycles of products, systems and services (Eastman et al., 2001). Working with organic and non-organic substances, such as seaweeds, algae, fungi, fibers and particles, as well as with digital technologies, executive mechanisms, LEDs, engines, sensors, open platforms and participatory processes, design can explore new textiles, sensitive structures, material behavior, interactive objects and tangible networks. The aim is to activate systemic changes (Groche et al., 2017).

2. **Social and public innovations.** In public and social sectors, the pressure related to innovations is constantly increasing. New technologies completely change traditional methods of work. Expectations and requirements for social and public services are increasing while public resources and budget are decreasing. Besides, new expectations of young people concerning their future work and workplace lead to a considerable pressure onto public and social services (Wallace & Blessing, 2000). In this section, students analyze the role of design in these processes and consider how constant innovations and transformations can be organized, created and established with the help of design. In close cooperation with other scientific branches, for instance social sciences, information technologies, media studies or ethics students experiment and present projects concerning common creation and advancement of technology-oriented transformations, development of active participation model, testing and modeling new work cultures and methods of work that presuppose application of design (Keeler et al., 2016).



**3. Urban intensity and resources.** Cities concentrate more and more power, capital and knowledge as well as people, data, goods and finance. Because of this, many cities cannot solve problems related to supplies, social inclusion, economic integration and infrastructure. At the same time bodies, things, environments and technologies quickly become more interrelated. These interconnections open new opportunities – cultural, ecological, social, and economic – for alternative future of big cities. The main focus of this section is to explore these opportunities. With the help of spatial and urban analysis, concepts of development, project scenarios, speculative interventions and experimental prototypes students look for answers of how to live in the future and how to design urban space, infrastructure and buildings to live there the way they see it (Koch, & Buhl, 2013; Park & Lee, 2010). Should we perceive cities as physical and virtual resource available for everyone? How do people interact and cooperate with their urban environment? What are the complicated and heterogeneous systems for their activities? What social, political and technological achievements and consequences emerge in the result of acceleration and tightening of urban space and time structures? How can design be involved in these processes?

**4. Visual Cultures and Politics.** Modern everyday culture and media culture perceive visualizations in unique cultural way. Images and methods of imagining often determine identity, recognition and transformation in society. Media and visual images form economic, political and social discourses evoke some mood, thoughts and even world views. They usually appear together with auditory, verbal or tactile phenomena that allow them to develop in a different way. As digital and media processes gradually cover all aspects of everyday life, critical reflection of design, application of images by users and their influence on them is becoming more and more important (Wahl, 2016). What impact can visual design have on modern society? How can it be used to communicate? What are the possibilities and limits of visual argumentation and how can visual processes draw attention to certain issues? These and similar questions are considered through material-practical and reflexive designing processes. The scope of possible perspectives includes formal and informal forms of communities, cooperation and co-existence; communication, cooperation and participation in digital communities and social media; processing and presentation of data in informational design; social, political and cultural consequences of digitalization; forms of communication in economic and political advertisement; design as fiction; methods and forms of branding and identity; new forms of cultural and esthetic representation in post-digital era (Deutsch, 2011; Vajna, 2020).

To carry out qualitative research within these thematic sections, students must take part in interdisciplinary collaboration.

In terms of our research, it is also important to mention some regulations concerning Master's thesis writing, presentation and assessment. The theme of the thesis can be elaborated by any professor that was appointed as examiner. This professor can also function as advisor of the thesis. Students can refuse from the theme of the thesis only once and if so, must do it during first two weeks of its announcement without explaining the reason. Thesis can be completed in some institution beyond the university if it can provide appropriate help and consulting. Students can give their own suggestions as to the theme of the thesis. Master's thesis can also be written as a part of some common team project if the contribution of the student can be easily tracked and assessed. Students have 14 weeks to complete the thesis. However, if students wish so, the term for thesis completion can be reduced and the final exam can be held earlier than planned (Examination regulations for



the Master's program in Integrated Design with the study courses "Interdisciplinary Studies in Design" and "European Studies in Design", 2021).

Master's thesis is assessed by three examiners. Two of them are supervisors of the thesis and one professor is appointed by the board. If the grades of these examiners are different, the grade for the thesis is calculated as an arithmetical mean. However, the grade "sufficient" or "good" are given only if at least two grades are "sufficient" or "good".

The student has to make the presentation of the thesis no later than one week after its submission. The presentation is in open access to all students and university members. The format of the presentation can be chosen by the student. It is assessed as a partial grade that is taken into account during the defense of the thesis as 20 % of the final grade. It should be stressed that examiners' decision concerning student's passing the defense is based on the presentation.

Students obtain 23 ECTS credits for completion of the Master's thesis and its presentation and 2 more credits for final oral exam that complements the thesis. However, it is assessed as a separate exam that must be held during 2 weeks after the submission of the master's thesis. Its main aim is to define whether the student is capable of oral presentation and independent substantiation of the results and conclusions of the thesis, its scientific and methodological foundations, interdisciplinary and multicultural contexts and importance of the thesis for practice and real life. Students can be allowed to take the final oral exam under the following conditions: 1) they have passed all the module exams; 2) they obtained at least "sufficient" grade for the thesis including the presentation.

Examination Board has to inform the students about dates of their final oral exam (defense of their thesis). The duration of the exam is usually 30 minutes per student. If a student fails the exam, he/she has right to take it again. Students who pass master's thesis including the presentation and final exam (defense) obtain 25 ECTS credits. Master's thesis and final exam are assessed with a final cumulative grade. Master's thesis and presentation account for 80 % of the grade and the final oral exam – for 20 % (Examination regulations for the Master's program in Integrated Design with the study courses "Interdisciplinary Studies in Design" and "European Studies in Design", 2021).

Students pass master's exam if they obtain 90 ECTS credits. It requires that students passed all the necessary module exams and obtained at least "sufficient" grade for the thesis and final oral exam. The student doesn't pass the master's exam if at least one of the exams is assessed as "insufficient" or recognized as "insufficient". In this case, the student must be notified about his/her failure. The student then is excluded from the list of students and the head of the examination board is to give them an official document with a list of passed exams and their grades and exams that were not passed.

In case students pass everything, they receive a certificate about passed master's exam during 4 weeks after the final exam. This certificate contains all grades and credits for all module exams, theme of the thesis, grades and credits for the thesis and final oral exam, final cumulative grade for master's exam and transferred or recognized grades from other universities. Final cumulative grade for the master's exam is partially weighed as a grade for module exams and partially for final oral exam (defense). As it was mentioned before, grades for optional courses are not taken into account while calculating final cumulative grade for the master's exam. Students are given diploma with certificate about passing the Master's exam and its date. The diploma verifies the acquiring of the master's degree.



## CONCLUSIONS

In the result of the conducted research, we came to the following conclusions:

- “Integrated Design” program is a project- and student-oriented study in inspiring and specialized environment that is suitable for implementing problem-solving practices and techniques and provides students with high level of flexibility and independence.

- The main component of the program is the completion of the thesis within one of the thematic sections: Material Systems and Laboratory Culture, Urban Intensity and Resources, Social and Public Innovations, and Visual Culture and Politics.

- The duration of the program is 3 semesters. During the first semester, students develop their vision and explore issues within the thematic section for the thesis writing and have 3 types of courses (KISD short-termed, medium-termed and long-termed projects and seminars; courses with master-classes (MethodLab, Design Approaches, Mentoring); and courses with students of the same thematic section). During the second semester, they start their designing process and apply observation, exploration, experimentation and practical designer work to handle their thesis. The third semester is dedicated to in-depth work on the thesis and its presentation.

- Curriculum of the Integrated Design program presupposes 90 ECTS credits for the whole study with 30 credits for each semester. The semester includes compulsory modules, the completion of which is verified by module examinations. Curriculum provides information on the quantity of credits assigned to each module, to Master’s thesis and final exam, which is the defense of the thesis. The grade for the final exam is calculated as a cumulative grade.

- Students complete Master’s degree program if they obtain 90 ECTS credits.

In our further research, we have an intention to study student exchange programs in affiliated universities of KISD, such as Erasmus or Double Degree. Of special interest is the study of students at Tongji University in Shanghai (China) and Chiba University in Japan. It will allow to outline specific features of “Design” Master’s degree program in Asian countries.

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### **DEVELOPMENT OF FUTURE TEACHERS' PEDAGOGICAL SKILLS: COMPARATIVE ANALYSIS OF FOREIGN AND DOMESTIC EXPERIENCE**

#### **ABSTRACT**

*The issue of developing teachers' pedagogical skills is raised in various countries around the world. The paper reveals the results of the comparative study of domestic and foreign experience in the development of future teachers' pedagogical skills and highlights the best practices of European countries. Due to the analysis of scientific researches, the general tendencies of modern pedagogical education development have been outlined. The principles of implementing innovative approach to pedagogical education for the development of future teachers' pedagogical skills have been substantiated. The peculiarities of higher pedagogical education in Germany and Great Britain have been analyzed, as it is in these countries that modern innovative systems of future teachers' training have been designed. It has been found out that the prevailing methods of teaching while developing future teachers' pedagogical skills in our country are interactive methods that contribute to practical consolidation of acquired knowledge, skills and abilities. The importance of forming pedagogical skills in the process of professional training of future teachers has been emphasized. The main components of the development of future teachers' pedagogical skills in Great Britain and Germany as well as personality qualities of teachers necessary for the development of pedagogical skills have been characterized. As a result of the comparative analysis of the foreign countries experience, it has been found out that training focused on the development of professional competence of a specialist is carried out effectively only under conditions of productive relationship between the teacher and students, positive psychological climate, equal partnership based on dialogue and joint activities. The development of pedagogical skills is facilitated by active forms and methods of teaching. It has been determined that the system of professional development and in-service training of teachers is in the need of improvement.*

**Keywords:** *pedagogical skills, pedagogical experience, teaching methods, system of future teachers' training, future teachers, Great Britain, Germany.*

#### **АНОТАЦІЯ**

*Питанню розвитку педагогічної майстерності вчителів приділяється увага в різних країнах світу. У статті розкрито результати порівняльного дослідження вітчизняного та зарубіжного досвіду проблеми розвитку педагогічної майстерності майбутніх учителів та виокремлено кращі практики європейських країн. На основі аналізу наукових праць дослідників виокремлено загальні тенденції розвитку сучасної педагогічної освіти. Обґрунтовано принципи реалізації інноваційного підходу у педагогічній освіті для розвитку педагогічної майстерності. Проаналізовано особливості систем вищої педагогічної освіти Німеччини та Великобританії, оскільки саме у цих країнах створено сучасні інноваційні системи підготовки*



майбутніх учителів. Встановлено, що пріоритетними методами навчання в системі розвитку педагогічної майстерності в нашій країні стають інтерактивні методи, які сприяють практичному закріпленню набутих знань, умінь і навичок. Наголошено на важливості формування педагогічної майстерності в процесі професійної підготовки майбутніх вчителів. Схарактеризовано основні складові розвитку педагогічної майстерності педагогів Великобританії й Німеччини та особистісні якості, які необхідні для розвитку педагогічної майстерності учителів. У результаті порівняльного аналізу досвіду зарубіжних країн було з'ясовано, що навчання, орієнтоване на розвиток професійної компетентності спеціаліста, здійснюється ефективно лише за умови налагодження продуктивного взаємозв'язку між викладачем та здобувачами освіти, позитивного психологічного клімату, рівноправного партнерства, побудованого на діалозі, спільній діяльності. Розвитку педагогічної майстерності сприяють активні форми і методи навчання. Водночас, потребує удосконалення система професійного розвитку та підвищення кваліфікації вчителів.

**Ключові слова:** педагогічна майстерність, педагогічний досвід, методи навчання, система підготовки майбутніх учителів, майбутні вчителі, Велика Британія, Німеччина.

## INTRODUCTION

Considering current development of Ukraine and revival of spiritual culture of the Ukrainian people there is an urgent need for education of the developed person capable of focusing their activities onto the humanistic development of the society and self-development by means of assimilation of universal values. In this process, pedagogical educational institutions are very important as they strengthen the requirements for the personality of the teacher, their ability to develop the spiritual realm of students.

Nowadays, the issue of the importance of teachers in society is of current interest. It should be emphasized that over time, new requirements are set for the teacher's personality and the quality of their professional and pedagogical activities (Zyazyun, 2016). The main task facing the teacher is a decent upbringing of the younger generation. They must be able not only to teach and educate, but also to find an approach to each student, skillfully using special pedagogical methods, demonstrating high level of pedagogical skills. This is emphasized in the Laws of Ukraine "On Education", "On the formation and placement of state order for training specialists, scientific and pedagogical staff, working personnel, their in-service, further training and refresher training", the National Strategy of Education Development in Ukraine.

The process of reforming modern education puts forward new requirements to the training of teachers, according to which the importance of their pedagogical skills is growing. In this regard, universities face the task of developing future teachers' skills because teachers are not only subjects of professional activities for the training of highly qualified professionals, but also act as active participants in political and socio-cultural processes and changes in the country.

The essence of pedagogical skills is reflected in the personality of the teacher, their ability to take creative initiative. Pedagogical skills of the teacher is the self-realization of the teacher's personality in educational activities that provide self-development of a student's personality. It is a synthesis of the teacher's personality traits necessary for the implementation of pedagogical activities at a high level.

Teacher's pedagogical skills are the highest level of teaching activity, a manifestation of the creative activity of the teacher's personality. Pedagogical skills are a



set of personality traits that provides self-organization of a qualitative professional activity on a reflective basis. Today, the teacher needs to develop the ability to take into account changing socio-economic conditions, the general situation in the education system and at the same time make decisions and predict the consequences of these decisions, be able to cooperate, etc. (Yunusova et al., 2020).

Analysis of teachers' experience shows that the future of students depends on their knowledge, skills and abilities. The most important thing is to improve the educational process, increase pedagogical skills of the teacher, who has always been and remains the core of any pedagogical system. The issue of developing pedagogical skills of the teacher is directly related to constant optimization of the educational process. This raises the problem of the ratio of the teacher's creativity and a certain algorithm of actions that they must constantly adhere to.

#### **THE AIM OF THE STUDY**

The aim of the paper is to analyze domestic and foreign experience in the development of teachers' pedagogical skills and highlight the best practices of European countries that can be borrowed and implemented in our country.

#### **THEORETICAL BASIS AND RESEARCH METHODS**

In domestic and foreign literature, serious attention is paid to the problem of pedagogical professionalism, as well as to the formation and development of teachers' pedagogical skills. Thus, studies of the role of the teacher, the meaning and content of their professional activity are reflected in the works of M. Acost, U. Dilafruz, M. Esteves, J. Galant, V. Hrynyova, L. Kaidalova, V. Kovalchuk, P. Lundgren, K. Melanie, N. Shchokin, T. Vakhrushchev, N. Volkova, A. Zafeirakou, I. Zyazyun, and others.

I. Zyazyun in his research revealed the essence and structure of professional and pedagogical activities in general, revealing the elements and techniques of pedagogical skills (Zyazyun, 2016). V. Kovalchuk substantiated theoretical and methodological principles of the development of pedagogical skills in the system of postgraduate education (Kovalchuk, 2014). L. Kaidalov explored the essence and components of pedagogical skills (Kaidalova et al., 2014). V. Hrynyova points out that today there is a problem of identifying the subjective characteristics of teachers that determine the productivity of their pedagogical activities and provide conditions for the development of pedagogical skills (Grinyova, 2013).

Despite the large number of publications on the formation and development of pedagogical skills, there is a need to compare domestic and foreign experience in the development of teachers' pedagogical skills and implement the best practices of the latter in higher pedagogical education of Ukraine.

The research was carried out with the use of general scientific methods (study, analysis and synthesis of reference, overview of scientific educational print and on-line sources), as well as systematization and generalization. The research is qualitative (descriptive) and is based on observation and narrative inquiry.

#### **RESULTS**

Under the conditions of the educational strategy changes, the issue of teachers' professional skills becomes relevant and increases the requirements for the quality of future teachers' training and further improvement of their professional teaching competence. A necessary condition for the professional development of teachers today is not only profound professional knowledge and high level of education, but also constant replenishment and



updating of knowledge, high level of professionalism, desire to educate children within the humanistic approach [2].

Scientists and teachers try to identify general trends in the development of modern pedagogical education. Nowadays, European countries (Germany, Great Britain, France and Poland) adhere to the following principles of implementing innovative approach to pedagogical education aimed at the development of teachers' pedagogical skills:

- continuous professional development of the teacher;
- democratization of pedagogical education and the whole structure of activities of pedagogical educational institutions;
- broad self-government;
- focus on creative activity, unique personality of each teacher; provision of a differentiated personal and creative approach to their training;
- consolidation of socio-ethical, general cultural and professional development of the teacher's personality under the conditions of wide humanization of pedagogical education;
- humanization of education; careful and attentive attitude to the person who is the subject of communication, cognition, and social creativity;
- unity of fundamental and practical orientation in the holistic process of teacher training;
- continuous improvement of pedagogical education system, which provides openness, flexibility, dynamism of changes in the content, forms and methods of teacher training in accordance with modern requirements and forecasts for the future;
- unity and consistency in the work of schools, pedagogical educational institutions, institutes of teacher education, institutes of teachers' further training;
- implementation of the content, forms and methods of teacher training with the use of new information technologies (Lundgren, 2014; Yanan & Hasanova, 2020).

In European countries, common European recommendations for the training of contemporary teachers are being formulated. The proposals of the Council of Europe state the need to develop teacher competence. European integration in education depends not only on didactic knowledge and methodological concepts, but also to some extent on what is "transmitted" to the teacher (pluralism and multiculturalism that are European values, commitment to democracy and cultural diversity). This is manifested in the teacher's recognition of pluralism, cultural heritage, their desire for mutual understanding. The perception of such a way of life is the perception of European integration (Zafeirakou, 2002).

New educational paradigms complicate pedagogical activities of teachers. Besides, personal qualities of the teacher are of great importance for the development of the student's personality. Requiring from the students the development of such qualities as sociability, ability to adaptation, creativity, and self-confidence, teachers should develop them in themselves.

For example, in Germany, the development of teachers' pedagogical skills presupposes a set of their personal qualities. Among them are high ethical standards, breadth of views, adaptability, interest to innovation, curiosity, willingness to take responsibility, ability to analyze and solve important problems, accessibility, attention to personality, high civic activity, ability to work in a team, independence, high resilience in stressful situations, emotional stability (Lundgren, 2014). These qualities are also necessary for intercultural communication of specialists in the field of education.



We consider it essential to analyze the characteristics of higher pedagogical education systems in Germany and the United Kingdom, because it is in these countries that modern innovative teacher training systems have been developed.

The current system of teacher training in Germany includes two stages: university studies (before the First State Examination) and two years of teaching practice (until the Second State Examination). University training of future teachers consists of three components: the study of 2–3 academic disciplines that the future teacher will teach at school; study of pedagogical sciences; and teaching practice at school.

The training of future teachers also includes the academic discipline “Pedagogical Sciences” which takes 25 % of the curriculum for teachers of primary and secondary schools, and 20 % – for teachers of secondary schools. This is a significant share, given that the training of gymnasium (specialized high school) teachers is dominated by the study of scientific subjects.

State regulations define the following branches and sections of pedagogical and related humanities that should be taught at the university: education (pedagogy, philosophy); development and training (psychology); social preconditions of education (sociology, pedagogy); institutions and forms of the education system organization (pedagogy, sociology, law); teaching and general didactics. At the level of an individual university, these state regulations are implemented in curricula that take into account local conditions and combine compulsory and elective parts.

At the end of their studies at the university, students take the First State Exam in two or three academic disciplines and pedagogical sciences – both in writing and orally. Prior to this, the student must write one test paper (in one academic discipline). Exam requirements vary slightly depending on the teaching position the graduate wishes to obtain. After successfully passing the First State Exam, the future teacher undergoes a two-year teaching practice – “referendariat” (probationary training). It is a professional practical training at school and at the so-called training seminar. The main part of the professional training is attending lessons, conducting trial lessons and independent teaching. At the end of the probationary training, teachers take the Second State Exam, which consists of a written test, two trial lessons, and oral exam. Successfully passed Second State Exam marks the end of teacher training (Yanan & Hasanova, 2020; Esteves et al., 2017).

A distinctive feature of the teacher training system in the UK is the availability of a large number of educational routes for the teaching profession and the development of pedagogical skills. There are currently seven major university qualification programs for higher pedagogical education:

1. Bachelor of Pedagogy (Bachelor of Education) – a course that takes four years of study at a pedagogical college of the university, focused on special disciplines and aimed at training primary school teachers.

2. Course of study, which lasts for three years and provides bachelor’s degree in pedagogy with or without honors. The study presupposes six academic disciplines and has less clear focus on subject specialization. A Bachelor of Arts or a Bachelor of Science degree with Qualified Teacher Status and a specific specialization can be awarded after another year of study.

3. Course of study for the degree of Bachelor of Pedagogy. It is shortened (lasts for two years) and provides training for secondary school teachers in academic disciplines that lack teachers in the country.



4. Three / four-year full course for a Bachelor of Arts or a Bachelor of Science with Qualified Teacher Status. Emphasis is placed on subject specialization. At the end of the course, future teachers undergo teaching practice at school, so students who realize that they do not like the teaching profession, can interrupt the teaching course and complete their education.

5. Postgraduate Certificate in Education at the pedagogical faculty of the university. The training lasts for one year, the course takes place after obtaining a Bachelor of Arts or Sciences. Mostly it is aimed at training secondary school teachers.

6. Two-year part-time post-graduate course (two-year part-time PGCE). Here only academic disciplines that lack teachers are studied. The course is designed mainly for students who cannot study under the full course program.

7. Two-year full-time course for obtaining a postgraduate certificate, associated with a change of specialization (two-year full-time subject conversion PGCE course). The course is designed for those who want to teach an academic discipline that is not in their specialization (Yunusova et al., 2020).

The system of future teachers' training in the UK is aimed at forming the model of a skilled teacher that presupposes a set of requirements to teachers:

1. Teachers are knowledgeable practitioners who deeply understand the content of academic disciplines and successfully involve students in their study by demonstrating the relationship of content with everyday practical life; they show curiosity and have a mindset that encourages them to learn throughout life in order to improve their pedagogical skills; they have the ability to integrate the foreign context, international issues and prospects into the standard school and university curriculum; they use the research model of learning; they encourage students to actively use different ideas for new knowledge, problem solving, development of their own understanding of the content of the discipline; they encourage students to analyze and reflect on their own learning direction; they use various forms of assessment to assess and monitor the learning of students.

2. Teachers are profound thinkers who are able to solve problems skillfully, who understand the nature of complex problems; collect, analyze, systematize information from various sources; they are tolerant to ambiguity and uncertainty, offer a potentially viable solution to the problem; they use their skills in favor of solving both individual learning problems of their students and colleagues, and collective issues of the school community; they observe their pedagogical activities, use new strategies to find individual approaches to each student, as well as a variety of resources to achieve maximum learning outcomes of students; they counsel students and help them overcome challenges and learning difficulties.

3. Teachers are professionals with established multicultural values who recognize, value and respect ethnic and cultural diversity of society, and teach students to work effectively with people from different layers of society; they are aware of the contribution of different cultures to the development of their country, recognize the multicultural space of the educational institution and use appropriate educational strategies for its cultural enrichment; they recognize different levels of academic and social literacy of students and help them to combine them.

4. Teachers are aware of the dynamics of global change in the world, they understand international issues of a global nature, keep track of key events in the world and help students understand them through daily interaction; they link the content of academic disciplines to authentic global problems and perspectives; they express balanced views on



global issues and teach students to reflect on them from different points of view (Yunusova et al., 2020).

Under the conditions of current reformation in the system of pedagogical education in the UK, its development is at a new qualitative level – the tasks and functions of forming structural elements of teachers' pedagogical skills are an integral part of every teacher's activity, regardless of their specialization. It also concerns mentor-teachers who are active participants of continuous professional development of future teachers.

It is clear that from the point of view of EU countries and teachers-practitioners, pedagogical skills of modern teachers have a multicomponent structure, so it provides a holistic, integrated approach to its formation and development. Experts note that global knowledge and abilities should be developed through an interdisciplinary approach, which is regarded as a new methodology for developing curricula of higher education institutions in the EU. Interdisciplinary approach can be realized by both integrating new content and forms of education into existing programs and by introducing new academic disciplines (Yuldashevich & Kenzhebekova., 2021).

According to European experts, the development of education on the continent in the coming decades will largely depend on recognizing the importance of continuing professional development of teachers, supporting real initiatives to improve pedagogical skills and solving problems of additional certification of teachers in the process of further or in-service training. Currently, at the international level, a systematic approach to the modernization of continuing education of teachers is being elaborated with the consideration of all aspects of their professional development. Thus, the content of teacher training and the quality of their continuous professional development are two of the most important elements of modernizing pedagogical education in Europe (Botirova, 2020).

Taking the above into consideration, we have defined aspects of foreign experience that can be useful for developing and modernizing the system of teachers' pedagogical skills in Ukraine: enhanced role of teaching practice throughout the whole process of studying at the higher educational institution; decentralization of postgraduate pedagogical education; professional adaptation of beginning teachers; intensified teacher professional development on the basis of the school in accordance with their interests and development programs of educational institutions; active interaction of schools with universities and other institutions of further training; support of teachers by university officials, authorities, members of the public; variety of professional development forms; organizational support for teachers during professional development; the use of distance learning as an alternative form of training and retraining of teachers.

Providing conditions for the successful implementation of the teacher's professional mission is, first of all, the responsibility of the system of postgraduate pedagogical education, which must provide psychological and pedagogical training by means of refresher or in-service courses, probationary teacher training, methodological work (Kovalchuk, 2014).

A structural element of teacher education is the process of improving their skills, which is aimed at teachers' cognition of new theories and practices of pedagogical activities, advanced pedagogical technologies, as well as at developing their ability to independently acquire knowledge necessary for professional development (Kovalchuk, 2015; Dilafroz, 2021).

Nevertheless, the purpose of the professional development is fulfilling the general goal of postgraduate education – enriching professional and general culture of the teacher, finding effective ways of adult education.





The development of competent pedagogical staff within the framework of further training can be carried out more intensively under the condition of its modernization. Certain steps in this direction have already been taken in our country – the transition to personality-oriented education in courses where the activity-competence approach is implemented.

The experience of foreign countries shows that training focused on the development of professional competence of a specialist is carried out effectively only under the condition of productive relationship between teacher and students, positive psychological climate, equal partnership based on dialogue, and joint activities.

The priority methods of teaching aimed at the development of pedagogical skills in our country are interactive methods, which focus on the practical consolidation of acquired knowledge, skills and abilities. Today, the most common methods of active learning are workshops, educational group discussions, games, role-plays, programmed learning. They contribute to the formation of effective skills of business communication, interpersonal interaction and thus increase the overall competence of the teacher.

#### CONCLUSIONS

The core of pedagogical skills is pedagogical experience as a set of methods and forms, techniques and technical means of education used by the teacher. Training of teachers and qualitative provision of their continuing pedagogical education is one of the main components of the education development.

Analysis of the pedagogical experience of foreign countries allows us to conclude that teaching focused on the development of pedagogical skills requires an organic combination of its elements in the comprehensive training of teachers (teaching practice is of particular importance in this process). Active forms and methods of teaching contribute to the development of the studied quality. The system of professional development and further (advanced) training of teachers needs to be improved.

The prospects of further research include exploring the system of teacher's professional development and further training in countries of Western Europe to outline positive experience that can be borrowed and implemented in the system of teacher education and professional development in Ukraine.

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### **CROSS-DISCIPLINARY APPROACH TO PROFESSIONAL TRAINING: INTERNATIONAL EXPERIENCE**

#### **ABSTRACT**

*The article considers the peculiarities of cross-disciplinary educational programs in various foreign educational institutions. Emphasis is placed on reforming the education system using a cross-disciplinary model of education in accordance with international standards and labor market requirements. The experience of implementing a cross-disciplinary approach in different specialties has been analyzed. Ways to equalize additional skills that are not provided by educational programs, using a cross-disciplinary approach have been outlined. The importance of using a cross-disciplinary approach as the main part of interdisciplinary studying has been emphasized. The necessity of using cross-disciplinary studying as an integral part of innovative educational techniques has been highlighted. Cross-disciplinarity is described as one of the main integrative teaching methods. Clear definitions of concepts of cross-disciplinarity, multidisciplinary, and transdisciplinarity have been given. Cross-disciplinary approaches in educational programs at Brown University (Rhode Island, USA), Warren Alpert Medical School of Brown University (Rhode Island, USA), Vienna University of Applied Arts (Universität für angewandte Wunst Wienst), IT University of Copenhagen (Copenhagen, Denmark), Hong Kong University of Science and Technology (Guangzhou), Roberts Wesleyan College (Rochester, NY), Harvard Graduate School of Education (Cambridge, MA) have been analyzed. Special attention has been paid to the Scholarly Concentrations program; a long-term mentoring program based on cross-disciplinary approach that covers all four years of study at Alpert Medical School. It is an optional element of the curriculum that provides students with additional opportunities to develop the skills and abilities through research, scientific and extracurricular experience in one of the twelve areas of science concentration.*

**Keywords:** cross-disciplinarity, interdisciplinarity, cross-disciplinary programs, cross-disciplinary approach, cross-disciplinary training.

#### **АНОТАЦІЯ**

*У статті розглянуто особливості міждисциплінарних освітніх програм у різних зарубіжних навчальних закладах. Акцент зроблено на реформуванні системи освіти з використанням міждисциплінарної моделі освіти відповідно до міжнародних стандартів та вимог ринку праці. Проаналізовано досвід впровадження міждисциплінарного підходу за різними спеціальностями. Окреслено шляхи вирівнювання додаткових навичок, які не передбачені освітніми програмами, за допомогою міждисциплінарного підходу. Наголошено на важливості використання міждисциплінарного підходу як основної частини міждисциплінарного навчання. Висвітлено необхідність використання міждисциплінарного навчання як невід'ємної частини інноваційних освітніх технологій. Міждисциплінарність описується як один*



з основних інтегративних методів навчання. Дано чіткі визначення понять міждисциплінарності, мультидисциплінарності і трансдисциплінарності. Проаналізовано міждисциплінарні підходи в освітніх програмах університету Брауна (Род-Айленд, США), Медичної школи Уоррена Альперта університету Брауна (Род-Айленд, США), Віденського університету прикладних мистецтв (Universität für angewandte Kunst Wien), Технічного університету Копенгагена (Копенгаген, Данія), Гонконзького університету науки і техніки (Гуанчжоу), коледжа Робертса Весліана (Рочестер, штат Нью-Йорк), Гарвардської вищої школи освіти (Кембридж, Массачусетс). Особливу увагу було приділено програмі «Наукові концентрації» (Scholarly Concentrations) – довгостроковій програмі наставництва на основі міждисциплінарного підходу, яка охоплює всі чотири роки навчання в медичній школі Уоррена Альперта. Це факультативний елемент навчальної програми, який надає студентам додаткові можливості для розвитку вмінь та навичок шляхом дослідження, наукових розвідок та позакласної діяльності в одному з дванадцяти напрямів науки.

**Ключові слова:** міждисциплінарність, міждисциплінарні програми, міждисциплінарний підхід, міждисциплінарна підготовка, програма підготовки.

## INTRODUCTION

Processes related to globalization and digitalization are accompanied by changes in all areas of human life, which requires constant acquisition of new skills and competencies. This necessitates the need to introduce the latest models of education aimed at meeting personal needs and demands of the labor market.

State policy in Ukraine is aimed at reforming the education system in accordance with its international standards and labor market requirements. The Strategy for the Development of Higher Education in Ukraine for 2021–2031 (Strategy for the development of higher education in Ukraine for 2021–2031, 2020) focuses on:

- ensuring the quality and accessibility of higher education for different strata of the society;
- complying the content of educational programs with world trends;
- developing the system of state standards of higher education on the basis of qualification requirements;
- ensuring compliance of the content of higher education with the current and strategic goals of the country;
- updating the content of educational programs;
- strengthening interdisciplinary cooperation in educational programs.

The State Strategy for Regional Development for 2021–2027 emphasizes the need to introduce the latest educational approaches and formats with the enhanced applied nature and interdisciplinary approach related to intellectually capacious, productive and innovative types of entrepreneurship (State strategy of regional development for 2021–2027, 2020).

The education system must meet the trends and requirements of the labor market, and graduates of educational institutions must be its competitive participants (Kovalchuk, 2017; Kovalchuk, 2016).

## THE AIM OF THE STUDY

The aim of the paper is to carry out a theoretical analysis of international experience in the implementation of cross-disciplinary educational programs in various educational institutions worldwide.



## THEORETICAL BASIS AND RESEARCH METHODS

The issue of interdisciplinarity is not new in science. It has been studied for many years. In the scientific literature, the issue of interdisciplinary relations was studied by G. Bibik, O. Buhayova, J. Buzinskaya, L. Deminska, Y. Derkach, V. Fedorova, O. Hlobina, S. Honcharenko, V. Ilchenko, L. Kolomiets, L. Kovalchuk, I. Kozlovskaya, M. Kurach, N. Loshkaryova, O. Lyashenko, V. Maksymova, O. Mitryasova, L. Momot, D. Pokryshen, S. Rybak, N. Samaruk, P. Samoilenko, O. Serhyeyeva, G. Shatkovska, V. Shvets, Z. Slyepkan, N. Tararak, O. Teslenko, S. Tkachenko, Y. Tryus, A. Usova, T. Vychuk, O. Yefremova, N. Zakharova, M. Zhaldak, I. Zvyereva, and others).

L. Bentarlanffy, O. Bogdanov, G. Hacken, I. Prykhozyn, and N. Wiener studied interdisciplinary approach in scientific cognition. O. Komar, V. Lukyanets emphasized epistemological role of interdisciplinarity. H. Mednikova highlights signs of creativity in interdisciplinary research, which, on the one hand, combines the knowledge gained in higher educational institutions, and on the other hand – knowledge that is directly needed in the workplace in a particular field.

The issue of interdisciplinarity is raised in the studies of V. Arshynov, A. Bekrenev, A. Bochan, V. Budanov, I. Dobronravov, A. Huriev, V. Kostyuk, K. Krechetnykov, L. Kyyashchenko, V. Mykhelkevych, D. Shyryayev, V. Styopin, L. Sydorenko, T. Tytovets, A. Verbytskyi. Interdisciplinary relationships are revealed in the works of T. Bashyrov, V. Bilousov, V. Koltsov, V. Koryukin, A. Medvyedyev, Y. Shankin, A. Shchebetenko and others.

While working on the article a wide range of general and applied methods of scientific knowledge has been used, in particular: analytical method for collecting, processing and systematizing scientific information; study of foreign experience, abstract-logical method for generalization and general conclusions.

## RESULTS

The nature of modern education is cross-disciplinary, which is the result of social transformations that expand the boundaries of disciplinary understanding of problems and call for interdisciplinary cooperation and integration in their solution. Graduates of educational institutions finding themselves in the working environment, feel the need for additional skills that are not provided by educational programs. This necessitates the need for interdisciplinary education that combines technological trends, scientific principles and business practices.

Since the concept of “interdisciplinary relations” is multifaceted, it is clear that its essence has no fixed definition. It permeates the content, organizational forms of learning, methods, educational and cognitive activities, promotes the development of abilities and cognitive needs, provides effective formation of scientific concepts, in-depth mastering of the studied theories etc. Contemporary Ukrainian scientists refer interdisciplinary learning which they interpret as “the use of knowledge from different fields, their grouping and concentration in the context of the studied problem” to the main types of innovative educational techniques. In contemporary education, the concept of cross-disciplinarity is more widely used.

Cross-disciplinarity is an integrative method. This is a scientific approach, according to which methods of other disciplines are used to study and explain the problem of particular discipline. Cross-disciplinarity is a method that takes a researcher out of a separate discipline, but without cooperation or association (integration) with the relevant disciplines (Galison & Stump, 1996).



The concepts of cross-disciplinarity and interdisciplinarity are very closely related and are often used interchangeably. If you teach a discipline in a broad format, covering many topics, the “cross-disciplinary” relationship is between topics and “interdisciplinary” relation is usually within the topic (Is there a difference between cross-disciplinary and inter-disciplinary?, 2021) .

According to Karin Beland Lindal of the Lulea University of Technology (Luleå, Sweden), an interdisciplinary approach to research is aimed at “crossing disciplinary boundaries in one way or another”. Each discipline has its own organizational culture, settings and rules. Crossing disciplinary boundaries is the violation of these rules and the creation of something new (Cross-disciplinary approaches: the ‘must have’ tools to work with complexity, 2018).

Analysis of American scientific and pedagogical literature (Klein, 2001; Lawrence, 2004; Meeth, 1978; Petrie, 1992; Robbins, 2014) showed that within interdisciplinarity there can be distinguished:

- cross-disciplinary, which involves the consideration of a problem in one disciplinary field through the prism of another discipline, which has a distinctive epistemological basis (e.g., History and Mathematics); it concerns the problem that crosses the boundaries of one discipline and transfers cognition methods from one discipline to another;
- multidisciplinary, which helps to solve a problem by comparing knowledge from several or more epistemologically similar disciplines that focus on a definite problem (for example, Physics and Mathematics, French and Latin);
- transdisciplinarity, which goes beyond separate disciplines that are in different epistemological planes and focuses on the problem in such a way as to ensure the acquisition of complex, often new, knowledge that leads to a holistic picture of the world as an effective body of fundamental knowledge.

Cross-disciplinarity as a general term is used for any analysis or recommendation policy based on the methods of more than one science. The concept of “cross-disciplinarity” in the understanding of Erich Jantsch provides a new interpretation of the disciplinary concept and sheds light on the goals and advantages of disciplines for clear articulation of their controversial issues (Jantsch, 1972).

O. Fedorova interprets cross-disciplinary strategy as a strategy of interdisciplinary interaction, in which a particular study is carried out within one discipline from the standpoint of another discipline (Fedorova, 2014).

Cross-disciplinarity means processing a part of reality using the terminology of several disciplines, all of which are devoted to the study of the same subject. Since all sciences tend to offer specialized knowledge, which is more concise, cross-discipline also means finding a level of detailed elaboration that allows you to conform different disciplines.

Cross-disciplinary learning refers to learning activities that relate to a subject beyond the discipline without any integration with other disciplines.

Cross-disciplinary approach is implemented when each of the disciplines that deals with the same or similar subject of research, contributes to solving the problem, using its theory and practical recommendations.

In Brown University (Providence, USA) cross-disciplinary approach is used during the study in various programs. This is especially evident in the program “Literary Art” which is taught at the Digital and Cross-disciplinary faculty. “Literary Art” is a leader program of the university in innovative, experimental, performance, multimedia and cross-



disciplinary practices in literary and linguistic art. Besides, since the early 1990s, Brown University has been a leading institution in the research practice of digital language art. Since the late 2000s, the “Literary Art” has become a course for graduates designed to give students the opportunity to explore cross-disciplinary methods and issues. The programs combine music, visual art, contemporary culture and media, computer science, theater and performance (Literary Arts Brown University, 2021).

The Cogut Institute for the Humanities at Brown University promotes curriculum innovation through its scholarships for lecturers and PhD students. The courses offered by the institute contribute to the development of cross-disciplinary curricula at Brown University (Cogut Institute for the Humanities Brown University, 2021).

Alpert Medical School at Brown University has scientific research programs that offer unique opportunities for cross-disciplinary study in medicine, health, engineering, biomedicine, art and humanities (Alpert Medical School. Brown university, 2021).

The Scholarly Concentrations program is a long-term mentoring program that covers all four years of study at Alpert Medical School. It is an optional element of the curriculum that provides students with additional opportunities to develop their skills and abilities, which are defined by the objectives of the medical education program “Nine Abilities”. It is achieved through research, scientific and extracurricular experience in one of the twelve areas of science concentration. The main goal of the program is to provide structure, resources and mentoring for students who plan to conduct research in basic, clinical or translational science or in areas beyond traditional research areas such as global health, medical humanities, health imbalances or medical education. Components of the curriculum include, but are not limited to, meetings in the concentration area, weekly or monthly seminars, field trips, teaching opportunities, journalism clubs, elective courses related to concentration, as well as opportunities for information mastering and oral presentation of research project summaries at the annual academic workshop symposium (Alpert Medical School, 2021).

Scientific concentrations include the following programs: “Reproductive Health”, “Translational Research in Medicine”, “Doctor as a Communicator”, “Aging”, “Biomedical Information Technologies”, “Caring for Low-Income Communities”, “Global Health”, “Lifestyle Medicine and Integrative Health”, “LGBTQ Health Care and Advocacy”, “Medical Education”, “Medical Humanities and Ethics”, “Medical Technology, Innovation and Entrepreneurship” (Alpert Medical School. Brown university, 2021).

The Department of Cross-Disciplinary Strategies (CDS) operates at the Vienna University of Applied Arts (Universität für angewandte Kunst, Wien, Austria). The University addresses key issues in education and art, as well as the issue of participation and assistance in shaping society in the early 21st century (Institute of Arts and Society, 2021).

The program is aimed at preparing graduates for an independent role in mediation between global interest groups and different professionals. Artistic strategies allow them to intervene in a wide range of contexts. Using practical, artistic and theoretical models of learning, the connections between knowledge, experience and policy are developed and elaborated to meet the complex social challenges of today. The sciences of epistemology, methodology, and history are basic and supplemented by specific issues of art, natural sciences, humanities, social sciences, economic history, and current social and political events. This contributes to independent cross-disciplinary practice in solving global problems such as migration, digitalization, labor, development, environment and nutrition (Institute of Arts and Society, 2021).



Master's programs are aimed at implementing cross-disciplinary projects for sustainable social change in the transformation processes associated with digitalization. Students have the opportunity to apply the acquired knowledge in independent cross-disciplinary projects every semester. Dialogue and cooperation with representatives of society, art, science, politics and economics are supported and promoted within these projects.

The IT University of Copenhagen (Denmark) also develops and actively implements cross-disciplinary courses to enable students to become skilled, efficient and critically relaxed employees (Cross Disciplinary Team Work, 2021). Practical work is aimed at integration of the conceptual process of critical research and reflection. The goal is not to gradually improve services and products, but to explore and expand the space for innovation through cross-disciplinary collaboration and prototyping. An open research project is a means for students of different curricula to interact with each other.

The George Washington University (Washington, DC) offers many interdisciplinary programs in its schools and departments, among which the most relevant are: "Digital Technology", "GWTeach and STEM Teaching Minor", "Linguistics", "Naval Science", "Sustainability", "Program for Outstanding Students", "Women's Leadership Program" etc. (The George Washington University, 2021).

The Hong Kong University of Science and Technology (Guangzhou) is a specially established cross-disciplinary university. Cross-disciplinary model of active learning that combines research-oriented learning with a focus on preparing students for leadership and technology entrepreneurship takes the central place in academic structure. All activities are aimed at providing high-quality and transformational learning experience for young talents, creating opportunities to meet real needs and predict further opportunities in potential labor markets. The following programs are implemented at the university: "Financial Technologies", "Innovation, Policy and Entrepreneurship", "Urban Management and Design", "Earth, Ocean and Atmosphere Sciences", "Microelectronics, Sustainable Energy and the Environment", etc. (The Hong Kong University of Science and Technology, 2021)

Roberts Wesleyan College (Rochester, NY) offers a unique opportunity within the Bachelor's degree program of cross-disciplinary research to pursue an individual specialty that meets personal interests and professional goals of students. Cross-disciplinary researches offer flexibility to create an individualized study program. There are 3000 possible combinations to create your own specialty, the result of which is a 100 % employed graduate or the one admitted to post-graduate school in the first year after graduation (Roberts Wesleyan College, 2021).

Harvard Graduate School of Education (Cambridge, MA) focuses on disciplinary and cross-disciplinary research of how disciplines from history and art to biology and mathematics embody culturally valuable knowledge and ways of thinking that deepen understanding of the world and the ability to create products, solve problems, and explain phenomena. In order to solve today's social problems of climate change, mass migration, global health, and digital revolution, which require the integration of disciplinary views, the university has implemented a number of cross-disciplinary programs. Among them are "Culture of Thinking", "Education of Citizens of the World through the Prism of the United States and China", "Innovations in Education", "Interdisciplinary and Global Research", "Learning to Think, Thinking to Learn" and many others (Harvard Graduate School of Education, 2021).

#### CONCLUSIONS

Analysis of cross-disciplinary programs in foreign educational institutions allows to make a conclusion about necessity to implement similar programs in domestic system of





professional education. The important feature of vocational training based on cross-disciplinary approach is its competitiveness in the labor market. This is due to the fact that the diversity of its activities requires knowledge from different fields, which allows to adapt to the changing demands of the labor market. Cross-disciplinary approach makes learning effective, as it allows to identify and use only relevant information for learning while unnecessary information remains beyond the educational process.

Cross-disciplinarity helps to develop and quickly adapt to the unpredictable conditions of the world. This is possible only through a combination of current knowledge with modern skills and abilities. All this leads to the development and formation of vital competencies that allow to solve problem situations. In the work of a contemporary professional, it is impossible to consider the problems only from the point of view of one discipline, because they must be competent in two or more specialties.

In our further research, we will pay more attention to The Scholarly Concentrations program and study in detail twelve areas of science concentration to consider possibilities of implementing a similar program in Ukrainian education system.

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### **PROFESSIONAL DEVELOPMENT OF BIOLOGY TEACHERS: A COMPARATIVE ANALYSIS**

#### **ABSTRACT**

*Approaches to the professional development of teachers in foreign countries are analyzed. Analysis of the experience of world countries has shown that both public schools and specialized institutions/leading academies and private companies make a significant contribution to the continuous, professional development of teachers, their self-education and professional development. It is emphasized that the professional development of different countries has its own characteristics, is constantly being transformed, taking into account modern needs. Various forms of education, innovative methods, programs, projects, courses are emphasized on. In Finland, teacher training is provided through special programs, school-based project activities, international cooperation projects and national research programs. The training is organized by the National Education Agency of Finland. In the UK, a teacher must take an 18-day (30-hour) training each year. Teachers can choose courses offered at universities, independent counseling centers, education departments, teacher training centers, local education authorities, schools. In France, advanced training is provided by various postgraduate education institutions, university institutes and regional education centers. The professional development of German teachers is based on two main factors: professional development and additional training. In China, self-study and teacher training courses are provided on the basis of educational institutions and envisage an accumulative credit system. Continuing education of Singapore teachers is provided by the National Institute of Education several times during their professional careers. The state financially stimulates the professional development of teachers.*

**Keywords:** professional development, educational environment, tendencies, qualification, education, world practice, competence, advanced training.

#### **АНОТАЦІЯ**

*Проаналізовано підходи до професійного розвитку вчителів у зарубіжних країнах. Аналіз досвіду світових країн показав, що як державні навчальні заклади і спеціалізовані установи / провідні академії та приватні компанії роблять вагомий внесок у неперервний, професійний розвиток педагога, його самоосвіту. Підкреслено, що професійний розвиток різних держав має свої особливості, постійно трансформується, враховуючи сучасні потреби. Акцентовано увагу на різних формах навчання, інноваційних методиках, програмах, проєктах, курсах. У Фінляндії підвищення кваліфікації вчителів відбувається за допомогою спеціальних програм, проєктної діяльності на базі шкіл, проєктів міжнародного співробітництва і національних дослідницьких програм. Організацію підвищення кваліфікації здійснює Національна Агенція Освіти Фінляндії. У Великобританії вчитель щороку повинен пройти підвищення кваліфікації тривалістю 18 днів (30 год). Вчитель може обрати*



курси які пропонують в університетах, незалежних консультативних центрах, департаментах освіти, вчительських центрах, місцевих органах освіти, школах. У Франції підвищення кваліфікації здійснюють різноманітні установи післядипломної освіти, університетські інститути та регіональні центри освіти. Професійний розвиток німецьких учителів базується на двох основних факторах: підвищення кваліфікації та додаткове навчання. В Китаї самонавчання та курси підготовки вчителів здійснюють на базі навчальних закладів та передбачають накопичувальну кредитну систему. Неперервна освіта вчителів Сінгапуру здійснюється Національним інститутом освіти кілька разів за професійну кар'єру. Держава фінансово стимулює професійний розвиток вчителів.

**Ключові слова:** професійний розвиток, освітнє середовище, тенденції, кваліфікація, освіта, світова практика, компетентність, підвищення кваліфікації.

## INTRODUCTION

Today, education is being in transition. Transformational changes in the modern educational space are connected with the need to form a new type of future teacher. An innovative teacher, a professional in his field, mobile, able to continuously improve himself.

The main task of educational processes in modern educational institutions should be the development of the ability to think, to obtain information independently and critically evaluate it, but not just accumulate and memorize information (Kovalchuk, 2018).

Therefore, in the pedagogical professional development of teachers it is fundamentally important to take into account the experience of other countries.

## THE AIM OF THE STUDY

The article analyzes the trends of professional development of teachers around the world. The identified ideas can be embodied in improving the system of professional development of teachers in Ukraine.

## THEORETICAL FRAMEWORK AND RESEARCH METHODS

Issues of professional development of teachers were considered by both domestic and foreign scientists: N. Huziy, H. Danylova, H. Maralov, L. Mitina, V. Slaktionin, Y. Slipich and others. V. Andriushchenko, M. Byrka, I. Zyazyun, V. Oliynyk, V. Kovalchuk, T. Sorochan, T. Asunta, J. Edge, O. Kulpan, D. Uznadze and others studied the issues of professional development of teachers in the system of postgraduate education.

The main research methods that contributed to the goal were: analysis and systematization of scientific and pedagogical information aiming to study the experience of professional development of teachers in foreign practice.

## RESULTS

The future of humanity, society and every state is unquestionably connected with youth, their education and intellectual potential. In the long run, we should focus on the quality of education, which is constantly modernized and sets new requirements for teachers, their competence, creative skills and professionalism, and the teacher, at the same time, becomes the object and driver of positive change. A modern teacher must be a professional who responds quickly to changes in the educational environment, develops and implements innovative methods of teaching and education and who continuously studies and self-improves, who grows professionally throughout life. In the history of Ukrainian pedagogical thought, the problem of professional development of teachers occupies one of the leading places. It should be noted that the problem of improving the professional



development of teachers is not fundamentally new for pedagogical practice, but in world practice there is considerable experience in the professional development of teachers. Today Ukraine needs to update the system of professional development of teachers, taking into account the experience of developed countries. (Martynets, 2017). Reforming the education sector requires a detailed analysis of various innovations, getting acquainted with the processes of professional development in different countries to determine the degree of its effectiveness. In Ukraine, Finnish education is actively promoted, as well as professional activities and teacher training. In Finland, teacher training is provided through special programs, school-based project activities, international cooperation projects and national research programs. The teacher must dedicate three days of each school year to his teaching. The Finnish government allocates €20 million annually through the National Education Agency of Finland (FNAE) for teacher certification. (Asunta, 2006) Teachers' professional training is organized by local municipalities, regular and summer universities, specialized institutions/leading academies and private companies. Every year, the National Education Agency of Finland holds an open competition for funding for teacher training. Both public educational institutions and private companies and non-governmental organizations can take part in the competition. (Holovina, 2020).

Continuing Professional Development is well organized in the UK. Professional development courses for teachers have been carried out since the 1970s. They are held on the basis of pedagogical institutes at universities, independent counseling centers, the Department of Education, teacher training centers, local education authorities, schools and are focused on practical pedagogical situations. Each year, by choosing from a wide range of activities, UK educators are required to improve their professional level, lasting 18 days (30 hours). When the effectiveness of the teacher reduces, the administration has the right to insist on a specific form of training. In turn, the state supports the professional growth of teachers, motivating them by free education and exemption from school for the period of professional development. Instead, in the Ukrainian educational space, professional development does not differ in variability and occurs every 5 years.

In the English system, there are so-called Teacher Centers, which are an intermediate link between the school and local education authorities. Their main tasks are professional growth and assistance to the teacher in solving specific problems of school practice. The number of such centers and the peculiarities of their operation, taking into account the needs of the region, are determined by local authorities. Today in the UK there are popular seminars for local teachers, organized on the basis of several schools, taking into account the common practical educational problems of the region. The content of the programs of such courses is based on the specific needs of schools in a particular district. Here the focus is not only on the knowledge and skills of teachers, but also on the prospect of changes in the levels of students' development. Online inter-school communities and teachers' associations in subject areas are also active. British teacher training is perceived as training throughout the professional activity and updating knowledge in a convenient form, based on previous experience (Semenets-Orlova, 2015).

In France, various postgraduate education institutions, university institutes and regional education centers are involved in raising the professional level of teachers. Their task is to provide teachers with their professional growth and at the same time to orient them in accordance with the real problems of the school and society.

Continuing education in France has priority areas of reforming, including: significant improvement of teacher education, teaching through a research approach, mass



innovation approach in the educational process, the creation of new educational and research institutions of higher level (Synenko, 2002, p. 12). This is the personal orientation of the professional development of the teacher (Korsak & Hraniuk, 2001). For both Ukraine and France, the problems of personal motivation of teachers, lack of replacement in schools for teachers who should be retrained, insufficient budget are urgent (Skrypchuk, 2007).

The content of advanced training courses successfully combines general, special and theoretical disciplines of psychology and pedagogy, as well as the use of acquired knowledge in practice in the school environment. They use educational video demonstrations, modeling, micro-learning, "mini-courses", role-playing games, project demonstrations, telecommunications and information technology. In France, from the beginning of an active career to retirement, all periods of professional development at the expense of the budget or enterprise should be one year (if training is conducted without a break in work or official duties, it is 1200 hours). (Kovalchuk, 2015; Maria Andritsou, 2005).

The professional development of German teachers is based on two main factors: professional development and additional training. The amount of the task of the first direction is related to the training of teachers in the main professions (subject teachers). Tasks of the second direction in land affairs are related to providing teachers with new pedagogical specialties or improving their professional skills for the transition to higher positions (Synenko, 2002, p. 12). In Germany, in-service training is a voluntary task for every teacher who has the opportunity to obtain additional specializations by taking a preparatory course organized by the Ministry of Culture and Education or a university. The choice of additional subjects will take into account the wishes of students and the needs of the educational institution. In case of successful passing of the final stage of teacher training, a teacher will be able to teach the subject in all types of schools. Today, these activities are in great demand in Germany. After all, professionals who are competent in various scientific fields are more likely to realize their abilities and ambitions in the labor market and increase their material well-being (Vakulenko, 1995). Among the forms of advanced training groups should be distinguished the following: interrelated theoretical and practical qualification courses at the highest classification level; specialized problem courses and seminars in order to prepare for the development of specific innovations in school practice; professional courses and seminars prepared by teachers to perform new professional functions; thematic meetings; subject Olympiads and popular science classes; reports on the latest scientific achievements, laws and organizational changes in certain areas; series of lectures; individual reports; meeting seminars and scientific meetings; seminars and courses to prepare for additional exams to obtain new specialties (Kovalchuk, 2015; Häring, 2000). ).

In China, teaching is considered to be a highly respected profession, and the current Chinese government attaches great importance to the social status and professional development of teachers. Teacher training courses are organized on the basis of educational institutions and self-education of teachers (Kotelnikova, 2012). To do this, a system of credit accumulation is used, which makes it possible to take into account the achievements of teachers not only during training, but also during interaction at the level of the educational institution (Shatska, 2012). Education is conducted in the form of day, night and distance learning and is formed taking into account the needs of pedagogical experience, level of pedagogical qualification and improvement of methodology. Teachers have the opportunity to take a variety of courses: courses for young teachers; courses according to the professional experience of teachers; courses with the use of information



technology in the pedagogical field; refresher courses in the form of Educational "menu", in which teachers choose the most interesting subjects from the many offered; rural teacher courses; part-time and in-service courses; short-term and long-term, etc. (Kotelnikova, 2010).

According to China's Information Society Development Plan, the National Teacher Education Alliance, the Coordinating Agency for Teacher Education, provides a combination of distance, full-time and independent education and integrates the best educational resources. The purpose of the Internet Alliance in China is to use modern technologies and various training programs to implement large-scale, high-quality and cost-effective postgraduate education programs (Borevskaya, 2003).

The experience of Singapore is interesting, where a lot of attention is paid to teacher training, creating an extensive system of additional education, which is carried out in various directions; the possibility of internships in foreign countries with the availability of appropriate funding, material incentives for the development of professional skills, the creation of research centers with the involvement of teachers in the development of strategies for reforming education. Continuing education of Singaporean teachers is provided by a monopoly institution - the National Institute of Education (based on Nanyang Technological University). Advanced training here takes place several times during your professional career in specially organized courses. The Ministry of Education considers professional development to be its most important task, creating an extensive system of additional education. Teachers can participate in mentoring, developing standards and programs, conducting trainings, etc., and executives are involved in a variety of leadership development courses. To determine the objectives of additional education, teachers are guided by the results of diagnostics of the effectiveness of their work, carried out on the basis of special methods that allow to assess the effectiveness of teachers of any subjects and levels of education. The level of formation of teacher competencies, which in Singapore are a way of thinking, feelings, actions, style of communication, is measured. The purpose of diagnosis is primarily to support the teacher. They can objectively evaluate their work, control the correct choice of career path, determine the need for professional development (Sergienko, 2018). Singaporean teachers are interested in additional education, as the amount of salary depends on it. The state pays each teacher 100 hours of in-service training per year. Moreover, the more intensively the teacher receives additional education, the higher his salary is. Teachers who work in the classroom with students may receive less than specialists who are on internship (Alishev & Gilmutdinov, 2010). Teachers choose a variety of programs for in-service training, often traveling abroad (Yankovych).

#### **CONCLUSIONS**

Thus, from the above we can conclude that the issue of professional development of teachers in different countries has certain features. The analyzed world experience shows that educational institutions and organizations make a significant contribution to the professional growth and self-development of the teacher's personality. Therefore, foreign experience will be useful and relevant for Ukraine, as the level of its professionalism, self-improvement and self-realization influences the current socio-economic and spiritual development of Ukraine. Professional development in the system of postgraduate education should meet the personal needs of teachers, improve skills and professional growth. To do this, according to Ukrainian researcher V. Kovalchuk, it is necessary to work out a diagnostic model of professional development of teachers, according to which they could



determine the level of professional skills and personal needs of their development (following the example of the Netherlands) (Kovalchuk, 2015).

The article analyzes the approaches to the professional development of teachers in many developed foreign countries. The issue of creating optimal conditions for improving the system of professional development of teachers in Ukraine needs further study.

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### **TRENDS AND PECULIARITIES OF PROFESSIONAL AND PHYSICAL TRAINING OF GERMAN ARMED FORCES OFFICERS**

#### **ABSTRACT**

*The aim of this article is to investigate and highlight trends and characteristics of the physical and professional training of officers in the German armed forces. Methods of analysis, generalization, comparison and systematization were used to achieve the aim. The Bundeswehr's officer training system is presented through the example of Army officer training. The training of Bundeswehr officers is characterized by certain trends and peculiarities. In particular, it continues in stages. The number of cadets at Bundeswehr universities is determined by the needs of the armed forces. The existing system of physical training for officers provides the necessary practical skills for professional activities. The purpose of physical (sports) training is the education of an integral personality, and the main objectives are the development of physical qualities, the formation of movement skills and improvement of athletic results. The sport concept of physical training, recognized as a leading idea in the German Armed Forces, assumes that in the process of practicing sports one develops the habit of systematic exercise, proper physical development of servicemen, and relief of nervous and mental tension. In the organizational aspect, physical training is divided into service and non-service sports. It is established that separate time is given for the formation of military-applied skills (overcoming obstacles, throwing grenades, hand-to-hand combat and marching training). The Bundeswehr's system of continuous physical training involves the marching training of servicemen. It is seen as a means of increasing mobility and endurance, as a way of strengthening discipline and educating servicemen in the spirit of militaristic traditions. An important part of the Bundeswehr's system of continuous physical training is the testing and evaluation of personal physical preparedness. The "Soldier Competition" is a mandatory mass test of the physical preparedness of Bundeswehr personnel. At the same time, we have to note the existence of critical comments on the current system of physical training in the Bundeswehr.*

**Keywords:** *physical training system, officers, military personnel, the Bundeswehr, military education, German armed forces, continuous physical training.*

#### **АНОТАЦІЯ**

*Мета статті полягає в тому, щоб дослідити та виокремити тенденції та особливості фізичної та професійної підготовки офіцерів збройних сил Німеччини. Для досягнення мети використано методи аналізу, узагальнення, порівняння та систематизації. Систему підготовки офіцерських кадрів Бундесверу представлено на прикладі навчання офіцерів сухопутних військ. Підготовці офіцерів Бундесверу притаманні певні тенденції та особливості. Зокрема вона триває поетапно.*



*Кількість курсантів в університетах Бундесверу визначається потребами збройних сил. Існуюча система фізичної підготовки офіцерських кадрів забезпечує отримання ними необхідних практичних навичок для професійної діяльності. Метою фізичної (спортивної) підготовки є виховання цілісної особистості, а основними завданнями – розвиток фізичних якостей, формування рухових навичок і підвищення спортивних результатів. Спортивна концепція фізичної підготовки, яка визнана в німецьких збройних силах провідною ідеєю, передбачає, що у процесі занять спортом відбувається виховання звички до систематичних вправ, належний фізичний розвиток військовослужбовців, зняття нервово-психічної напруги. В організаційному аспекті фізична підготовка поділяється на службовий і позаслужбовий спорт. З'ясовано, що для формування військово-прикладних навичок (подолання перешкод, метання гранат, рукопашний бій і маршова підготовка) відводиться окремий час. Система неперервної фізичної підготовки Бундесверу передбачає маршову підготовку військовослужбовців. Вона розглядається як засіб підвищення рухливості і витривалості, як метод зміцнення дисципліни і виховання військовослужбовців у дусі мілітаристських традицій. Важливе значення у системі неперервної фізичної підготовки офіцерів Бундесверу належить перевірці й оцінці особистої фізичної готовності. обов'язковим масовим видом перевірки фізичної підготовки особового складу Бундесверу є «Солдатські змагання». Разом з тим доводиться констатувати існування критичних зауважень щодо існуючої системи фізичної підготовки військовослужбовців Бундесверу.*

**Ключові слова:** система фізичної підготовки, офіцерські кадри, військовослужбовці Бундесверу, військова освіта, збройні сили Німеччини, неперервна фізична підготовка.

## INTRODUCTION

The complicated military-political situation observed on the state border of Ukraine requires revision of the content of professional training of all categories of military personnel of the State Border Guard of Ukraine and, in particular, officers, because conditions of intensive operational and service activity require them to be able to endure various physical and psychological loads, to adequately act in conditions characterized by excessive physical overloads, etc. Under these conditions, the quality and intensity of physical training of officers is of particular importance.

In order to find effective ways to solve the problems of training of officers of the State Border Guard Service, in particular physical training, the study of organizational, pedagogical and didactic foundations of physical training of military officers and border guard specialists in NATO member countries, in particular Germany is important.

## THE AIM OF THE STUDY

The aim of this article is to investigate and highlight trends and characteristics of the physical and professional training of officers in the German armed forces.

## THEORETICAL FRAMEWORK AND RESEARCH METHODS

The methods of analysis, generalization, comparison and systematization have been used to achieve the aim of the study. As a source base there have been used the information from the official websites of the Armed Forces of the Federal Republic of Germany (Bundeswehr), in the regulations governing physical training and sports in the Bundeswehr (Beitrag Ausbildung), in Rüdiger's (2005) publications, publications of



scientists, whose publications reveal some aspects of professional and physical training (Dönitz, 2007; Fernandesh, 2012; Hans-Werner, 2005; Matthias, 2007; Meliukh & Larchenko, 2015; Dmitruk, 2014; Shchegolev, 2007; Riabchuk, 2011).

### RESULTS

To solve the scientific problem of improving the system of continuous physical training of officers at different levels of military education, the experience of physical training organization in the Armed Forces of the Federal Republic of Germany (Bundeswehr – Federal Defense) is of interest. The Bundeswehr consists of the Army, the Air Force and the Navy. The armed forces of the Federal Republic of Germany are actively involved in various peacekeeping operations outside the country (Bundeswehr).

As for the recruitment of the Bundeswehr, Germany ended the compulsory military conscription on July 1, 2011. This means that the Bundeswehr has completely switched to manning its armed forces on a professional basis. The Bundeswehr employs contract servicemen (their service term varies from 2 to 12 years) and regular servicemen, whose number reaches 250,000 (Bundeswehr).

In order to examine the specifics of the Bundeswehr's physical training system for officers, it is useful to present the training of officers using the training of Army officers as an example. Officers receive training at the Army Officer School, the service schools, and at one of the Bundeswehr universities, as well as military internships and direct service in the troops in various staff and command positions. According to the requirements applicable in Germany, any citizen of the Federal Republic of Germany between the age of 17 and 25, who has completed secondary school, vocational training or high school, has no criminal record or financial debts and is fit for service, can be a candidate for active-duty or contract officer for at least 15 years (M. Nikitin, 1998).

Those wishing to become officers must undergo a medical examination and a professional and psychological screening within two days at the Officer Candidate Selection Center in Köln, which is operated by the Human Resources Directorate of the German Ministry of Defense. Those future officers who successfully pass the test are assigned to military training institutions of the Army and the Bundeswehr (A. Dmitruk, 2014).

The training of officers for the German Army is gradual. The first stage involves initial military training in the troops for three months (about 16% of the time budget is given to physical training). The second stage is basic training in the enlisted man's program and six months of training to obtain a driver's license. The third stage involves three months of preparation for the military rank of fannen-junker (the equivalent of non-commissioned officer) in the schools of the branches of the armed forces. The fourth stage is military training as a section commander for three months. Further training of officer candidates for combat troops (motorized infantry, tank, mountain infantry, airborne) and combat support and logistics troops is somewhat different. Specifically, combat officer candidates take an officer course at the Officer School in Hanover (4.5 months), followed by an internship with the troops or service branch schools (4.5 months), and serve as platoon leaders (three months). Their training also includes higher education at the Bundeswehr universities in Hamburg and Munich, where training lasts three years (11 percent of the time budget is devoted to physical training) (A. Dmitruk, 2014).

The number of cadets at Bundeswehr universities is determined by the needs of the armed forces of the Federal Republic of Germany. The educational process takes into account the changes taking place in science, technology, weapons, etc. During the training period, students receive theoretical and specialized knowledge and skills necessary for



service in the troops. The studies end with the presentation of diplomas or the awarding of a degree.

Officers at Bundeswehr universities are trained in small groups; it allows the teaching staff to devote sufficient attention to each student.

The system of training of combat officers (under contract from three to 11 years) has its specific features. The main difference is that they may not study at Bundeswehr universities. Depending on the length of their contract, officer candidates receive varying amounts of training, and they receive only the knowledge they will need to lead their subordinates in a platoon or equivalent unit. The rank of lieutenant is awarded three years after officer candidates begin their training.

The total length of a typical Bundeswehr soldier's training process for serving in primary officer positions in the Army is 6.5 years on average. In the future, before each new appointment to a higher post, officers are required to take refresher courses in the schools of the corps. The courses for the Bundeswehr Army command staff are the courses for company commanders (the branch school), battalion commanders (the branch school), senior officers (the Bundeswehr Leadership Academy), and staff officers (the Bundeswehr Leadership Academy), which are mandatory for professional development. About 10–12 % of the best soldiers, based on their graduation from senior officer courses, are eligible to continue on to general staff officer courses. Training lasts two years at the Bundeswehr Leadership Academy (V. Meljuh, M. Larchenko, 2015).

On the whole, the system of professional training of officers in the armed forces of the FRG, which is continuous and multistage, provides quality training of officer personnel (V. Shhegolev, G. Dmitriev, G. Blahin, 2007), and the current system of physical training for officers provides the necessary practical skills for professional activities. The overall leadership of physical training in the German armed forces is provided by the Minister of Defense through the Inspector General of the Bundeswehr, who has a sports sector on his headquarters. In the branches of the armed forces, physical training is managed by combat training departments. In troops, unit and subunit commanders rely on non-staff specialists: sports leaders, their assistants, coaches, and instructors to organize and conduct physical training sessions.

The main guiding document for physical training in the Bundeswehr is General Statute 3/10 "Sports in the Bundeswehr" (ZDv 3/10 – Sport in der Bundeswehr). It is for commanders and specialists and consists of the following sections: "Basic Provisions and Organization of Sports Training of the Bundeswehr", "Fundamentals of Methodology of Sports Training", "Basics of Sports Medicine", "Physical training program during elementary and basic education", "Practical Conduct of Classes", "Basic Sports Training Program", "Additional program of sports training" (V. Rjabchuk, 2011).

According to the requirements of ZDv 3/10 – Sport in der Bundeswehr, mass sports in the Bundeswehr are closely related to national sports. In addition, it should foster physically and mentally prepared soldiers who are ready to perform any task assigned to them, as well as foster in them a desire to continue practicing any kind of sport after discharge from the army. Mass sports have time allotted (at least twice a week) when no other activities can take place (Beitrag Ausbildung).

The purpose of physical (sports) training is the education of an integral personality, and the main objectives are the development of physical qualities, the formation of motor skills and improvement of athletic performance (ZDv 3/10) (Bundeswehr). A high level of physical development is a prerequisite for the successful



mastery of military professional activity. That's why the complex test of physical training includes such military-applied exercises as a march-throw with shooting from a standard-issue weapon.

According to West German experts, the transfer of qualities and skills acquired through sports to military professional activity occurs indirectly and is provided by the entire system of training and education of servicemen. Bundeswehr soldiers must prove their physical endurance every year by receiving the German Sports Badge (DSA) and passing the Physical Fitness Test (PFT).

The Sports Concept of Physical Training, recognized as a leading idea in the German Armed Forces, assumes that in addition to the basic tasks, additional tasks, such as cultivating the habit of systematic exercise, proper physical development of soldiers, relieving nervous and mental tension, are solved in the process of sports activities (Fernandesh, 2012).

The results of summarizing the provisions of the regulations governing physical training in the Bundeswehr allow us to conclude that, from an organizational perspective, physical training is divided into service and non-service sports. Service sport encompasses general and special programs, the training program for highly qualified athletes, as well as mass sports. The general program is divided into a basic program and a supplementary one. The basic program, designed for servicemen under the age of 49, includes such sections as general training gymnastics, gymnastics on sports equipment, track and field athletics, swimming, movement games, volleyball. Additional program includes soccer, handball, boxing, judo and skiing (options made by the branches of the armed forces). There are 2–3 classes of 90 minutes each week to complete the basic and supplemental program. The current General Statute ZDv 3/10 – Sport in der Bundeswehr allows commanders in some cases to reduce no more than one class per week. A special program is designed for sports improvement of the most talented athletes in the national teams of military units and formations. It provides for specialization in such sports as basketball, biathlon, equestrianism, sailing, shooting, modern pentathlon, military all-around, air and sea all-around, and parachuting. There is a class in this program every day (after 3 p.m.). Soldiers who are engaged in a special program are not exempt from general classes, performance standards and requirements, as well as from physical training tests (V. Rjabchuk, 2011).

The basic physical training program for Bundeswehr officers consists of such sections as “Gymnastics”, “Athletics,” “Swimming”, “Gymnastics on Equipment”, “Small Games” and “Volleyball”. Gymnastics involves doing exercises with or without equipment for contraction, stretching and relaxation of major muscle groups and individual muscles, as well as exercises for coordination and training of the cardiovascular system. Exercises are performed with a partner, with a ball (3 kg), with a gymnastic bench and on the wall bars. The “ZDv 3/10 – Sport in der Bundeswehr” does not recommend the use of marching drills and martial arts-style exercises in the classroom (V. Rjabchuk, 2011). The course of the section “Gymnastics on Apparatus” assumes that servicemen will get skills to perform exercises on parallel and equal-height bars and crossbars; learn how to perform throws and flips on the floor; swings and turns on the crossbar and the different-height bars; jumping over the plinth, over the horse from the mini-trampoline, the rests on the crossbar, parallel and different-height bars. Classes in this section are held, as a rule, by circular training with a predominant focus on the development of coordination and agility movements.

In the section “Track and Field Athletics” the main role is given to middle and long distance running, the main means of improving overall endurance. Short distance



running and relay races, long jump and high jump, throwing the ball with a loop (imitation of a track and field hammer), shot put are also provided.

The “Swimming” section assumes that future officers master the basics of swimming technique, the skills of swimming at different distances, mastering the technique of starts, turns and speed. Successful mastery of the requirements of the section “Swimming” requires completion of the standards for the German Red Cross badge and water rescue badge.

A Generalization of the provisions of the Statute ZDv 3/10 – Sport in der Bundeswehr allows us to state that in the section “Small Games” are represented by different types of relay, ball games – soccer, handball and volleyball. ZDv 3/10 – Sport in der Bundeswehr provides for the use of sports games mainly in the final part of classes in order to achieve emotional release and improve collective action. Sports games are considered to be an excellent means of developing concentration and reaction speed, but these sports games are played according to simplified rules, that is, not by sport standards. Also, all branches of the armed forces practice judo, the training of which involves mastering the basic techniques of self-belaying, grappling, scrambling, throwing, choking and painful techniques, as well as learning self-defense techniques; disarming the opponent and attacker with a knife (with a stick) or a pistol; learning the skills of tying and escorting prisoners. Football and handball are very popular in the Bundeswehr, but are usually played with significant deviations from sports standards (Bundeswehr).

If climatic conditions permit, servicemen are taught the basics of skiing techniques. In most cases, special military skis are used, designed for crossing different terrains at moderate speed (V. Rjabchuk, 2011).

The regulatory documents concerning the physical training of future officers of the Bundeswehr prohibit the practice of military-applied exercises during the time allotted for physical training. That's why separate time is set aside for the formation of military-applied skills (overcoming obstacles, throwing grenades, hand-to-hand combat and marching training).

Normative documents of the Bundeswehr recognize military-applied physical training as a fundamental means of forming the psychological stability of servicemen. This aspect is of particular importance in the training of huntsmen, mountain infantry and paratrooper units, designed to perform complex combat tasks in extreme conditions. The training program provides more than 130 hours directly to physical training, as well as additional time to practice overcoming obstacles, hand-to-hand combat and swimming, overcoming water obstacles, training of endurance during marches with weapons and high-speed marches with minimal equipment and without weapons.

The Bundeswehr's system of continuous physical training involves the marching training of servicemen. It is seen as a means of increasing mobility and endurance, as a method of strengthening discipline and educating servicemen in the spirit of militaristic traditions (V. Rjabchuk, 2011).

The Bundeswehr Army Statute NDR 100/1, based on experience of marching on foot in sandy and snowy terrain, states that troops must be able to cover 40–60 km on foot per day (K. Dönitz, 2007). The German Army distinguishes between two types of marching training: accelerated march (the distance is covered in the shortest time, the march is used for sports purposes with a load in a duffel bag of about 9 kg) and march (maintains an average speed of about 6 km/h, used in combat training and performed with weapons and equipment).



In the Bundeswehr, “people’s marches” (multi-day marches) held in Germany or other countries are also popular (Hulin, Rüdiger, 2005). For example, in Holland they last 4 days and cover a distance of 200 km. Similar marches are conducted over two days in Denmark (80 km distance for servicemen) and in Israel (120 km for 3 days). Preparations for such marches are conducted in stages, with many Bundeswehr servicemen taking part; especially Army troops (M. Matthias, 2007).

Based on the results of the synthesis of publications on the problem of research (M. Nikitin, 1998; A. Dmitruk, 2014; V. Meljuh, M. Larchenko, 2015; V. Rjabchuk, 2011) we can conclude that an important role in the system of continuous physical training of Bundeswehr officers belongs to the verification and assessment of personal physical preparedness. It has been found that among the main diagnostic tools there is a test of physical fitness, “Soldier competitions” and the compilation of certain standards, the successful completion of which provides for the “Badge of Sports and Military Achievements”. The officers of the Bundeswehr are divided into five age groups: the first – up to 25 years; the second – 25–32 years; the third – 32–40 years; the fourth – 40–46 years, the fifth group includes officers over 46 years. In addition to these, there are two other categories of servicemen with physical disabilities, for which there are simplified standards (A. Dmitruk, 2014; V. Rjabchuk, 2011).

The physical fitness test is used at the beginning and end of the basic training period for future officers, as well as during all training programs at least once a year. The test is performed in sportswear for two to three days. The results are evaluated according to a point system.

The Bundeswehr’s “Soldier Competition” is an obligatory mass test of the physical fitness of members of the Bundeswehr. For all servicemen under 40 years of age, participation in the competition is mandatory, and for older age categories it is voluntary. A prerequisite for participation in the “Soldier Competition” is regular attendance at classes and training sessions for the coming 6 weeks (M. Nikitin, 1998; A. Dmitruk, 2014; V. Meljuh, M. Larchenko, 2015; A. Fernandesh, 2012).

Another step in checking and evaluating the physical fitness of Bundeswehr troops is the performance of the “Sports and Military Achievement Badge”, introduced in 1971 to encourage improvement in the results of physical and general military training. They are performed or confirmed every year. In addition to these types of physical fitness checks, there are also standards of “German Sports Badge”, standards of sports and applied swimming, mass skiing competitions. The results of all tests are entered into an individual record card, which, along with other documents, is the basis for determining the level of general readiness of each member of the armed forces (A. Fernandesh, 2012).

At the same time, we have to note the existence of critical comments on the current system of physical training in the Bundeswehr. Despite sufficient theoretical justification and logistical support in practice there is an underestimation on the part of commanders and superiors of middle and higher levels of the importance of physical training for combat capabilities and the moral and psychological state of the personnel. In addition, there is a lack of full-time and insufficient training of freelance specialists – physical training organizers. We also have to note the insufficient motivation of servicemen to improve their physical preparedness. Military experts and analysts point to these problems (D. Kartamyshev, S. Mehed, V. Berlinde, V. Islamov, 2020; V. Shhegolev, G. Dmitriev, G. Blahin, 2007).





## CONCLUSIONS

So, after the decision of the Bundestag to freeze conscription from July 2011, the national armed forces are staffed only on a voluntary basis. This imposes additional requirements on military personnel, particularly officers of the Bundeswehr. The system of their training is a complex of gradual stages of training in the officer schools of the armed forces and at one of the universities of the Bundeswehr, as well as military training and direct service in the troops in various staff and command positions. Before each new assignment to a top post, officers are required to take a refresher course in the schools of the branches and meet physical fitness requirements. In the Bundeswehr, physical training is determined by the provisions of the sports concept, which defines the involvement of servicemen in regular sports activities. The physical training consists of special exercises, as well as sports and movement games, swimming, and various sports chosen by servicemen of their choice. The most advanced thing in the German armed forces is the formation of groups of servicemen according to their sports preferences and interests. The Bundeswehr's system of continuous physical training involves the marching training of servicemen. It is seen as a means of increasing mobility and endurance, as a way of strengthening discipline and educating soldiers in the spirit of militaristic traditions. An important part of the Bundeswehr's system of continuous physical training is the testing and evaluation of personal physical preparedness. The "Soldier Competition" is a mandatory mass test of physical fitness of Bundeswehr personnel. At the same time, we have to note the existence of critical comments on the current system of physical training in the Bundeswehr.

Perspectives for further studies are research and synthesis of the experience of physical and professional training of soldiers in the French Armed Forces.

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## THE MAIN ASPECTS OF FORMING ENTREPRENEURIAL COMPETENCE IN FUTURE TEACHERS IN UKRAINIAN AND FOREIGN EXPERIENCE

### ABSTRACT

*The article highlights the need to study the problem of forming the entrepreneurial competence of the future primary school teacher in domestic and foreign experience. It is noted that the development of entrepreneurship of European citizens and organizations has been one of the key policy objectives of the European Union and the Member States for many years; the understanding that entrepreneurial skills, knowledge and guidelines can be learned is deepening, which leads to the widespread development of entrepreneurial thinking and entrepreneurial culture, useful both for individual citizens and for society in particular. The structure of entrepreneurial competence Entre Comp is presented in this article. This structure presents a conceptual model and definition of entrepreneurial competences, offers ways and means to improve the entrepreneurial capacity of citizens and organizations in Europe. The experience of entrepreneurial training as a part of the educational process in the United Kingdom is examined here. It is aimed at the purposeful formation of the qualities of the entrepreneur's personality and competence in the organization and implementation of small business projects. It is stated that there is no established interpretation of the concept of "entrepreneurial competence" in scientific and pedagogical works. Emphasis is placed on the study of entrepreneurial competence as an integrative quality of personality, a complex of personal or business qualities, a model of behavior based on critical thinking skills, creativity, initiative, perseverance, ability to solve problems and cooperate, create and implement innovations. The need to teach entrepreneurship, the formation of a modern teacher of entrepreneurial competence at the national level (Professional Standard), in the Ukrainian-Polish project “Lessons with an entrepreneurial background”, research studios of Ukrainian and foreign scientists are declared in this article.*

**Keywords:** *entrepreneurial competence, Entre Comp, structure of entrepreneurial competence, key competence, entrepreneurial skills, abilities, personality qualities, future teacher, educational process.*

### АНОТАЦІЯ

*У статті актуалізовано необхідність опрацювання проблеми формування підприємницької компетентності майбутнього вчителя початкової школи у вітчизняному і зарубіжному досвіді. Зазначено, що впродовж багатьох років розвиток підприємливості громадян і організації Європи є однією з ключових цілей політики Європейського Союзу і держав-членів; поглиблюється розуміння того, що підприємницьким умінням, знанням і настановам можна навчитися, що обумовлює широкий розвиток підприємницького мислення і підприємницької культури, корисних*



як для окремих громадян, так і для суспільства зокрема. Представлено структуру підприємницької компетентності *Entre Comp*, що презентує концептуальну модель та визначення підприємницьких компетенцій, пропонує шляхи та способи вдосконалення підприємницької спроможності громадян і організації Європи. Розглянуто досвід підприємницької підготовки як частини освітнього процесу у Великій Британії, що спрямований на цілеспрямоване формування якостей особистості підприємця та компетентності щодо організації та здійснення проєктів малого бізнесу. Констатовано відсутність усталеного трактування поняття «підприємницька компетентність» у науково-педагогічних працях. Закцентовано увагу на студіюванні підприємницької компетентності як інтегративної якості особистості, комплексу особистісних або ділових якостей, моделі поведінки, що базується на навичках критичного мислення, творчості, ініціативності, наполегливості, вмінні розв'язувати проблеми і співпрацювати, створювати і впроваджувати в економічне життя суспільства інновації. Декларується необхідність навчання підприємництва, формування у сучасного вчителя підприємницької компетентності на загальнодержавному рівні (Професійний стандарт), в українсько-польському проєкті «Уроки з підприємницьким тлом», наукових студіях українських і зарубіжних учених.

**Ключові слова:** підприємницька компетентність, *Entre Comp*, структура підприємницької компетентності, ключова компетентність, підприємницькі навички, здібності, якості особистості, майбутній учитель, навчальний процес.

## INTRODUCTION

Modern globalization trends in society, integration processes, the transition to the formation of active, creative personality, capable of self-determination in the field of professional activity, the implementation of their own ideas in real market conditions, open new opportunities for modern approaches to providing a qualitatively new level of professional training, actualize the need to form his entrepreneurial competence through the use of the best examples of world experience. We assume that education in the field of globalization processes, internationalization of world economies is “a key to future economic prosperity, an effective means of combating unemployment, the engine of scientific and technological progress and the passport of individual success” (Sheliuk, 2014, p. 73). Therefore, the necessity to study the problem of forming the entrepreneurial competence of the future primary school teacher in domestic and foreign experience is discussed.

## THE AIM OF THE STUDY

The purpose of the article is to highlight aspects of the formation of entrepreneurial competence of future primary school teachers in the field of domestic and foreign experience.

## THEORETICAL FRAMEWORK AND RESEARCH METHODS

V. Bezliudna, I. Biletska, N. Bidiuk, O. Zabolotna, Y. Zagrebniuk, T. Kapeliushna, O. Lokshina, O. Ogienko, E. Panchenko, A. Sbrueva, O. Chugai, S. Shandruk, etc ... testifies the increasing of scientists' attention to foreign experience in education reform, carried out in comparative pedagogical research. It was found that the problems of entrepreneurial competence of a man, in particular, as a key competence of the specialist (J. Strojny (2007), I. Humeniuk (2018), V. Maikovska (2017), O. Ovcharuk, etc...); content, forms and methods of development of entrepreneurial competence of students in higher education institutions (S. Luparenko); the peculiarity of the formation of entrepreneurial competence of the given professional field: future managers (E. Belan, M. Ponomariova,



M. Strelnikov), specialists in economics (Yu. Bilova (2013)), restaurant business (I. Gaiovy, M. Palchuk, T. Stakhmach, M. Tkachenko and others), service provision of cultural and living facilities (V. Maikovska); future teachers of biology and basics of health (L. Barna, H. Pokhila). At the same time, it was established that the issues of formation of entrepreneurial competence of the future primary school teacher need research attention and, in fact, led to the author's scientific research. The following methods were used in the research process: analysis of the scientific literature on the research problem; study and generalization of pedagogical experience of foreign scientists.

### RESULTS

First of all, we pay attention to the lack of established interpretation of the concept of "entrepreneurial competence" in scientific and pedagogical works. Note that for the first time in the domestic educational space, this term is used in the list of key competencies (learning skills, civic, cultural, competence in information and communication technologies, social, entrepreneurial, health), defined by discussions organized by scientists under the UNDP project "Educational policy and peer education" (Leiko, 2013). According to this document, entrepreneurial competence involves the realization of abilities:

- correlate one`s own economic interests and needs with available material, labour, natural and ecological resources, interests and needs of other people and society, to apply technologies of monitoring of resources and maintenance of sustainable development;
- organize one`s own labour and business activity and work of a team of people, to orientate in norms and ethics of labour relations;
- analyze and evaluate one`s own professional opportunities, abilities and correlate them with the needs of the labour market;
- make and evaluate business plans and personal business projects, develop simple models of action and make economically and environmentally sound decisions in a dynamic world;
- present information about the results of one`s own economic activities and the activities of the team.

We note that entrepreneurial competence as part of key competencies developed by the European Commission determines the ability to turn ideas into action, creativity, innovation, risk, as well as the ability to plan projects to achieve the goal; it is the basis for acquiring more specific skills and knowledge needed for social or commercial activities; contains moral values that promote wise management (DeSeCo, 2005).

Entrepreneurial competence is based on the skills of critical thinking, creativity, initiative, perseverance, ability to solve problems and cooperate (European Union, 2006).

In 2016 The Entrepreneurship Competence Framework was worked out by the European Commission for the Education System. This Entrepreneurship Competence Framework presents the structure of entrepreneurial competencies, offers ways and means to improve the entrepreneurial capacity of citizens and European organizations. For many years, the development of entrepreneurship of European citizens and organizations is one of the key policy objectives of the European Union and the Member States of the European Union. It is clear that entrepreneurial skills, knowledge and guidance can be learned, which in turn this will lead to the widespread development of entrepreneurial thinking and entrepreneurial culture, useful for individual citizens in particular and for society as a whole (EntreComp, 2019). Obviously, Entre Comp is an attractive attempt to organize and define entrepreneurial competence, referring to the European definition of entrepreneurship as a key competence.



As we see the Entre Comp framework consists of three areas of competences: “ideas and opportunities”, “resources” and “taking into action”. Each area includes five competencies. They are considered as structural elements of entrepreneurial competence:

- 1) “Ideas and opportunities”:
  - definition of opportunities;
  - creativity;
  - vision;
  - evaluation of ideas;
  - sustainable thinking;
- 2) “Resources”:
  - self-awareness and self-effectiveness;
  - motivation and persistence;
  - resource mobilization;
  - financial and economic literacy;
  - mobilization of other people;
- 3) “Transformation in action”:
  - initiative;
  - planning and management;
  - overcoming indefiniteness and risks;
  - cooperation with others;
  - constant learning through experience.

Thus, we can say that Entre Comp defines entrepreneurship as end-to-end competence which applied in all spheres of life: from caring for one's own development to active participation in the life of our society.

Yu. Bilova interprets entrepreneurial competence as an integrative psychological quality of personality. It is manifested in a motivated ability to implementation of new ideas and allows us to solve various problems in professional and social life.

It is important that scientists consider its formation in the process of continuing economic education, and later professional activity at the following stages: entrepreneurial knowledge – entrepreneurial thinking – entrepreneurial consciousness – entrepreneurial behavior (Bilova, 2013).

The availability of entrepreneurial competence allows individuals to find and apply the optimal combination of resources in the production process, to create and implement innovations in the economic life of our society. The success of entrepreneurial activity is associated with self-organization, business and personal qualities of the entrepreneur, the effectiveness of business management. It is very important to have leadership skills, the ability to resolve conflict situations, make decisions in unusual situations, work in team, stimulate and motivate the efforts of employees, create organizational structures.

V. Maikovska rightly points out that researchers mostly understand entrepreneurial competence as a set of personal or business qualities, skills, behavior, the formation of which helps to solve successfully certain business problems and achieve high results in material implementation of one's own ideas (Maikovska, 2017).

It should be noted that entrepreneurial competence is distinguished in the professional standard by professions “Primary school teacher” and “General secondary school teacher”, approved in December 2020 by the Ministry of Education and Science of Ukraine, as a general competence that provides the ability to creatively search and implementation of



new ideas, self-presentation and the results of the professional activities; ability to manage by one's own life and career (Pro zatverdzhennia profesiinoho standartu, 2020).

In our opinion, the Professional Standard embodies modern approach to defining of the list and description of general and professional competencies of teachers in general, and primary school teacher in particular. Thus, at the national level, the necessity to form entrepreneurial competence in the modern teachers is noted. We define entrepreneurial competence as an integrative characteristic that combines a set of personal and professional qualities and knowledge that help to implement successfully one's own active professional position, innovative ideas, foresee risks and will be responsible for the process and the results of one's own activities.

According to the coordinators of the Ukrainian-Polish project “Lessons with an Entrepreneurial Background”, implemented under the Program of the Ministry of Foreign Affairs of the Republic of Poland in 2014, “an enterprising teacher is not one who has achieved significant wealth, but active, creative, brave man, who has self-respect and can see what others do not see. Therefore, entrepreneurship can be taught not only by a teacher of economics, but by any other competent teacher ” (Uroky z pidpriemnytskym tlom, 2014, p. 20).

We are impressed by the position of V. Tenetilova, according to which a specially trained teacher who can form a positive motivation, a system of special knowledge and skills for the organization of his own business must teach students the basics of entrepreneurship. Such teacher can cultivate initiative, leadership and other qualities necessary for business activities, entrepreneurship, self-confidence, independence (Tenetilova, 2009, p. 209).

In the given problem the progressive achievements of countries that demonstrate a high level of entrepreneurial training, in particular, the United Kingdom, are of significant scientific interest. Thus, according to research results of S. Baskerville, F. McLeod, N. Saunders, entrepreneurship training is a part of the educational process aimed at achieving two goals:

- purposeful formation of entrepreneurial personality qualities (creativity, entrepreneurship, initiative, independence, sociability, ability to take risks, etc.);
- formation of competence in the organization and implementation of the project of mini-enterprises (entrepreneurial competence).

It is noted that the idea of entrepreneurship education is embedded in the system of functioning of British educational institutions, so as they receive private income not only from housing and catering services, but also from business services: research, consulting and training (Baskervil, Makleod, & Sonders, 2011).

We agree with the opinion of the Polish scientist Jacek Strojny, according to which a teacher with entrepreneurial competence is an optimist, and this skill promotes to success, because success depends on how the world is perceived. From such position, the goal will be achieved even when there are obstacles. There are often difficulties in the enterprising teacher's way, but he, as an entrepreneur-optimist, perceives them as something temporary that can have experience, and will lead to success (Strojny, 2007). Such teacher, forming motivation, self-confidence and faith in his own abilities, develops students' enthusiasm and strength to control their destiny. After all, self-esteem and motivation are the signs of personal entrepreneurship, which are so necessary to direct our own entrepreneurial life.

#### **CONCLUSIONS**

Thus, through the prism of the outlined, despite the ambiguity of interpretations of entrepreneurial competence, different research approaches to this phenomenon, there is an



agreement, at least in European countries, to define it for the purposes of the education system.

Summarizing the aspects of the formation of entrepreneurial competence of future primary school teachers in the field of domestic and foreign experience, we note that the transformation processes affect people, encourage them to use all intellectual opportunities and be open to change. In such circumstances, the advantages on the side of the individual, who is not afraid of new, difficult and unknown situations, can move forward with the right motivation to achieve a certain goal and take an active part in projects and look for new solutions. In our opinion, a modern teacher must show his own entrepreneurial competence, which is the key of his professional mobility, successful self-realization.

Elaboration of domestic and foreign experience in the field of entrepreneurial competence of future primary school teachers opens new opportunities for improving of educational system in Ukraine in the context of adaptation to the requirements of European and global educational space. We connect the prospects of future scientific research with the study of the organizational component structure of the studied phenomenon.

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**ПРАВИЛА ОФОРМЛЕННЯ І ПОДАННЯ РУКОПИСІВ  
(відповідно до міжнародних вимог)**

Проблематика статей журналу охоплює: теоретико-методологічні засади порівняльної педагогіки, сучасні стратегії і тенденції розвитку освіти, вирішення соціально-педагогічних проблем розвитку освітніх систем у **ЗАРУБІЖНОМУ ДОСВІДІ**.

Усі, хто бажає здійснити публікацію в журналі «Порівняльна професійна педагогіка», просимо подавати матеріали до **20 травня/20 листопада**.

Для публікації статті просимо надсилати:

- відомості про автора (ПІБ, місце роботи (назва і адреса), науковий ступінь, вчене звання, адреса для листування, електронна пошта; для аспірантів – ПІБ, місце навчання (назва і адреса), адреса для листування, електронна пошта);
- електронний варіант наукової статті.

**ВАЖЛИВО!**

Публікації в журналі «Порівняльна професійна педагогіка» здійснюються **АНГЛІЙСЬКОЮ МОВОЮ** (за бажанням автора публікуємо також україномовний варіант статті). Обсяг статті – **8–12** сторінок.

**СТАТТІ, ЯКІ ПЕРЕКЛАДЕНІ ЗАСОБАМИ ОНЛАЙН-СЕРВІСІВ (НА ЗРАЗОК GOOGLE TRANSLATE), НЕВІДКОРИГОВАНІ, АБО НЕ ВІДПОВІДАЮТЬ ЧИННИМ ВИМОГАМ, ДО ДРУКУ НЕ ПРИЙМАЮТЬСЯ І НЕ ПОВЕРТАЮТЬСЯ!**

**Технічні характеристики:** Microsoft Word, шрифт – Times New Roman; інтервал – 1,5; кегль – 14; відступ абзацу – 1,25 см; поля: ліворуч – 2,5 см; праворуч – 1,5 см; зверху – 2,5 см; знизу – 2,5 см.

Обов'язкові складники статті:

- **АНОТАЦІЯ / ABSTRACT** (обсягом **1800** друкованих знаків, **АНГЛІЙСЬКОЮ ТА УКРАЇНСЬКОЮ МОВАМИ**);
- **КЛЮЧОВІ СЛОВА / KEYWORDS** (не менше 8);
- **ВСТУП / INTRODUCTION** (постановка проблеми в загальному вигляді та її зв'язок із важливими науковими або практичними завданнями);
- **МЕТА ДОСЛІДЖЕННЯ / THE AIM OF THE STUDY**;
- **ТЕОРЕТИЧНА ОСНОВА ТА МЕТОДИ ДОСЛІДЖЕННЯ / THEORETICAL FRAMEWORK AND RESEARCH METHODS** (джерела, на які автор посилається в теоретичній основі дослідження, повинні бути представлені в **ЛІТЕРАТУРІ**; обов'язково вказати методи дослідження);
- **ВИКЛАД ОСНОВНОГО МАТЕРІАЛУ/RESULTS** (виклад основного матеріалу повинен бути чітким, інформативним і демонструвати власні результати дослідження авторів);
- **ВИСНОВКИ / CONCLUSIONS** (у висновках також слід вказати *перспективи подальших досліджень*);
- **ЛІТЕРАТУРА / REFERENCES** (не менше 10 джерел).



Вимоги до оформлення літератури в англomовній статті викладені наприкінці інформаційного листа і повинні відповідати міжнародному стилю Американської психологічної асоціації (APA).

При оформленні бібліографічних посилань в україномовній статті слід дотримуватися «ДСТУ 8302:2015. Бібліографічне посилання. Загальні положення та правила складання», що набрав чинності 01.07.2016.

Зверніть увагу, що статті англійською мовою мають цифровий ідентифікатор DOI, який надається кожній статті редколегією журналу. Що стосується україномовних статей, автори повинні самостійно вказати УДК.

**СТАТТІ ПРОХОДЯТЬ ПЕРЕВІРКУ В МІЖНАРОДНІЙ СИСТЕМІ АНТИПЛАГІАТ.**

**ЗА ДОСТОВІРНІСТЬ ВИКЛАДЕНИХ ФАКТІВ, ЦИТАТ І ПОСИЛАНЬ НЕСУТЬ ВІДПОВІДАЛЬНІСТЬ АВТОРИ.**

Аспіранти подають статті з **рецензією наукового керівника**; автори без наукових ступенів – із рецензією доктора або кандидата наук із відповідної спеціальності.

Наукові праці докторів наук друкуються в журналі безкоштовно.

Оплата за статтю здійснюється після повідомлення редколегії про відповідність статті вимогам та дозволу до друку. Вартість публікації однієї сторінки – 80 грн.

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### **Приклад оформлення англомовної статті**

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#### **TRENDS IN INCLUSIVE EDUCATION IN THE USA AND CANADA**

##### **ABSTRACT**

*This paper deals with foreign experience of implementing inclusive education for children with special educational needs in the United States and Canada. Legal documents on inclusive education in foreign countries have been analyzed. The most relevant topic of American and Canadian scholars' researches on reforming special education is related to integration, that is gradual transition from exclusion of children with special educational needs to inclusion in comprehensive schools. Based on the analysis of American and Canadian researches on inclusive education it has been concluded that the changes in legislation and education policies of North American countries aim to achieve the highest level of progress in regular education and special education. It has been found that the development of inclusive education in Canada has undergone and is significantly influenced by the American education system ... (1800 знаків)*

**Keywords:** children with special educational needs, inclusion, inclusive education, inclusive learning, special education.

##### **АНОТАЦІЯ**

*У статті проаналізовано зарубіжний досвід упровадження інклюзивного навчання для дітей з особливими освітніми потребами в США та Канаді. Схарактеризовано нормативно-правову основу у сфері інклюзивної освіти в зарубіжних країнах. Провідною темою в дослідженнях американських і канадських науковців стосовно реформування спеціальної освіти став рух у напрямі організації інклюзії, що передбачає поступовий перехід від ізоляції дітей з особливими освітніми потребами до включення їх у середовище закладів загальної середньої освіти ... (1800 знаків)*

**Ключові слова:** діти з особливими освітніми потребами; інклюзія; інклюзивна освіта; інклюзивне навчання; спеціальна освіта.

##### **INTRODUCTION**

Nowadays, one can observe an increasing number of people who refuse to participate in social, political, economic and cultural life of their societies. Such a society is neither efficient nor safe. The first education for all movement originated after the conference on education for all was held in Jomtien, Thailand in 1990 ...



### **THE AIM OF THE STUDY**

The paper aims to theoretically analyze the trends in development of inclusive education in the USA and Canada.

### **THEORETICAL FRAMEWORK AND RESEARCH METHODS**

The origination and development of inclusive education in North American countries have been studied by S. Alokhina, J. Andrews (2000), V. Bondar, E. Danilavichutic, L. Danylenko, A. Gartner (1997), A. Kolupaieva (2009), O. Kryvonosova, D. Lipsky (1997), J. Lupart (2000; 2010), S. Lytovchenko, Yu. Naida, M. Orlansky, T. Sak (2010), L. Savchuk, N. Sofii, Ye. Synova, O. Taranchenko, C. Webber (2010), S. Wilks, M. Winser, V. Zasenکو et al. ...

### **RESULTS**

Over the last few decades, developed countries have undergone significant changes in the attitude towards low-mobility groups of the population and providing quality educational services for children with special educational needs. Therefore, an inclusive model of education is becoming ever more acute. In view of the above, it is rather imperative to study foreign experience of those countries that have already achieved significant progress on this matter. Foreign law and inclusive practice are an important source of ideas about possible ways to solve the problems of implementing inclusive education in Ukraine ...

### **CONCLUSIONS**

So, theoretical analysis of American and Canadian scientific literature proves that the changes in legislation and education policies of North American countries aim to achieve the highest level of educational progress in regular education and provide children with special educational needs with the opportunity to obtain special education ...

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**Приклад оформлення україномовної статті**  
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**ТЕНДЕНЦІЇ РОЗВИТКУ ІНКЛЮЗИВНОЇ ОСВІТИ В США ТА КАНАДІ**

**АНОТАЦІЯ**

*У статті проаналізовано зарубіжний досвід упровадження інклюзивного навчання для дітей з особливими освітніми потребами в США та Канаді. Схарактеризовано нормативно-правову основу у сфері інклюзивної освіти в зарубіжних країнах. Провідною темою в дослідженнях американських і канадських науковців стосовно реформування спеціальної освіти став рух у напрямі організації інклюзії, що передбачає поступовий перехід від ізоляції дітей з особливими освітніми потребами до включення їх у середовище закладів загальної середньої освіти ... (1800 знаків)*

**Ключові слова:** діти з особливими освітніми потребами; інклюзія; інклюзивна освіта; інклюзивне навчання; спеціальна освіта.

**ABSTRACT**

*This paper deals with foreign experience of implementing inclusive education for children with special educational needs in the United States and Canada. Legal documents on inclusive education in foreign countries have been analyzed. The most relevant topic of American and Canadian scholars' researches on reforming special education is related to integration, that is gradual transition from exclusion of children with special educational needs to inclusion in comprehensive schools. Based on the analysis of American and Canadian researches on inclusive education it has been concluded that the changes in legislation and education policies of North American countries aim to achieve the highest level of progress in regular education and special education. It has been found that the development of inclusive education in Canada has undergone and is significantly influenced by the American education system ... (1800 знаків)*

**Keywords:** children with special educational needs, inclusion, inclusive education, inclusive learning, special education.

**ВСТУП**

Сьогодні перед світом постає проблема зростання кількості людей, які відірвані від активної участі в соціальному, політичному, економічному й культурному житті своїх суспільств. Таке суспільство не є ані ефективним, ані безпечним. Уперше рух за



освіту для всіх розпочався з моменту проведення конференції з освіти для всіх у Джомтєні (Таїланд) у 1990 році ...

#### **МЕТА ДОСЛІДЖЕННЯ**

Мета статті – теоретично проаналізувати тенденції розвитку інклюзивної освіти в США та Канаді.

#### **ТЕОРЕТИЧНА ОСНОВА ТА МЕТОДИ ДОСЛІДЖЕННЯ**

Становлення й розвиток інклюзивної освіти в країнах Північної Америки досліджували науковці С. Альохіна, Дж. Андрес (J. Andrews), В. Бондар, Ч. Веббер (C. Webber), С. Вілс (S. Wilks), М. Вінсер (M. Winser), А. Гартнер (A. Gartner), Л. Даниленко, Е. Данілавічюте, В. Засенко, А. Колупаєва, О. Кривоносова, С. Литовченко, Д. Ліпскі (D. Lipsky), Дж. Лупарт (J. Lupart), Ю. Найда, М. Орланські (M. Orlandy), Л. Савчук, Т. Сак, Е. Синьова, Н. Софій, О. Таранченко та інші ...

#### **ВИКЛАД ОСНОВНОГО МАТЕРІАЛУ**

Останні десятиліття в розвинутих країнах світу відбулися суттєві зміни в ставленні до маломобільних груп населення й наданні якісних освітніх послуг для дітей з особливими освітніми потребами. Дедалі більшої динаміки набуває й інклюзивна модель освіти. Значущим аспектом стає вивчення іноземного досвіду країн, які крокують у цьому напрямку. Іноземне право та інклюзивна практика – важливі джерела ідей про можливі шляхи розв'язання проблем упровадження інклюзивної освіти в Україні ...

#### **ВИСНОВКИ**

Унаслідок аналізу американської та канадської наукової літератури підсумовано, що зміни в законодавстві й освітній політиці північноамериканських країн спрямовані на досягнення найвищої успішності всіх категорій дітей у загальній освіті та створення рівних можливостей здобувати освіту для всіх учнів – у спеціальній освіті ...

#### **ЛІТЕРАТУРА**

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**Приклади оформлення посилань та списку літератури  
в англomовній статті згідно з вимогами міжнародного стилю  
Американської психологічної асоціації (APA Style)**

APA стиль передбачає використання посилань у тексті роботи щоразу, коли ви цитуєте джерело, будь то парафраз, цитата всередині рядка чи блокова цитата.

Внутрішньотекстове посилання містить інформацію про: автора праці (редактора/укладача/назву цитованого джерела, якщо автор відсутній), що цитується, рік видання та сторінковий інтервал (номери сторінок, із яких взято цитату). Сторінковий інтервал дозволяється не вказувати, якщо ви не цитуєте, а висловлюєте якусь ідею чи посилаетесь на роботу в цілому.

**Парафраз.** Не береться в лапки. Прізвище(а) автора(ів) може з'явитися:

1) безпосередньо в реченні, тоді після нього в круглих дужках зазначається рік видання;

2) у дужках після парафраза разом із роком видання (через кому).

**Наприклад:**

The publishing process consists of several stages of editing ( Tymoshyk, 2004).

У редакційно-видавничому процесі існує кілька етапів редагування (Тимошик, 2004).

According to M. Tymoshyk (2004), the publishing process consists of several stages of editing.

За Тимошиком (2004), у редакційно-видавничому процесі існує кілька етапів редагування.

Обидва посилання вказують на те, що інформація, яка міститься в реченні, може бути розташована у праці Тимошика, виданій 2004 року.

Більш розгорнута інформація про згадане джерело буде міститися у списку використаних джерел.

**Цитата всередині рядка.** Береться в лапки. Прізвище(а) автора(ів) може з'явитися:

1) безпосередньо в реченні, тоді після нього в круглих дужках зазначається рік видання, а після цитати в круглих дужках зазначається сторінковий інтервал;

2) у дужках після цитати разом із роком видання та сторінковим інтервалом (через кому).

**Наприклад:**

W. Wordsworth (2006) claimed that poetry was “the spontaneous overflow of powerful feelings” (p. 263).

Вордсворт (2006) заявив, що романтична поезія була відзначена як «спонтанний перелив сильних почуттів» (с. 263).

Poetry is “the spontaneous overflow of powerful feelings” (Wordsworth, 2006, p. 263).

Романтична поезія характеризується «спонтанним переливом сильних почуттів» (Вордсворт, 2006, с. 263).





Обидва посилання вказують на те, що інформація, яка міститься в реченні, розташована на сторінці 263 твору 2006 року, автором якого є Вордсворт. Більш розгорнуту інформацію про згадане джерело можна отримати зі списку використаних джерел.

**Блокова цитата** (складається із трьох і більше рядків). Подається в тексті з нового рядка з абзацним відступом для всієї цитати, не береться в лапки. Міжрядковий інтервал – подвійний. Після тексту цитати ставиться крапка і вказується вихідне джерело в дужках.

**Наприклад:**

In publishing, the concept of editing is primarily used to refer to types of work directly related to the activities of the press. Modern editing is associated with sociocultural professional activities aimed at analyzing and improving linguistic works during their preparation for reproduction by means of printing, or broadcast (Khoniu, 2006, p. 45).

У галузі видавничої справи поняття «редагування» насамперед використовується для позначення видів роботи, безпосередньо пов'язаних із діяльністю органів друку. Сучасне редагування належить до сфери суспільно-культурної професійної діяльності, що спрямована на аналіз і вдосконалення мовних творів під час їхньої підготовки до відтворення засобами поліграфії, або до трансляції (Хоню, 2006, с. 45).

**Посилання на роботу кількох авторів (редакторів/укладачів)**

Внутрішньотекстове посилання на роботу кількох авторів залежить від їх кількості:

**1) 2–5 авторів.** У внутрішньотекстовому посиланні необхідно перерахувати прізвища всіх авторів (через кому). Перед останнім автором пишеться знак «&», якщо автори перераховуються в дужках, або слово «та», якщо автори перераховуються в реченні, а рік видання та сторінковий інтервал у дужках.

**Наприклад:**

(Kernis, Cornell, Sun, Berry, & Harlow, 1993) *або* (Kernis, Cornell, Sun, Berry, & Harlow, 1993, p. 199)

Research findings by L. Voiko, S. Hrechka & N. Pavliuk (2010) prove ...

Результати дослідження Бойко, Гречки, та Павлюка (2010) підтверджують ...

*або*

L. Voiko, S. Hrechka & N. Pavliuk (2010) state, “Biology is a system of sciences...” (p. 5).

Л. Бойко, С. Гречка та Н. Поліщук (2010) стверджують: «Біологія – це система наук...» (с. 5).

**2) 6 авторів і більше.** У внутрішньотекстовому посиланні необхідно вказати прізвище першого автора і слово «та ін.».

(Jones et al., 1998) *або* (Jones et al., 1998, p. 7)

(Voiko et al., 2005) *або* (Voiko et al., 2005, p. 10)

Research findings by O. Velychko et al. (2014) prove ...

Результати дослідження О. Величко та ін. (2014) підтверджують ...



*або*

O. Velychko et al. (2014) indicate, “Biology is a system of sciences ...” (p. 10).  
О. Величко та ін. (2005) стверджують: «Біологія – це система наук...» (с. 10).

#### **Посилання на декілька робіт різних авторів (одночасно)**

Якщо парафраз стосується кількох робіт різних авторів, тоді після парафразу необхідно вказати прізвище автора однієї книги і рік видання, після знаку «;» вказати прізвище автора другої книги і рік видання.

##### ***Наприклад:***

Many researchers consider literary editing to be one of the most important stages of text processing (Feller, 2004; Rizun, 2002).

Чимало дослідників вважають літературне редагування одним із найважливіших етапів обробки тексту (Феллер, 2004; Різун, 2002).

#### **Посилання на роботу невідомого автора**

Якщо автора (редактора/укладача) праці встановити неможливо, слід процитувати джерело за його назвою або використати перші два слова в дужках. Назви книг і доповідей слід вказати курсивом або підкреслити; назви статей, розділів і веб-сторінок узяти в лапки.

##### ***Наприклад:***

A similar study was done of students learning to format research papers (“Using APA”, 2001).

Аналогічне опитування було проведено серед студентів, які вивчають формат наукових праць («Using APA», 2001).

Якщо автором виступає організація або державна установа, слід вказати назву цієї організації або взяти її у дужки, коли цитують уперше.

##### ***Наприклад:***

According to the American Psychological Association (2000), ...

Згідно з вимогами Американської психологічної асоціації (2000), ...

#### **Посилання на декілька робіт різних авторів з однаковими прізвищами**

Якщо два або більше авторів мають однакові прізвища, у внутрішньотекстовому посиланні необхідно вказати також перші ініціали (або навіть повне ім'я, якщо різні автори мають однакові ініціали).

##### ***Наприклад:***

There are different opinions on the effects of cloning (R. Miller, 2012; A. Miller, 2014).  
Існують різні думки щодо наслідків клонування (Р. Міллер, 12; А. Міллер, 46).

While some medical ethicists argue that cloning will lead to ... (R. Miller, 2012), others point out that the benefits of medical researches deny such reasoning (A. Miller, 2014).

Хоча деякі медичні фахівці з етики стверджують, що клонування призведе до дизайнерських дітей (Р. Міллер, 2012), інші відзначають, що переваги медичних досліджень перевершують це міркування (А. Міллер, 2014).

#### **Упорядкування списку використаних джерел**

Список використаних джерел подається після основного тексту статті і повинен містити інформацію, необхідну для того, щоб знайти й отримати будь-яке



процитоване джерело. Кожне процитоване в роботі джерело повинно з'явитися у списку використаних джерел. Відповідно, кожен запис у списку використаних джерел повинен бути згаданим у тексті роботи.

Цитований матеріал подається в алфавітному порядку за прізвищем автора (редактора/укладача, якщо немає автора). Якщо матеріал не має автора, його необхідно розподілити за першою літерою його назви.

Якщо в бібліографічному описі зазначено кілька робіт одного й того ж автора, редактора або упорядника, тоді записи розташовуються за роками видання в порядку зростання.

#### **Правила бібліографічного опису для списку використаних джерел**

Якщо в публікації зазначено не більше семи авторів (редакторів/укладачів, якщо книга без автора), то в посиланні необхідно вказати усіх авторів.

Якщо в публікації зазначено вісім та більше авторів (редакторів/укладачів), у посиланні необхідно перерахувати імена перших шести авторів, а потім вставити три крапки (...) та додати ім'я останнього автора.

Назви книг, журналів зазначаються без скорочень.

#### **1. Книга: 1–7 авторів**

Прізвище<sup>1</sup>, Ініціали<sup>1</sup>, Прізвище<sup>2</sup>, Ініціали<sup>2</sup>, Прізвище<sup>3</sup>, Ініціали<sup>3</sup>, Прізвище<sup>4</sup>, Ініціали<sup>4</sup>, Прізвище<sup>5</sup>, Ініціали<sup>5</sup>, Прізвище<sup>6</sup>, Ініціали<sup>6</sup>, & Прізвище<sup>7</sup>, Ініціали<sup>7</sup>. (Рік). *Назва книги: Підназва* (номер видання). Місце видання: Видавництво.

Bragg, S. M. (2010). *Wiley revenue recognition: Rules and scenarios* (2nd ed.). Hoboken, NJ: Wiley.

Тymoshyk, M. V. (2004). *Vydavnycha sprava ta redahuvannia*. Kyiv: In Yure.

Hubbard, R. G., Koehn, M. F., Omstein, S. I., Audenrode, M. V., & Royer, J. (2010). *The mutual fund industry: Competition and investor welfare*. New York, NY: Columbia University Press.

#### **2. Книга: 8 і більше авторів**

Прізвище<sup>1</sup>, Ініціали<sup>1</sup>, Прізвище<sup>2</sup>, Ініціали<sup>2</sup>, Прізвище<sup>3</sup>, Ініціали<sup>3</sup>, Прізвище<sup>4</sup>, Ініціали<sup>4</sup>, Прізвище<sup>5</sup>, Ініціали<sup>5</sup>, Прізвище<sup>6</sup>, Ініціали<sup>6</sup> ... Прізвище останнього автора, Ініціали. (Рік). *Назва книги: Підназва* (номер видання). Місце видання: Видавництво.

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#### **3. Книга за редакцією**

Прізвище редактора, Ініціали. (Ред.). (Рік). *Назва книги: Підназва* (номер видання). Місце видання: Видавництво.

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Ophir, A., Givoni, M., & Hanafi, S. (Eds.). (2009). *The power of inclusive exclusion*. New York, NY: Zone.

Fihol, N. (Red.). (2009). *Ukrainska mova*. Kyiv: NTUU "KPI".

Prusova, V. H., Prykhach, O. S., Dovhan, K. L., Ostapenko, H. H., Boiko, S. O., Polishchuk, O. O. ... Bondar, H. R. (Red.). (2004). *Matematyka*. Kyiv: Osvita.

#### **4. Книга: автор-організація**

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Instytut svitovoi ekonomiky ta mizhnarodnykh vidnosyn. (2012). *Derzhava v ekonomitsi Yaponii*. Kyiv: Nauka.

#### **5. Книга без автора**

*Назва книги: Підназва*. (Рік). (номер видання). Місце видання: Видавництво.

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#### **6. Частина книги**

Прізвище автора глави, Ініціали. (Рік). Назва глави: Підназва. В Ініціали Прізвище редактора або укладача (відповідальність скорочено), *Назва книги: Підназва* (номер видання). (сторінковий інтервал). Місце видання: Видавництво.

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Прізвище автора багатотомної праці, Ініціали, & Прізвище редактора, Ініціали (Ред.). (Рік). *Назва багатотомної праці: Підназва* (номер видання). (Діапазон томів). Місце видання: Видавництво.

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