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SPECIFIC FEATURES OF THE PROFESSIONAL SELF-DEVELOPMENT OF PHYSICAL EDUCATION TEACHERS IN THE CONTEMPORARY CONTEXT

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Abstract

Relevance. Contemporary transformations of the educational space of Ukraine, driven by digitalisation, the New Ukrainian School reform, and the challenges of martial law, place fundamentally new demands on specialists in physical education. Traditional forms of in-service training can no longer fully meet the need for the prompt mastery of innovative methods. Consequently, a contradiction arises between high societal expectations of the physical education teacher's personality and the insufficient substantiation of the internal mechanisms of their continuous professional self-development in the system of non-formal and informal education.

Purpose. To analyse the specific features of the professional self-development of physical education teachers in non-formal and informal education; to identify practical mechanisms for improving their professional and pedagogical activity; and to reveal the interrelation between general cultural and professional competences as the foundation of continuous personal and professional growth.

Methods. Systemic and comparative analysis of psychological, pedagogical, and methodological literature and regulatory documents; comparison and generalisation of the provisions of the competence-based and culturological approaches; and abstraction to structure the levels of reflection (intellectual, personal, and interpersonal) and to identify the functional links between general cultural and professional competences.

Results. The essential differences between the concepts of "professional development" and "professional self-development" are revealed, with the teacher's agency and conscious responsibility for their own growth identified as the key factor. It is demonstrated that general cultural competence acts as an axiological filter and the principal driver of self-education. The need to update the structure of the teacher's competence through the integration of digital literacy and methodological flexibility in elective modules is substantiated. The transformation of three levels of reflection in the digital age, involving generative artificial intelligence, smart devices, and horizontal peer-to-peer networks, is characterised. Applied cases are presented: algorithms for using generative artificial intelligence (ChatGPT, Gemini) to develop teaching materials, inclusive tasks, and wellness trajectories, as well as a structural and methodological model of a lesson within the New Ukrainian School (hereinafter – NUS) elective module "Frisbee (Ultimate)".

Conclusions. The professional self-development of the physical education teacher is a synergistic process within the system of lifelong learning, grounded in a high reflective culture and professional autonomy. Formal education provides the normative and fundamental basis, whereas non-formal and informal education serve as the main resources for the flexible mastery of innovations. Further research should focus on developing diagnostic tools for teachers' self-monitoring of reflective skills in the period between attestations.

Keywords: *professional development, teacher professional self-development, reflection, professional competence, general cultural competence, non-formal education, physical education.*

Introduction.

Contemporary transformations of the educational space place new demands on the teacher's personality, shifting priorities from the mere transmission of knowledge to the development of soft skills and readiness for lifelong learning. The Recommendation of the Council of the European Union emphasises that critical thinking, problem solving, teamwork, creativity, and self-regulation are becoming increasingly important in contemporary society; the document defines competence as a combination of knowledge, skills, and attitudes (Council of the European Union, 2018). Under present-day conditions, aggravated by martial law and its objective consequences (learning losses and gaps, relocated educational institutions, the education of internally displaced persons, and persistent stress and anxiety), and given the need for large-scale digitalisation and the practical implementation of the conceptual provisions of the New Ukrainian School, a teaching professional's capacity for continuous self-improvement acquires particular importance. Today's teachers have to perform many different functions that go beyond teaching the content of a school subject (UNESCO Institute for Lifelong Learning, n.d.). Teachers therefore need to update their knowledge and skills continuously, reflect on their own practice, and adapt to societal transformations. As stipulated in the Law of Ukraine "On Education", "the professional development of teaching and academic staff involves continuous self-education, participation in professional development programmes, and other types and forms of professional growth" (Verkhovna Rada of Ukraine, 2017). Current legislation thus does not reduce the professional development of a physical education teacher to the formal completion of in-service training courses: self-education and other forms of professional growth emerge as distinct components of this process. Accordingly, the relevance of the issues addressed in this article stems from the need to resolve the contradiction between the growing societal demands on the personality of the physical education teacher in the era of global

digitalisation (as a promoter of an innovative, healthy, and active lifestyle) and the insufficient elaboration of the internal mechanisms of their self-development in non-formal and informal education.

Literature Review. The issues of teachers' professional development and self-development are addressed in the works of many scholars, which we have grouped into the following thematic areas: the methodological and theoretical foundations of the teacher's professional formation (I. Bekh, O. Dubaseniuk, L. Yershova, I. Ziaziun, V. Kremen, V. Radkevych, O. Romanovskyi, and others) (Bekh, 2009; Dubaseniuk, 2013; Kremen, 2008; Romanovskyi et al., 2012; Ziaziun et al., 2004); the psychological features of the development of teachers' professional competence and creative potential (S. Maksymenko, V. Moliako, O. Pomytkin, V. Semychenko, and others); and the theoretical and methodological aspects of the professional self-improvement of physical education teachers (T. Buhaienko, Yu. Kurnyshev, M. Liannoi, Yu. Moseichuk, Ye. Prystupa, L. Sushchenko, B. Shyian, and others) (Kurnyshev & Moseichuk, 2025; Liannoi et al., 2024; Shyian, 2002). In particular, A. Tsos (2012) addresses the improvement of the system of teacher training and the development of the professional competence of specialists in physical culture. The scholar's provisions provide a basis for understanding contemporary requirements for the professional activity of a physical education teacher and for identifying prospects for their professional self-improvement. B. Shyian (2002) substantiates methodological approaches to organising teaching and upbringing and to developing the teacher's pedagogical mastery, and reveals the teacher's role in shaping pupils' motor culture. These contributions should be taken into account when identifying current directions of teachers' professional self-improvement, since they underline the need to combine fundamental subject training with the continuous updating of the methodological toolkit and the development of individual pedagogical mastery. At the same time, some

publications equate the scientific concepts of “professional development” and “professional self-development”, which, in our view, is unacceptable. The concept of “teacher professional development” is a semantically broader category, whereas we associate the semantic core of “professional self-development” with the teacher’s personal agency, self-determined goals, self-analysis, and conscious responsibility for their own professional growth. In view of this, we position the professional self-development of the physical education teacher as a complex, dynamic process that requires a deep internal rethinking of one’s own experience and active interaction with the professional environment.

The problem of the physical education teacher’s self-development as a factor in improving professional mastery is examined directly by V. Leleka and I. Melnychuk (2026). The researchers define the essence and components of the physical education teacher’s self-development and focus on the main factors of the teacher’s professional and personal improvement. Of conceptual importance for the study of physical education teachers’ professional self-development is the position of N. Mukan, F. Zagura, and Ya. Lavrysh (2025) on combining the teacher’s reflective understanding of their own practice with professional interaction with colleagues. The authors rightly argue that a teacher’s professional growth can occur through the systematic analysis of pedagogical experience, the discussion of professional problems, and a joint search for ways to improve teaching. In this case, reflection is not limited to self-assessment of a delivered lesson but becomes a means of rethinking pedagogical decisions, their premises, and their consequences. The conceptual idea proposed by the authors gives grounds for regarding the reflective component as one of the mechanisms of teacher self-development. At the same time, it is necessary to distinguish between individual reflection and interpersonal professional reflection: the former ensures a personal understanding of experience, while the latter broadens it through professional dialogue. In the context of our article, relevant ideas include the need to take into account the complexity of contemporary teaching, the interrelation between theory and practice, and the prospect of the teacher’s

professional growth throughout the career (Armour et al., 2012, 2017). Thus, Ukrainian and international publications substantiate the essence of self-development as an important factor in the specialist’s personal formation, the improvement of their professional activity, and the realisation of individual pedagogical potential. A generalisation of researchers’ approaches makes it possible to regard the teacher’s professional self-development as a purposeful and continuous process of qualitative change in the professional and personal spheres. This process involves awareness of one’s own educational needs, the identification of prospects for professional growth, the systematic updating of knowledge, the improvement of pedagogical skills, and the development of critical thinking and reflective abilities. Its important prerequisites are the teaching professional’s intrinsic motivation, readiness for self-education, and ability to evaluate the results of their own activity critically and to adapt to changes in the educational environment. These provisions are particularly significant for the professional activity of the physical education teacher, which requires a combination of psychological and pedagogical knowledge, subject-specific methodological training, practical skills in organising physical activity, and the ability to take into account the individual characteristics and physical capabilities of general secondary education learners. The specific nature of this activity creates a need for the continuous improvement of physical education methods, the mastery of modern educational technologies, the search for effective forms of organising classes, and the introduction of innovative approaches to fostering learners’ health culture and physical activity.

At the same time, the analysis of scholarly sources shows that, despite the substantial body of work on the professional development of teaching staff and the theory of physical education, which forms the necessary theoretical basis for studying the professional self-development of the physical education teacher, the problem raised in this article requires further scientific elaboration. In particular, open questions remain regarding the development of practical mechanisms for organising the professional self-development of such specialists in non-formal and informal education, the

substantiation of effective ways of motivating them towards self-education and professional reflection, and the identification of opportunities for using innovative technologies, including artificial intelligence (hereinafter – AI), in physical education in general secondary education institutions.

Purpose: to analyse the specific features of the professional self-development of physical education teachers in the contemporary context of non-formal and informal education; to specify practical mechanisms for improving their professional and pedagogical activity; and to reveal the interrelation between the general cultural and professional competences of the physical education teacher as the foundation of their continuous personal and professional growth.

Methods: To achieve the stated purpose and accomplish the research tasks, a set of interrelated methods was employed: *systemic and comparative analysis* of psychological, pedagogical, and methodological literature and regulatory documents to clarify the essence of, and conceptually delimit, the notions of “reflection”, “professional competence”, and “teacher self-development”; *comparison and generalisation* of the provisions of the competence-based and culturological approaches to examine the structure of the teacher’s professional mastery and to determine the role of the value-and-culture basis in the process of self-improvement; and *abstraction* to structure theoretically the levels of reflection (intellectual, personal, and interpersonal) and to identify the functional links between the specialist’s general cultural and professional competences.

Results and Discussion. The study of openly accessible works by Ukrainian and international authors makes it possible to form the theoretical and methodological basis for investigating the professional self-development of physical education teachers. The common value of the studies cited above lies in the fact that their authors regard the teacher’s professional growth not merely as the outcome of formal in-service training but as a long-term, reflective, socially conditioned, and practice-oriented process of transforming the professional thinking and pedagogical activity of the teacher, including the physical education teacher. In this study, we distinguish between closely related

concepts: “professional development” (the totality of changes in the teacher’s professional competences, knowledge, skills, values, and modes of activity); “continuing professional learning” (an organised and non-formal process of acquiring new knowledge, skills, and experience throughout the professional career); and “professional self-development” (a purposeful, self-directed process of self-knowledge, self-education, reflection, self-regulation, and self-improvement of the teacher in line with consciously set professional goals). This differentiation is methodologically important, since not every instance of in-service training of a physical education teacher ensures their self-development. Self-development is possible only if the teacher maintains a stable, active stance towards it, expressed in the ability to identify professional problems independently, set goals for solving them, choose the means of achieving these goals, and evaluate the results of their own change.

Consequently, the traditional understanding of a teaching professional’s self-development as the accumulation of didactic knowledge is now giving way to the concept of anticipatory lifelong learning and the construction of an individual educational trajectory, in which digital and technological constructs become basic elements of the physical education teacher’s professional resilience. In this context, the meaning of the teacher’s reflective culture requires particular rethinking: amid the integration of modern media technologies, it becomes the main driving force of physical education teachers’ professional self-development in the period between attestations.

At the same time, the specialist’s general cultural competence remains central (Dubaseniuk, 2013). This integrative quality serves as an internal value filter that helps the teacher navigate the online information field, single out academically substantiated methods, and create an inclusive, barrier-free environment in class. In view of this, we position the physical education teacher’s reflective attitude towards their own professional self-development as one of the most important conditions for its deeper understanding, critical analysis, and constructive professional self-improvement. Reflection finds expression in the so-called “normal duality of consciousness”, in which

the individual acts simultaneously as a “performer” (the direct object of reflection who carries out the activity) and as a “controller” (the subject of reflection who regulates and analyses their own actions and deeds).

It is important to note that reflective analysis of the physical education teacher’s professional self-development in general, and of each of their pedagogical actions, is not a process confined to the closed “individual space” of self-consciousness. On the contrary, according to philosophers, a person’s capacity to reflect on their activity results from active interaction with colleagues, general secondary education learners, and their parents. Only through interaction with other individuals in non-formal education does the teacher seek to understand the thoughts and actions of others, which in turn enables them to assess themselves reflectively. This individual internal reflection rests on processes of mutual reflection, which involve not only a personal understanding of the inner world of the “other” but also an understanding of how this “other” will understand “me”.

In the structure of the physical education teacher’s reflection aimed at developing self-awareness, it is advisable to differentiate three key vectors:

intellectual reflection – understanding and orienting the subject’s practical actions;

personal reflection – self-organisation, progress through self-knowledge, and self-analysis of one’s own state, inner mental acts, premises of thinking, and the integral “Self”;

interpersonal reflection – a person’s analysis of the personality and activity of a partner in joint work, as well as the mutual reflection of subjects in one another.

The results of the physical education teacher’s reflective actions invariably become a powerful stimulus for further self-development. In today’s realities, however, the classical interaction between the “Self-as-performer” and the “Self-as-controller” at the level of consciousness is undergoing substantial change under the influence of digital tools.

Today, the informal space makes it possible to digitise the physical education teacher’s self-analysis. In particular, intellectual reflection is now

supported by digital reflective journals and AI assistants (such as ChatGPT or Gemini) used to model and analyse non-standard situations in lessons. Personal reflection acquires a biometric dimension through the use of fitness trackers and smart devices: the teacher reflects on their own physical condition, stress resistance, and endurance, thereby directly conveying a culture of wellness to general secondary education learners. Interpersonal reflection is realised in professional online communities of the all-Ukrainian, and sometimes international, teaching community (for example, the JuniorS movement, thematic Telegram channels, Facebook groups, etc.). This creates a model of horizontal peer-to-peer (P2P) learning in which peer assessment and the exchange of experience occur instantly, removing temporal and spatial boundaries.

The next stage of the study of physical education teachers’ self-development is based on the competence-based approach, since professional competence in all its manifestations is the genuine foundation of a teacher’s self-development.

Most researchers understand the professional competence of the physical education teacher as the ability to perform the tasks of the physical education of young learners professionally, achieving efficiency and high results. This becomes possible through a harmonious combination of three groups of components: professional knowledge, skills, and abilities; personal qualities and individual characteristics; and the specialist’s general culture. Competence thus emerges as a comprehensive characteristic of a specialist who has attained a certain level of higher pedagogical education and is capable of meeting the requirements and duties of the professional activity they have mastered.

Professional competence, however, does not exist in isolation. Drawing on the scholarly propositions of O. Dubaseniuk (2013), it should be emphasised that the professional competence of the teacher, including the physical education teacher, is derived from general cultural competence. A person’s culture dominates their competence, since it encompasses the overall level of personal development and improvement (in particular, the qualities of mind, character, memory, and imagination that a person acquires through upbringing and education).

In non-formal and informal education, the dominance of a person's culture over their self-development (on the basis of the physical education teacher's already developed professional competence) is particularly evident. The cultural basis becomes the internal driver that motivates the teacher to improve their skills continuously beyond the traditional academic framework.

Under the influence of the reform of the "Physical Education" subject area (in line with the New Ukrainian School standards) and the expansion of the space of non-formal education, the structure of the physical education teacher's professional competence requires substantial modernisation. Its model acquires new connotations through the integration of two contemporary invariants:

digital competence, which encompasses the physical education teacher's ability to use cloud technologies to monitor pupils' physical condition, command of gamification tools (Kahoot!, Quizizz, LearningApps, etc.) to help pupils master the content of the theoretical modules of the NUS curriculum, and the use of video analysis (slow-motion recording applications) to correct learners' technique in performing motor actions during lessons;

methodological flexibility in elective modules acquired through non-formal education: unlike formal education, which provides the fundamental basis (anatomy, biomechanics), non-formal education (certified workshops and training courses delivered by sports federations) enables the teacher to master promptly new elective NUS modules such as cheerleading, frisbee, pétanque, korfbal, and floorball. This makes it possible to adapt the educational process flexibly to the interests of Generation Alpha, that is, children born

approximately between 2010 and the mid-2020s, who are growing up in a digital world and are distinguished by a high degree of independence, technological literacy, critical thinking, and a well-developed digital competence.

Under present-day civilisational conditions, it is precisely digital competence that should serve as the fundamental basis of the physical education teacher's professional formation and career growth. We believe that the contemporary teacher should pay attention to the following directions of self-development of their digital competence:

AI assistants: using ChatGPT or Gemini to generate engaging scenarios for quests and sports quizzes, individual training plans for general secondary education learners, or lesson plans; this saves the physical education teacher time for personal life and pedagogical creativity;

mobile applications and gadgets: digitising one's own experience; today the physical education teacher personally tests fitness trackers, applications for analysing movement technique (for example, slow-motion video to analyse errors in jumping or running), Tabata training applications (Tabata Timer), and interactive movement breaks (Just Dance, GoNoodle);

lesson design: integrating gamification through Kahoot!, Quizizz, or LearningApps into theoretical physical education classes (the history of the Olympic Games, safety rules, healthy eating).

Under martial law, the question of how formal and non-formal education should share the task of physical education teachers' professional self-development becomes particularly pressing. The approach we propose to address it is presented in Table 1.

Table 1

Distribution of the roles of formal and non-formal education in the professional self-development of physical education teachers

Criterion	Formal education (traditional)	Non-formal and informal education (contemporary/flexible)
<i>Essence</i>	Official training at higher education institutions and institutes of postgraduate pedagogical education; award of qualification categories.	Courses on online platforms (Prometheus, EdEra, Vseosvita, etc.), webinars, certification programmes, workshops.

Criterion	Formal education (traditional)	Non-formal and informal education (contemporary/flexible)
<i>Features for the physical education teacher</i>	Provides the fundamental basis (anatomy, biomechanics, classical pedagogy). Oriented towards state standards and requirements.	Enables rapid mastery of new NUS modules (cheerleading, frisbee, pétanque, badminton, korfbal) through short practical training courses delivered by sports federations.
<i>Advantages</i>	Mandatory for legitimising status and professional advancement.	Highly practical. Provides ready-to-use tools “here and now”.

Source: developed by the author.

Current legislation allows hours of non-formal education (webinars, online courses) to be counted towards the total number of hours required for attestation. This gives the physical education teacher a free hand and motivates them to learn, which is of genuine practical value and leads to concrete results.

The role of informal education in contemporary self-development deserves particular emphasis: it is not a bottom-up movement (from novice to professor) but a horizontal one:

professional learning networks: participation in Facebook groups and professional communities (for example, the JuniorS movement initiated by Oleksandr Pedan, which has completely reshaped physical education lessons in Ukraine);

mentoring and supervision: an experienced teacher becomes a mentor to a younger colleague or, conversely, a young teacher engages in “reverse mentoring”, teaching an older colleague to use AI or Canva for presentations.

An updated concept of the contemporary physical education teacher’s professional self-development should necessarily include training in soft skills, namely emotional intelligence and burnout prevention (the physical education teacher often works amid high noise levels and children’s strong emotions), as well as an inclusive culture: the ability to adapt exercises for children with various health conditions and special educational needs (SEN), and the development of empathy and barrier-free teaching.

Self-development today means the ability to maintain one’s own psychological resilience (mindfulness, breathing techniques, time management).

For a more detailed understanding of how the physical education teacher’s professional competence is being transformed amid digitalisation

and the introduction of NUS standards, it is useful to consider specific practical cases resulting from contemporary specialists’ non-formal and informal self-education.

Case 1. Algorithmisation of the use of generative AI assistants in professional activity.

The use of generative AI (exemplified by ChatGPT and Gemini) is regarded not merely as an automation tool but as the teacher’s cognitive partner that stimulates intellectual reflection. Below is a practical matrix of prompts (queries) and outcomes that a physical education teacher can integrate into lesson preparation to save time and increase pupils’ engagement.

Designing non-standard teaching materials (gamification of theory).

Prompt for the AI: “Act as an NUS methodologist in physical education. Create an interactive sports quest with five stations for Grade 6 pupils on the topic ‘History and Rules of the Olympic Games’. Each station should contain one motor task and one logic question whose answer is the key to the next station. Adapt the quest to the conditions of an ordinary school gym.”

Outcome for the teacher: the teacher receives a ready-made step-by-step scenario with time allocation, assessment criteria, and didactic prompts, which requires only minimal adaptation to the facilities and equipment of a particular educational institution.

Differentiation and an inclusive approach (working with learners with SEN).

Prompt for the AI: “Develop an individual plan of physical activity for a lesson within the ‘Badminton’ module for Grade 7 pupils with mild scoliosis and myopia (–2.5 D). Suggest alternative exercises that allow the pupil to be fully included in the general activity of the class while minimising axial loading of the spine.”

Outcome for the teacher: the AI generates a list of modified exercises (for example, keeping the shuttlecock up on the spot, serving from a fixed position, and hand-eye coordination exercises without abrupt jumps), which makes it possible to implement the principles of barrier-free education within a standard lesson.

Personalising pupils' wellness trajectories.

Prompt for the AI: "Compile a template for a 15-minute high-intensity interval training session based on the Tabata system for senior pupils (Grades 10–11) who have a low level of physical fitness but wish to improve their general endurance. Use bodyweight exercises only."

Outcome for the teacher: a ready-to-use technological card of an interval session with precise timing (20 seconds of work / 10 seconds of rest), a description of safety rules, and heart-rate zones for pupils' self-monitoring with smart devices.

Case 2. Detailed methodology and structure of a lesson within the NUS elective module "Frisbee (Ultimate)".

Mastering the technology of teaching Ultimate (a flying-disc game) through non-formal education (seminars of the Ukrainian Flying Disc Federation) enables the teacher to implement a key NUS principle, namely education through values: Ultimate has no referee, and players resolve disputes themselves on the basis of the Spirit of the Game.

Below is a detailed methodological structure of a lesson for Grade 7 pupils (duration: 45 minutes).

I. Preparatory part (up to 10–12 minutes)

organisational moment and reflective start: instead of the traditional report and line-up, a quick "pulse-monitoring" circle and psychological warm-up are held. Pupils measure their heart rate (HR) using smartwatches or by palpation and record the baseline data in reflection cards;

theoretical mini-block (microlearning): the teacher shows a one-minute video of the correct backhand throw (a throw with the wrist turned inwards) on a tablet or via a printed QR code;

special warm-up with discs:

dynamic movement break: running along the court lines with changes of direction on a sound signal (a whistle or the Tabata Timer application);

gymnastic routine with a frisbee: rotating the disc around the neck and torso and under the legs (developing coordination and a "feel for the disc");

flexibility exercises: lunges and bends in which the disc is used as a marker of the range of motion.

II. Main part (up to 25–28 minutes)

Block A. Technical training (work in pairs).

Exercise 1: learning the backhand throw. Pupils stand 5–7 metres apart. The task is to complete 15 accurate passes to the partner's chest area. The teacher uses a mobile application (for example, Technique_Video_Analysis) to record selected pupils' movements for immediate error analysis (disc tilt angle, elbow position).

Exercise 2: learning to catch the disc. Two catching techniques are practised: the "sandwich" catch (with two palms from above and below, the safest technique for beginners) and the "crocodile" catch (with one or two hands from the sides).

Block B. Tactical and game training (work in small groups).

Exercise 3: the game "Keep the Disc (3 v 1)". Three players pass the disc to one another within a marked 10 × 10 m square while one defender tries to knock down or intercept it. The game teaches pupils to get open for a pass and to make decisions quickly.

Game component: simplified Ultimate (5 v 5), a non-contact game. The aim is to pass the disc through the air between teammates and catch it in the end zone (the opponents' zone). Running with the disc in hand is not allowed.

Educational and reflective focus on the Spirit of the Game: when a foul occurs (a collision or snatching of the disc), play is stopped. Pupils must resolve the situation themselves through a short dialogue (up to 30 seconds) without the teacher's intervention. This develops interpersonal reflection, emotional intelligence, respect, and barrier-free communication.

III. Final part (up to 5–7 minutes)

cool-down: breathing recovery exercises and stretching (of the leg, back, and shoulder-girdle muscles) accompanied by calm, relaxing music;

final reflection (P2P assessment): pupils measure their heart rate again to analyse how quickly the body recovers. The teacher collects feedback using the "circle of impressions" method:

What went best today in your throwing technique?

How did the Spirit of the Game manifest itself in your team?

Which of your partners would you like to thank for successful cooperation?

Homework (informal track): watch a short YouTube analysis of the “vertical stack” tactical formation in Ultimate or complete a short test (five questions) on the Quizizz platform created by the teacher with the help of AI.

Conclusions. The contemporary professional self-development of the physical education teacher is a synergistic, continuous process driven by a renewed reflective culture and anticipatory professional competence. Under the influence of digitalisation, the traditional triad of reflection (intellectual, personal, and interpersonal) is being transformed into a high-tech toolkit for self-monitoring and networked P2P interaction. It is also a multifaceted process based on the synergy of reflective culture and professional competence. Internal reflection (the “Self-as-performer” and the “Self-as-controller”), combined with interpersonal interaction, enables the teacher to evaluate and adjust the direction of their professional growth objectively. At the same time, the individual’s general culture acts as the main stimulus of this process in the space of non-formal and informal education, ensuring a transition from the formal performance of duties to continuous creative and professional self-improvement.

Formal education continues to serve as the normative and fundamental basis, whereas non-formal and informal education are becoming the

main platforms for the rapid acquisition of innovative skills (new NUS sports modules, digital literacy, and the use of AI). In this context, general cultural competence ensures the humanistic and inclusive orientation of digital transformations, turning physical education into a space for the harmonious development of the individual.

Further research should focus on developing specific practical tools (questionnaires, digital reflective journals, interactive self-development maps) that will help the physical education teacher diagnose independently the level of development of their personal and interpersonal reflection. Another promising direction is the study of the impact of contemporary professional online communities and non-formal educational platforms on the intensification of physical education teachers’ self-learning in the period between attestations.

It also appears promising to substantiate the expediency of the following shifts: from the traditional focus on “accumulating knowledge” to the development of resilience and adaptability and the building of one’s own professional brand; from control to autonomy, since the contemporary teacher directs their own learning and develops not because it is “required for attestation” but in order to remain interesting to Generation Alpha (digital natives); and towards the concept of microlearning, in which long lectures are replaced by short learning sessions (podcasts, ten-minute videos, professional blogs on Instagram and TikTok, Telegram channels).

Conflict of Interest

The author certifies that no conflict of interest (financial, professional, or personal) exists that could have influenced the objectivity of the research results or conclusions. The integrity of the double-blind peer review process was ensured through a mandatory declaration of the absence of conflict of interest submitted via the journal's editorial system. This protocol guaranteed complete author anonymity and the independence of the expert evaluation throughout the entire editorial cycle.

Declaration on the Use of Generative Artificial Intelligence.

During the preparation of the English version of this manuscript, Claude (Anthropic) was used for translating the text from Ukrainian into English, language editing, verifying bibliographic data, and formatting the manuscript in accordance with the journal template. The conceptual provisions, practical cases, and scientific conclusions are the author’s own. The translated text was reviewed and approved by the author, who takes full responsibility for its content and scientific accuracy. Artificial intelligence is not a co-author of this work.

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ОСОБЛИВОСТІ ПРОФЕСІЙНОГО САМОРОЗВИТКУ ВЧИТЕЛІВ ФІЗИЧНОЇ КУЛЬТУРИ В СУЧАСНИХ УМОВАХ

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Реферат:

Актуальність. Сучасні трансформації освітнього простору України, зумовлені цифровізацією, реформою «Нова українська школа», а також викликами воєнного стану, ставлять принципово нові вимоги до фахівців галузі фізичного виховання. Традиційні форми підвищення кваліфікації вже не можуть повною мірою задовольнити потребу в оперативному оволодінні інноваційними методиками. Відтак постає суперечність між високими суспільними очікуваннями від особистості вчителя фізичної культури та недостатнім обґрунтуванням внутрішніх механізмів його неперервного професійного саморозвитку в системі неформальної й інформальної освіти.

Мета. Проаналізувати особливості професійного саморозвитку вчителів фізичної культури в умовах неформальної та інформальної освіти; визначити практичні механізми вдосконалення їхньої професійно-педагогічної діяльності; розкрити взаємозв'язок між загальнокультурною та професійною компетентностями як підґрунтям безперервного особистісного й фахового зростання.

Методи. Системний і порівняльний аналіз психолого-педагогічної, науково-методичної літератури та нормативних документів; зіставлення та узагальнення положень компетентісного й культурологічного підходів; абстрагування – для структурування рівнів рефлексії (інтелектуальної, особистісної, міжособистісної) та виявлення функціональних зв'язків між загальнокультурною і професійною компетентностями.

Результати. Розкрито сутнісні відмінності між дефініціями «професійний розвиток» і «професійний саморозвиток», де ключовим чинником визначено суб'єктну активність та усвідомлену відповідальність учителя за власне зростання. Доведено, що загальнокультурна компетентність є аксіологічним фільтром і головним рушієм самоосвіти. Обґрунтовано необхідність оновлення структури компетентності педагога через інтеграцію цифрової грамотності та варіативно-методичної гнучкості. Охарактеризовано трансформацію трьох рівнів рефлексії в цифрову епоху із залученням генеративного штучного інтелекту, смарт-гаджетів і горизонтальних P2P-мереж. Представлено прикладні кейси: алгоритми застосування генеративного ШІ (ChatGPT, Gemini) для розроблення дидактики, інклюзивних завдань і Wellness-траєкторій, а також структурно-методичну модель уроку за варіативним модулем Нової української школи (далі – НУШ) «Фризбі (Алтимат)».

Висновки. Професійний саморозвиток учителя фізичної культури є синергетичним процесом у системі освіти впродовж життя, базованим на високій рефлексивній культурі та професійній автономії. Формальна освіта формує нормативний і фундаментальний базис, тоді як неформальна та інформальна освіта виступають головними ресурсами для гнучкого опанування інновацій. Перспективи подальших розвідок полягають у створенні діагностичного інструментарію самомоніторингу рефлексивних умінь педагогів у міжтестастійний період.

Ключові слова: професійний розвиток, професійний саморозвиток вчителя, рефлексія, професійна компетентність, загальнокультурна компетентність, неформальна освіта, фізична культура.

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