# TEACHER PROFESSIONAL DEVELOPMENT IN THE CONDITIONS OF EDUCATION TRANSFORMATION: NEW REGULATORY FRAMEWORK, CHALLENGES AND OPPORTUNITIES

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**Abstract.** The article identifies new challenges and potential opportunities for teacher professional development in the context of nowadays Ukrainian education system transformation. The meaning of the research concepts of "transformation", "modernization" and "reformation" were clarified. The "transformation" is interpreted as profound qualitative changes in the main structural components of the system, which are satisfactory to the

challenges of modern society. The conducted literature review determined that the processes and changes in current education system of Ukraine should be defined not as modernization or reformation but as transformation. Nevertheless, the education transformation in Ukraine includes both modernization and reformation. A strong impact on teacher's professional development maintains: 1) the system of general secondary education since it determines goals, terms, and rules of professional activities, and 2) the system of postgraduate pedagogical education that induces every teacher to find the most satisfactory methods, means and approaches to sustain high productivity and achieve complete self-realization in everyday routine. The current Ukrainian system of general secondary education is under changes performed according to the "Concept of the New Ukrainian School" implemented in the new "State Standard of Basic Secondary Education for 5-9 grades" and "Professional Standard "Teacher of general secondary education institution". The existing Ukrainian system of postgraduate pedagogical education is revised in accordance with "Procedure for improving the qualifications of pedagogical and research and teaching staff" and conceptual and methodological principles of the implementation of the certification process outlined in the "Framework for continuous professional development of teachers". The challenges that the new regulatory framework of Ukrainian education generates for teachers in the system of general secondary education and postgraduate pedagogical education are stressed, and new opportunities for teacher professional development are accentuated.

**Keywords:** transformation, regulatory framework, system of general secondary education, system of postgraduate pedagogical education, teacher professional development.

## **INTRODUCTION**

The Ukrainian education system, adapting to the new terms of globalization, integration, and the information society, nowadays is under the effect of various reforms that lead to a qualitative transformation of its target orientations, content, forms, methods, and approaches to education.

From September 2022, following the Concept of the New Ukrainian School (Hrynevych, 2016), 5th-grade students of general secondary education institutions will undergo study based on the new State Standard of Basic Education (Cabinet of Ministers of Ukraine, 2020), which ensures continuity between Ukrainian primary and secondary schools and implements the person-oriented and competency-based as the leading approaches.

Under such circumstances, the problem of teacher professional development becomes very relevant insomuch as teachers are the ones who will practically implement all reforms. In addition, only they can ensure the effectiveness of the transformation of the Ukrainian education system and make Ukrainian school graduates competitive and able to get further education at European education establishments.

The Encyclopedia of Education interprets professional development as a process that

forms a system of personal properties of a subject of professional activity in the conditions of continuous professional education, self-education, and the implementation of professional activities (Kremin, 2008). Along these lines, teacher professional development (TPD) is an uninterrupted educational process implemented in the system of postgraduate pedagogical education (SPPE) but directed and closely connected to the system of general secondary education (SGSE). Therefore, it is necessary to define challenges and outline possibilities that the new regulatory framework in the conditions of the Ukrainian education transformation (both in SGSE and SPPE) generates in the TPD context.

Various aspects of the problem of teacher professional development are under study of researchers worldwide. In studies and publications, scientists pay attention to the problems of: teacher professional development in changing conditions (Beijaard, Meijer, Morine-Dershimer, and Tillema, 2005), overcoming innocence and resistance of professional development for web based teaching (Gallant, 2000), teacher professional development in the context of education for peace (Semenog, 2019), theoretical principles of teacher professional development (Yaremko, 2016). Author's view on the essence of teacher professional development as study phenomena is presented in doctoral dissertation study – the system of professional development of teachers of natural sciences and mathematics in postgraduate education (Byrka, 2016).

Several publications were devoted to the problem of education transformation. Generalization of scientific developments allows to allocate the works devoted to: the phenomenon of "education transformation" in scientific research (Tsyupak, 2017), the role of transformation in learning and education for sustainability (Filho et al., 2018), the peculiarities of professional training of educational managers in conditions of transformation processes (Prykhodkina et al., 2022), the modernization of higher agrarian education in Poland in the conditions of European integration (Sokolovich-Altunina, 2012).

However, the conducted studies generally concentrate on the particular process of teachers' workplace changes, teacher learning of a new technology, as well as the improvement of the quality of teacher thinking and learning, bypassing the exploration of the challenges and opportunities of teacher professional development in the conditions of education transformation as a general and ascending problem for ensuring efficient performance of all planned reforms.

The purpose of the study is to identify challenges and potential opportunities for teacher professional development generated by new regulatory framework in the conditions of Ukrainian education transformation.

# **MATERIALS AND METHODS**

The study implemented a qualitative, inductive research design with all appropriate ethical concerns taken into consideration to comply with the norms and standards of the field. The research methodology employs such theoretical methods, namely: limited literature review for conceptualization on the research issue; the analysis, synthesis, description, and definition to determine and clarify the meaning of the research concepts: "transformation", "modernization" and "reformation"; the analysis, synthesis, abstraction, generalization, induction, deduction, description, definition as well as principles of objectivity and continuity

to identify challenges and potential opportunities for TPD generated by the new regulatory framework in the conditions of Ukrainian education transformation.

The regulatory framework of research consists of the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020), "Concept of the New Ukrainian School" (Hrynevych, 2016), "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019), "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade and Agriculture of Ukraine, 2020), and "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017).

# **RESULTS AND DISCUSSION**

The meaning of the concept "transformation".

To better understand the conceptual foundations of TPD in the conditions of education transformation, we need to clarify the meaning of the basic concept of study – "transformation". In general, the concept "transformation" comes from the Latin word "transformatio", which means change, transformation of form, shape, essential properties of something (Melnichuk, 1974).

Nowadays, the concept "transformation" is widely used both in the natural sciences (mathematics, physics, biology, technology, design, etc.) and in the social sciences and humanities (economics, law, linguistics, public administration, etc.).

However, in the social and humanitarian sciences the concept "transformation" was most actively used in the last 70 years to characterize innovations in culture, politics and economics conditioned internationalization, integration, informatization and globalization. Therefore, in modern research, the concept "transformation" implies various meanings. For example, A. Vasyliuk connects "transformation" with a long-term qualitative process of adaptation to the environment changes with the simultaneous introduction of innovations (Vasyliuk, 2007). I. Tsyupak believes that "transformation" describes a certain state of society in which there are qualitative changes in the forms of social relations and ways of development (Tsyupak, 2017).

Nevertheless, all definitions of the concept "transformation" have in common its interpretation as profound qualitative changes in the main structural components of the system, which are satisfactory to the challenges of modern society. Note, recent studies along with the concept "transformation" often use notions of "modernization" and "reformation" which need to be specified also.

In general, the concept "modernization" (French "modernisation") is defined as renewal, improvement, giving anything a modern look, processing under contemporary requirements (Melnichuk, 1974). The purpose of modernization of any social system is to achieve compliance with current standards, and its result is to increase the efficiency and quality of the conducted process (Sokolovich-Altunina, 2012). Simultaneously, one of the most significant features of modernization, as notes A. Vasyliuk, is that changes do not occur in the entire system, but only in its separate structural components (Vasyliuk, 2007).

Consequently, "modernization" is a progressive change that meets the requirements of the time, as a result of which the system (or separate structural components) increases its efficiency. However, such changes are often not drastic, as they do not involve restructuring the entire system.

The concept "reformation" (Latin "reformo") is a renovation introduced by legislative means (Melnichuk, 1974). Also, reformation is a way of change carried out by the authorities, initiated "from top to bottom" with a clear awareness of its goals (Sokolovich-Altunina, 2012).

The way of "reformation" implementation in education is a "reform" – any change in the education system. Every "reform" should: 1) correspond to educational policy, 2) outline strategic intentions, 3) emerge as a concept of government, regional education authorities with appropriate powers in the field of teaching and education, or influential public organizations, compounds that evolved from a state of ideas and proposals into the state educational policy (Vasyliuk, 2007).

Consequently, "reformation" is a purposeful process of partial, radical, systemic, comprehensive education changes, initiated "from top to bottom" and regulated by legislation under the state educational policy. Relevant ways to reformation implementation are reforms. So, we can conclude that the processes and changes that the contemporary education system of Ukraine is going through should be defined as transformation, not as modernization or reforming. But, the education transformation in Ukraine includes both modernization and reformation.

The new regulatory framework of Ukrainian SGSE and its challenges to TPD

The SGSE generally ensures the formation of a person and lays the foundations for his successful self-realization throughout life in a specific society. Therefore, the main goal of the SGSE is always the same – socialization of an individual as a person. Socialization represents an individual preparation for a successful life and self-realization in a specific society. But we should remember that every society is constantly changing, transforming, and renewing itself, so the requirements for a graduate of an educational institution also change.

The current Ukrainian SGSE is under transformation that occurs following the new vision declared in "The Concept of the New Ukrainian School" (Hrynevych, 2016) and implemented in the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020).

The aim of the contemporary SGSE for 5-9 grades is the development of abilities, interests, and gifts of students; the formation of competencies necessary for their socialization and civic activity, the conscious choice of a life path and self-realization; the continuation of education at the level of professional education or acquiring a profession; education of a responsible, respectful attitude towards the family, society, natural environment, national and cultural values of the Ukrainian people. Reaching this objective is ensured by students' acquirement of appropriate value orientations, key competencies, and cross-cutting skills necessary for the future citizen to achieve his own goals and successful activities in society.

The realization of a new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020) causes TPD several challenges and opportunities concerning the achievement of value benchmarks that include: respect for the student's personality; ensuring equal access to quality education; compliance with the principles of academic integrity; support of students' independence, entrepreneurship, and initiative; development of critical thinking and self-confidence; formation of a healthy lifestyle culture;

forming students active civic position and patriotism.

One of the main education challenges to TPD in the new State Standard is an apparition among student educational achievements of a new target orientation – attitudes. Such a challenge is very perspective because, over time, knowledge is lost, skills forgotten, but attitudes as a value component remain with the person lifelong. Consequently, the highest goal of the teacher in education becomes to instill a love for the subject of teaching, as well as for work and learning in general, and the lowest is to form at least a positive attitude. In this context, a teacher should obtain knowledge related to axiology, motivation, self-education, and succeed in new situations.

Another challenge to TPD comes from the fact that the new State Standard special attention pays to cross-cutting skills that act as a means for forming and developing students' key competencies.

The list of such cross-cutting skills includes: reading with understanding; expressing own opinion orally or in written form; critically and systematically thinking; logically justifying own position; acting creatively; showing initiative; managing own emotions constructively; assessing risks; making decisions and solving problems. The need to form and develop the mentioned cross-cutting skills in all integrated courses or subjects produces new challenges and opportunities for TPD refers to technologization, which involves considering the educational process as a clearly defined sequence of stages, as well as the teacher's actions at each of these stages.

One more challenge to TPD in Ukrainian SGSE is the creation of professional standards of teacher professional activity in secondary schools that begin with approval of the "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade, and Agriculture of Ukraine, 2020).

The Professional Standard embodies a modern approach to determining the list and description of general and professional competencies of a secondary school teacher. The general competencies include civic, social, cultural, leadership, and entrepreneurial.

The document also contains a description of professional competencies in the distribution of professional functions of a teacher. "Teaching subjects (integrated courses)" professional function requires language-communicative, subject-methodical, and information-digital competencies. Professional function "Partnership interaction with the participants of the educational process" involves psychological, emotional-ethical, and pedagogical partnership competencies of a teacher. Realization of a "Participation in the organization of a safe and healthy educational environment" as a teacher professional function suppose possession of inclusive, health-preserving, and projective competencies. Professional function "Management of the educational process" needs teachers' prognostic, organizational, evaluative, and analytical competencies. "Continuous professional development" as a professional function obligates teachers to have developed innovative, reflective competencies, and lifelong learning abilities.

Despite numerous challenges to TPD, The Professional Standard creates significant opportunities for teachers to determine clear guidelines for professional development goals and prevents risks of biased assessment of teachers' professional competencies during their attestation and certification.

The new regulatory framework of SPPE and its challenges to TPD

The purpose of the SPPE is to ensure rapid and high-quality professional development of teaching staff and management personnel of the general secondary education institutions that act as implementers of educational policy and education reforms.

The new regulatory framework in the **SPPE** scene generates new challenges and opportunities for TPD caused by the formation of a new system of professional development of teachers and management personnel of general secondary educational institutions and creation of a network of institutions for independent certification of teachers.

The first challenge, the formation of a new system of professional development of teachers and management personnel of educational institutions, comes from the "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019).

According to the approved document, now for teachers is necessary to improve qualifications yearly, and within five years should acquire not less than 150 hours of professional development (30 credits). Herewith, the teacher obtains an opportunity of free choice of forms, methods, means, duration, and place of qualification, as well as full responsibility for their professional development.

Teacher training forms are institutional (full-time (day, evening), part-time, distance, online), dual, and at the workplace, and any formats can combine.

The main types of teacher training are training under the teacher professional development program, participation in seminars, workshops, webinars, master classes, and internships implemented as an individual program developed and approved by the subject of professional development.

The main teacher training goals are:

- development of the main teacher's professional competencies (knowledge of the educational subject, professional methods, technologies);
- development of other teacher professional competencies speaking, communication, inclusive, emotional, and ethical competence;
- mastering the latest education technologies, familiarization with modern equipment, technology, the state and development trends in the teaching subject;
- preparing teachers for the formation of cross-cutting skills and key competencies development of secondary school students;
- teacher familiarization with psychological and physiological characteristics of students of a certain age, as well as andragogy basics;
- preparing teachers for the creation of a safe and inclusive educational environment through providing additional support to children with special educational needs in the educational process;
- to increase teachers' ability to use the information and digital technologies in the educational process, including providing e-learning, information and cyber security, etc.

The document also defines the mandatory requirement for teachers to acquire competencies in e-learning, adult education, and the organization of special education (15 hours).

Another challenge to TPD comes from the teacher's opportunity of free choice of forms,

methods, means, duration, and place of training that determines the implementation of the TPD by an individual trajectory.

The individual trajectory of TPD can be executed as a blend of formal (10%), non-formal (10%), and informal forms (80%) of learning.

The formal learning forms are teacher training courses and internships performed on a syllabus and have a diagnostic part. Therefore, such training outcomes are recognized by the school administration. The non-formal and informal learning forms include seminars, workshops, webinars, master classes, and teachers' self-education without any syllabus and diagnosis. Hence their educational outcomes are not recognized by the school administration.

Since informal learning beset 80% of TPD, this form needs a more detailed examination.

*Informal learning* involves the teacher's self-organized acquisition of new knowledge and skills during every day professional, social, family, or leisure activities. Such educational activity is not documented, preplanned and controlled, but contributes to the expansion of teacher professional competencies and acts like one of the key competencies of a person (Samoilenko, 2019).

The forms of informal education are one-time lectures, video lessons, media consultations, communication with others, reading specialized magazines, watching videos, and spontaneous conversations.

In the SGSE context, informal learning is implemented through teacher self-education activities that cover: scientific research on the methodical problem; study of scientific, methodical, and educational literature; participation in collective and group forms of methodical activity; studying the experience of colleagues; development and practical trying of personal materials. The methods of teacher self-education include autonomous work with literature; communication; self-training; isolated activity with audiovisual means; separated performance of practical tasks; individual visits to the cultural institutions, lectures, excursions; experiments, etc.

Nowadays, the use of ICT for TPD is very promising because it generates new trends like online platforms and online teacher communities.

In Ukraine, various online platforms (Coursera, EdEra, EdX, iTunes U, KhanAcademy, Prometheus, Udemy, etc.) are widespread, as they offer teachers opportunities to study at a time convenient for them and receive a certificate of completion. Such platforms provide online courses on current study topics and contain educational and methodical materials, interactive tests, forums, video lectures by teachers of the world's leading universities, etc.

The online teacher community is a virtual professional association, representing a group of teachers who carry out information exchange, professional communication (in the form of consultations, mutual reviews, etc.), and joint activities, whose contacts are mediated by the services and resources of the global computer network Internet (e-mail, sites, chats, and forums, etc.) (Byrka, 2016).

For the teacher, joining an online teacher community has several advantages, namely: fast communication and professional development to solve their professional problems with the primary source regardless of the geographical location; cooperative creation of products; individual and collective creativity; significant optimization of time and financial costs for the organization of one's activities (there are always professionals in the network

who can provide you with assistance and share already completed tasks); the opportunity to openly express own opinion on various issues. In addition, participation in the online teacher community helps to acquire various professional knowledge and skills, opens up new opportunities for the use of ICT in education; promotes interaction with like-minded colleagues; provides an opportunity to receive help from other teachers; opens access to the library of methodical materials; helps in enrichment with new ideas, promotes inspiration for further research and experiments.

Therefore, every teacher should perform informal learning continuously and systematically. The last challenge to TPD concerns the teachers' appraisal process will be gradually replaced by certification.

The conceptual and methodological principles of the implementation of the certification process are outlined in the "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017). In particular, this document defines teacher competencies, namely: possession of innovative educational methods and technologies and their active dissemination in the professional environment; implementation of a competency-based approach to the educational process; production of new innovative ideas; mastery of a wide range of learning strategies, technologies of creative pedagogical activity taking into account the characteristics of the educational material and the abilities of students; the use of non-standard forms of lessons and educational classes, etc.

The descriptors of teacher certification for all qualification categories are common and include "Lesson and course planning", "Students' understanding", 'Organization of the lesson", "Evaluation and assessment of educational achievements", "Knowledge of teaching Subject" and "Management of professional development".

Considering that the certification of teachers takes place voluntarily and solely at the teacher initiative, it has some opportunities as getting an additional payment of 20% of the official salary; admission of the certification as teacher appraisal with assigning a qualification category, and/or teaching rank; right to participate in procedures and activities related to quality assurance and the introduction of pedagogical innovations and new technologies in the education system.

Although, the certificate is valid for three years only and listed teacher's competencies quietly differ from the "Professional Standard "Teacher of general secondary education institution".

### **CONCLUSIONS**

Now Ukrainian education should be considered under transformation insomuch occur profound qualitative changes in the main structural components of the system satisfactory to the challenges of modern society. But, this transformation includes modernization and reformation, which are closely related.

The transformation of the Ukrainian education system reflects the emergence of a new regulatory framework of general secondary education and postgraduate pedagogical education that generates new challenges and opportunities for teacher professional development.

Teacher professional development is an uninterrupted educational process implemented

in postgraduate pedagogical education but directed and closely connected to general secondary education.

The new regulatory framework of the transformation of the Ukrainian education system consists of the new "State Standard of Basic Secondary Education for 5-9 grades" (Cabinet of Ministers of Ukraine, 2020), "Concept of the New Ukrainian School" (Hrynevych, 2016), "Procedure for improving the qualifications of pedagogical and research and teaching staff" (Cabinet of Ministers of Ukraine, 2019), "Professional Standard "Teacher of general secondary education institution" (Ministry of Economic Development, Trade, and Agriculture of Ukraine, 2020), and "Framework for continuous professional development of teachers" (Ministry of Education and Science of Ukraine, 2017).

The challenges and opportunities for teacher professional development generated by the new regulatory framework of the system of general secondary education are: 1) achievement of value benchmarks of the new State Standard; 2) requirement of the knowledge related to axiology, motivation, self-education, and success in new situations; 3) be prepared to use cross-cutting skills for forming and developing students' key competencies; 4) creation of a professional standard of teacher professional activity in secondary schools that determine clear guidelines for professional development goals and prevents risks of biased assessment of teachers' professional competencies during their attestation and certification.

The new regulatory framework of the system of postgraduate pedagogical education also generates new challenges and opportunities for teacher professional development initiated by the formation of a new system of professional development of teachers and management personnel of general secondary educational institutions and the creation of a network of institutions for independent certification of teachers. Among new challenges and opportunities to teacher professional development in this scene are: 1) the formation of a new system of professional development of teachers and management personnel of educational institutions; 2) the teacher's opportunity of free choice of forms, methods, means, duration, and place of training; 3) the implementation of the teacher professional development by an individual trajectory; 4) informal learning as a key instrument of the teacher professional development; 5) gradually replacing of the teachers' appraisal process by certification.

Further research will focus on effective teacher professional development technology to adequately and satisfactorily respond to defined challenges and opportunities.

### REFERENCES

Beijaard, D., Meijer, P., Morine-Dershimer, G., Tillema, H. (2005). Teacher Professional Development in Changing Conditions. Springer Dordrecht. 364 p. DOI: 10.1007/1-4020-3699-X.

Byrka, M. F. (2016). The system of professional development of teachers of natural sciences and mathematics in postgraduate education. Doctoral Thesis. Zaporizhzhia: Classic Private University. 440 p.

Cabinet of Ministers of Ukraine. (2019). Decree No. 800 "Some issues of professional development of pedagogical and research-pedagogical staff". Retrieved from: https://zakon.rada.gov.ua/laws/show/800-2019-%D0%BF#Text.

Cabinet of Ministers of Ukraine. (2020). Decree No. 898 "About some issues of state standards of complete general secondary education". Retrieved from: http://search.ligazakon.ua/l\_doc2.nsf/link1/KP200898.html. Filho, W. L., Raath, S., Lazzarini, B., Vargas, V. R., Souza, L. De, Anholon, R., Quelhas, O. L. G., Haddad, R., Klavins,

M., Orlovic, V. L. (2018). The role of transformation in learning and education for sustainability. *Journal of Cleaner Production*, 199, 286-295. https://doi.org/10.1016/j.jclepro.2018.07.017.

Gallant, G. M. (2000). Professional development for web based teaching: overcoming innocence and resistance. *New Directions For Adult And Continuing Education*, 88, 69-78. DOI: 10.1002/ace.8807.

Hrynevych, L., Elkin, O., Kalashnikova, S. (2016). New Ukrainian school: conceptual foundations of secondary school reform. Lviv, 40 p.

Kremin, V. G. (2008). Encyclopedia of Education. Kyiv: Yurinkom Inter, 1040 p.

Melnichuk, O. S. (1974). Dictionary of foreign words. Kyiv: URE, 776 p.

Ministry of Economic Development, Trade and Agriculture of Ukraine. (2020). Order №2736-20. "On approval of the professional standard for the professions "Teacher of primary classes of a general secondary education institution", "Teacher of primary education (with a diploma of a junior specialist)". Retrieved from: https://zakon.rada.gov.ua/rada/show/v2736915-20#Text.

Ministry of Education and Science of Ukraine. (2017). Order No1547. "On approval of the Framework for continuous professional development of teachers". Retrieved from: http://ngschoolteacher.wixsite.com/cpdinsett.

Prykhodkina, N., Tymoshko, H., Sholokh, O., Makhynia, T., Koroliuk, S., & Genkal, S. (2022). Peculiarities of Professional Training of Educational Managers in Conditions of Transformation Processes. *Postmodern Openings*, 13(2), 254-272. https://doi.org/10.18662/po/13.2/452.

Samoilenko, O. A. (2019). Informal education in the system of personal and professional development of an adult. *Bulletin*, 1 (157), 188-194. DOI: 10.5281/zenodo.2622637.

Semenog, O. M. (2019). Professional development of a teacher in the context of education for peace. *Education for peace*, 2, 153-166.

Sokolovich-Altunina, Y. O. (2012). Modernization of higher agrarian education in Poland in the conditions of European integration. Sumy: Sumy state ped. univ. A.S. Makarenko, 263 p.

Tsyupak, I. M. (2017). The phenomenon of "education transformation" in scientific research. *Scientific treasury of education of Donetsk region*, 1, 9-13.

Vasyliuk, A. V. (2007). Reforms of school education in Poland: history and modernity. Nizhyn: NDU. M. Gogol, 340 p. Yaremko, G.V. (2016). Theoretical principles of professional development of teachers. *Young scientist*, 12, 554-558.