

# The Educational Paradigm as a Conceptual Model of Developing Competencies during Learning

Iryna TAMOZHKA<sup>1</sup>

Olha RUD<sup>2</sup>

Serhii MEDYNSKYI<sup>3</sup>

Tetiana POLUKHTOVYCH<sup>4\*</sup>

Nataliia KUZEMKO<sup>5</sup>

Nataliia RUDENKO-KRAIEVSKA<sup>6</sup>

<sup>1</sup> Doctor of Pedagogical Sciences, Associate Professor of Department of Educational Sciences, Digital Education and Academic Entrepreneurship, Institute of International Education for Study and Research, V. N. Karazin Kharkiv National University, Kharkiv, Ukraine, [itamozhska@ukr.net](mailto:itamozhska@ukr.net), <https://orcid.org/0000-0003-0865-2380>

<sup>2</sup> Candidate of Philological Sciences, Associate Professor, Associate Professor of Ukrainian Language and Literature Department, Sumy State Pedagogical University named after A.S. Makarenko, Sumy, Ukraine, [olgarud2017@ukr.net](mailto:olgarud2017@ukr.net), <https://orcid.org/0000-0002-5985-2422>

<sup>3</sup> Doctor of Pedagogical Sciences, Professor, Professor of the Department of Theory and Methods of Physical Education and Sports, Bogdan Khmelnytsky Melitopol State Pedagogical University, Melitopol, Ukraine, [sermedyn@ukr.net](mailto:sermedyn@ukr.net), <https://orcid.org/0000-0001-6082-6566>

<sup>4</sup> Candidate of Science in Pedagogy, Docent, Docent of the Department of socio-humanitarian technologies, Lutsk National Technical University, Lutsk, Ukraine, [Polukhtovych@ukr.net](mailto:Polukhtovych@ukr.net), <https://orcid.org/0000-0002-0558-2981>

\* corresponding author

<sup>5</sup> Ph.D. of Technical Sciences, Associate Professor of the Department of Applied Information Technologies and Electrical Engineering, Ternopil Ivan Puluj National University, Ternopil, Ukraine, [kuna@ukr.net](mailto:kuna@ukr.net), <https://orcid.org/0000-0001-5112-8256>

<sup>6</sup> Candidate of Art Studies, Senior Lecturer at the Department of Monumental Painting Lviv National Academy of Arts, Lviv, Ukraine, [mytsa.lv@gmail.com](mailto:mytsa.lv@gmail.com), <https://orcid.org/0000-0001-6554-5325>

**Abstract:** *The article discusses the paradigmatic nature of today's education. A detailed analysis of the problem in question reveals that the competency-based paradigm takes the lead role in the paradigm complex. It is profoundly and extensively responsible for executing the social requirement of society and the state regarding teaching, upbringing and value-shaping of children in educational institutions. The goal of revising and updating secondary education is to enhance its quality and bring it in line with international standards. The entire structure of paradigms in secondary education is the primary source of its objective transformation, which highlights the relevance of this article. The research process shows that the overall cultural and professional competencies of educators are shaped when the competency-based paradigm is integrated with the knowledge-oriented, personal and cultural ones. During the learning process, these competencies assist in the formation of individuals, experts and citizens who can take effective action in the name of societal interests. Research methods include analysis, synthesis, as well as explanatory, scientific and descriptive methods. Importantly, this article is the outcome of looking into the conceptual model of producing a qualified individual through the educational process, which was grounded in scientific inquiries into the mentioned problem. Although all aspects have not been completely explored, the obtained results serve as a critical basis for forming fundamental ideas and meaningful lines of the study.*

**Keywords:** *Professional competences, values, educational process, innovations.*

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## Introduction

Paradigm as a concept was analyzed and introduced by Thomas Kuhn (1996), an American historian, a philosopher of science. He identified different stages in the development of a scientific discipline: a) the pre-paradigmatic stage (before the establishment of a paradigm); b) the dominance of a paradigm (normal science); c) the stage of a scientific revolution crisis, which involves a paradigm shift, that is, a transition from one paradigm to another (Abulalrub & Stensaker, 2017). The Bologna Process defines an educational paradigm as the accepted model of educational practice and theory over a certain period in a certain country. The paradigm of today's education is undergoing significant changes. Approaches focused on the learner are playing an increasingly important role (Allman, 2018).

This shift entails a move from teaching-oriented education to education that is geared towards developing competencies. By analyzing the multiple facets that define this trend, it is evident that the focus on competencies is pertinent. In the outdated paradigm, the emphasis was on obtaining and distributing knowledge. Examples of this transformation include student-centred learning, a transformation in the teacher's role, a better definition of objectives, a move from putting resources to results, as well as shifts in the arrangement of instruction.

Student-centred learning, as mentioned, signifies a shift from an emphasis on teaching (where the teaching staff plays a predominant role in "delivering" knowledge) to competency-based learning (active learning activities by the students). This is not regarding the conventional independent work of university students; it is about a radical shift in the learning process and the part of the student in it. Consequently, teachers are required to maintain their role and simultaneously provide higher levels of counselling and motivation to students regarding the practical selection of information and its sources, organizing appropriate learning situations and addressing identified problems. This naturally necessitates a high level of student motivation.

This learning style called a competency-based approach, which focuses on the learner, affects how learning activities and the organization of teaching are structured, taking into account the goals of the students. It also affects assessment, shifting the focus from input data to results, processes and situations in which learning takes place.

The competency-based approach by itself does not possess the power to transform the educational system and magically improve the

quality and competitiveness of national education. The European experience backs up the fact that it generates novel structural processes, and it is, in essence, their logical outcome (Atzory, 2015).

This article aims to identify the characteristics of the educational paradigm as a conceptual model for competency development in the learning process.

### **Theoretical and Methodical Principles of Implementing the Competency-Based Approach in the Educational Process**

The Bologna Process offers a key framework for defining qualifications (degrees, levels), which is based on competencies. Such competencies include a blend of knowledge, skills, attitudes and responsibilities that illustrate the level of proficiency.

Competencies are increasingly seen as a dynamic combination of qualities, abilities and attitudes that are the goal of educational programmes. At a meeting in Aachen at a specialized university, the concept of competency was discussed in the following format:

- Graduates who study a particular educational programme are distinguished by declarations such as “I can”, demonstrating their employability.
- Competencies provide the answer to what a student must be knowledgeable of, comprehend and be capable of doing to remain sought after.
- Competencies are measured by learning outcomes, ensuring a “recommendatory structure” linking the labour market, the degree, modules, the labour value (ECTS) and teaching and learning methods.

Gygli et al. (2019) determine that competence is one of the important problems in the formation of the choice of a profession, in particular, they justify knowledge "on the basis of the current, advanced level of understanding of knowledge". Gardner (2011) argues that a variety of important skills and awareness of personal growth is an important factor in the formation of competence. Furthermore, some researchers view competency as “the subject area in which one is well-informed and demonstrates readiness for action” (Giddens, 1991).

Thus, competency is regarded as “a dynamic set of knowledge, skills and values necessary for effective professional and social activities, as well as personal development of graduates, which they must acquire and demonstrate upon completion of a portion or the entirety of the educational programme. Besides, it is seen as a structural principle of today’s education.

Simultaneously, emphasis is placed on the ability to take action and consider contexts, combining knowledge and skills with psychosocial prerequisites. This definition is the most comprehensive and comparable with learning outcomes.

### **Developing a Conceptual Model of Competency-Based Education in Relation to Current Social Challenges**

An important conceptual-methodological problem is the specification of such terms as “learning outcomes”, “competencies” and “educational goals” (Vdovych & Palka, 2013).

Learning outcomes act as the expected and measurable specific achievements of learners, expressed in terms of knowledge, skills, abilities and competencies, which describe what a student/graduate will be able to do after completing all or part of the educational process.

The primary feature of the competency-based model is the implementation of models through subject areas. As opposed to the conventional qualification approach that state educational systems follow, the competency-based model focused on professional practice is not as inflexibly attached to a specific role or task. This ensures the mobility of learners in changing labour market conditions (Lazurenko, 2015).

In this regard, it is important to focus on the following competency models: a) a competency model for effective performance; b) a competency model for problem-solving; c) a competency model based on personal parameters; d) a competency model for results management.

Demand, predictability and competitiveness should make the competency model for results management highly sought-after, taking into account the activity from the perspective of one’s professional and social settings (Nychkalo, 2008). The current stage has seen a strategic shift towards a competency-based paradigm and the associated approach in both higher and secondary education. Monumental advances in technology and production, combined with the worldwide economic, social and demographic crisis, which impacts all aspects of human life, clearly delineate a new stage of development, which some researchers compare to stages in evolutionary growth. Although such phrases as “in-depth knowledge”, “the state of adequate task performance” and “the ability to perform real activities” provide insight into competency, they do not fully encompass the concept. Naturally, a traditional educational system cannot work in these new conditions. Not due to its quality, but due to its lack of relevance to current times (Evsyukov & Telegina, 2013).

The educational system has gone into a general crisis as a result of the rapid technological development of society, particularly in the latter part of the 20<sup>th</sup> century. This crisis is primarily caused by the lack of goals and content in education, as well as the forms, methods and level of development of educational systems in post-industrial society (Konjuh, 2010). Successful performance of certain tasks is largely contingent on one's psychological traits. Nevertheless, there is still debate about whether competency is exclusively an individual psychological trait. The response is no, for competency applies to a particular field of endeavour (not just practical) and a particular range of subjects to which it is related (Kryukov & Lutsenko, 2015). Finally, competency is a socially determined necessity for a student's educational preparation. Also, competency can be regarded as a broad capacity that is derived from learning, knowledge, values and experience. Therefore, it is essential to construct a completely novel system with objectives, duties and issues that have not been tackled before.

Possessing competency is different from having the ability to competently do something; it involves not only the skill but also the student's attitude and understanding of the topic (Leu, 2016). Consequently, "competency" and "competence" are not synonymous. They are part of two distinct realms of human existence – the external and the inner (Mateiuk et al., 2016).

Regarding human conformism, the distinction between micro and macrocosms is essential to understand the implications. Interaction between them is vital to the educational process, which is akin to exposing them to the environment. It is an already existing personal quality (a set of qualities) of the student, including his/her minimal experience in the given field. Competency is always subject to the capabilities of the individual student. However, competences should be distinguished from educational competencies (Nychkalo, 2014). Educational competency is a requirement for educational preparation expressed as a set of interconnected content orientations, knowledge, skills and student experience related to a specific sphere of reality. Nonetheless, certain components of these "adult" competences are developed during the student's learning period. It is an already existing personal quality (a set of qualities) of the student, including his/her minimal experience in the given field. Hence, not only to prepare for the future but also to experience the present, the student gains such competences from an educational standpoint. These capacities mirror the subject-activity element of general education and are meant to guarantee the complete achievement of its goals. Thus, the student obtains civic competency, however, it is not applicable until he/she receives a high school

diploma; thus, while he/she is studying, this competency is only for educational purposes.

It is believed that competencies do not provide anything innovative to pedagogy and didactics since they are composed of already established didactic elements, such as knowledge, skills and methods of activity. At the same time, competences differ from traditional knowledge and skills in their systemic and system-forming functions, which link the student's personal orientations to the needs of society and reality.

Competency does not simply involve knowledge or skills but rather the relationship between them and how they are applied in practice.

A detailed analysis of various proposed lists of competences reveals their orientation. Creative competencies involve using experience, problem-solving skills, uncovering connections between past and present events, as well as the ability to discover new solutions. Despite these traits of skills, they do not provide a comprehensive understanding of the entire combination of knowledge, skills, methods of activity and students' experience regarding their creative competences.

It has been firmly established that competency involves a certain amount of experience in its use. This is a must-consider factor when establishing the demands for student preparation and designing textbooks and the competency-based learning process.

The main functions of educational competences are the following:

- Aiming to meet the social requirement for a basic level of education for youths to be able to manage their day-to-day activities in the outside world.
- Offering an opportunity for students to gain personal significance through learning, thus bridging the gap between them and education.
- Creating physical items of the nearby environment for a meaningful and thorough application of knowledge, abilities and methods of work.
- Ensuring that the student has the requisite level of knowledge and expertise in the subject matter, essential for his/her area of emphasis and practical preparedness for real-world scenarios.
  - Serving as meta-subject elements of education content.
  - Being incorporated in various subjects and educational fields.
  - Serving as integral characteristics of preparation quality.
  - Acting as a means to organize comprehensive personally and socially significant educational assessment.

## **The Educational Paradigm as a Conceptual Model of the Learning Process and the Competency-Based and Axiological Approach**

The traditional knowledge paradigm is increasingly in conflict with the demands for education quality. Given Ukraine's involvement in the global crisis, the spiritual and moral sphere of society is subject to the most intense conflict. It encompasses deindustrialization and dehumanization, a highly rational and excessively pragmatic approach to thinking, the absence of moral codes and a sense of patriotism, the propagation of anti-social behaviours and the mis-adaptation of children, young people and adults.

A similar downward trend in educational standards is seen in schools, universities, colleges and technical institutes. Education is becoming removed from both the state and society, resulting in a lack of interaction between the student and teacher in terms of learning. In higher education institutions, the main goal of education becomes to provide students with knowledge, while ignoring lower-quality content (Padalka & Kalenyuk, 2013).

It is fair to make the same statement about the educational process in schools. Therefore, due to the ineffectiveness of the knowledge paradigm in post-industrial society, the focus on purely theoretical knowledge based on verbal teaching methods has resulted in the emergence of individuals with a low cultural background and maladaptive, aggressive and intolerant personalities.

Some scholars have drawn attention to the evident deficiency in addressing the issue of readying yesterday's schoolchildren for university admission as part of the existing knowledge paradigm (Parzhnytskyi, 2012). Acknowledging the need of adjusting educational paradigms to the objective pattern and immediate demand, it is essential to take into account the primary paradigms in the context of post-industrial social advancement while not discounting their multi-paradigmatic nature. After all, the roots of the competency-based paradigm reach back to the distant past of pedagogy theory and practice. The concept of the competency-based paradigm gradually matured and improved along with the development of society and its educational system. Fundamentally, it is founded on a scientific model, and it is undeniable that forming a well-rounded professional can be established on a precise understanding. However, this foundation can be effectively complemented by a range of crucial personal indicators necessary for successfully applying acquired knowledge in practical life situations.

The pedagogical paradigm involves the following:

- The set of theoretical, methodological and other frameworks accepted by the scientific community at each specific stage of pedagogy's development, which serve as a model or standard guiding the resolution of pedagogical tasks. It also encompasses a certain set of regulations (regulators).

- The aggregate of widely recognized scientific achievements that, for a certain period, provide the scientific community with a model for problem formulation and their resolution.

- A stable system of socially significant ideas and theories reflecting the patterns of pedagogy and education.

The educational paradigm is revealed through:

- A full-scale formula depicting the progress of education in a given period. The paradigm encompasses the essence of links among all educational components as a systemic object, including goals, content, forms, methods and relationships among the actors in the educational process. It also involves a theoretical model that demonstrates the state of education as a whole, an ideal theoretical image.

- A tool for research which facilitates the examination of the historical evolution of education through comparison of its features at certain points in its history. It is a general category under which all aspects of education and educational activities are considered, allowing for a summary that presents the state of education in a particular historical period.

The concise definitions of “pedagogical paradigm” and “educational paradigm” accurately reflect their content and structure. The evolution of educational pedagogy involves the formation, establishment and eventual downfall of pedagogical and educational paradigms, which have been observed throughout the various stages of societal development (Tamožhska et al., 2023). They include the knowledge (or cognitive-informational) paradigm, the traditional paradigm, the transformational paradigm, the personal paradigm, the cultural paradigm and the competency-based paradigm.

In this context, the contribution of each specialist working with a child dynamically changes during the correction process.

It should be noted, however, that

- 1) the origins of each of them date back to the period of formation and development of scientific pedagogy and educational systems;

- 2) they are characterized by conceptual approaches to problem-solving at certain historical stages of pedagogy and education development;

3) at each stage, there is an objectively demanded and dominant pedagogical-educational paradigm, which normally serves as a model or standard for addressing pedagogical, theoretical and practical tasks;

4) even when a paradigm is dominant at a certain stage of pedagogy and education development, it is integratively combined with other, more or less developed and functioning paradigms.

In other words, the dominant paradigm arises in a multi-paradigmatic combination with others, as noted in several recent studies. Each of the leading conceptual ideas has a serious foundational rationale, is deeply ingrained in the culture and guides educators towards essential values and meanings, thus cannot be eliminated from the educational process. Hypertrophy (excessive enlargement) of one of the educational paradigms poses a serious risk of distorting the student's personality development. There are objective limits to variant learning, dictated by the state and societal tasks of maintaining a unified educational space (Demchenko et al., 2021).

Education in the post-industrial age signifies that in the industrial evolution of learning, the preeminent model was knowledge-focused and science-driven. However, as the transition to the post-industrial-informational stage occurred, this paradigm faced a period of crisis (Prots et al., 2021). Education in a post-industrial society is geared towards developing spiritually vibrant people, promoting the advancement of their intellectual and innovative abilities, as well as their practical aptitudes (Kosholap et al., 2021).

The competency-based model seeks to cultivate an adept student with a unified range of social and professional abilities, based on the deliberate acquisition of information, skills, methods of operation and a determined aspiration for personal growth (Dykan et al., 2021). The personal paradigm is centred around the individual since upbringing, teaching and progress are tailored to the psychological needs of the students. The cultural paradigm strives to communicate the experience of previous generations to students by immersing them in culture and building their own life experiences upon this (Kornosenko et al., 2021).

A brief overview of the paradigm's goals reveals that the competency-based paradigm, which encompasses the essential tenets of other paradigms, is the most pertinent and applicable to current needs.

## Conclusions

Thus, using the competency-based approach in the educational process embodies the competency-based paradigm, while traditional practices embody the knowledge-oriented paradigm. At the same time, the person-centred approach exemplifies the personal paradigm, and the cultural approach is a reflection of the cultural paradigm. Consequently, it is essential to analyze the features of each educational paradigm, ascertaining the underlying concepts of the related approach, on which its educational philosophy is formed and carried out in the teaching and learning process.

The competency-based paradigm, incorporating the chief elements of knowledge-oriented, personal and cultural paradigms, overcomes their limitations through the competency-based method, focusing on what is necessary for the self, hampering free advancement (individuality, holistic consciousness, physical and mental health).

A powerful psycho-pedagogical illustration of the defects of the traditional educational paradigm shows once again that the succeeding competency-based paradigm should not only provide students with knowledge, skills and abilities. Instilling in them attitudes, values, emotions, motivation, diligence, autonomy and imagination and teaching them how to work in teams and make sound decisions in regular and irregular, individual and professional circumstances should be encouraged.

Accordingly, the following conclusions have been reached: 1) currently, the multi-paradigmatic nature of education is apparent; 2) the competency-based paradigm is assigned the primary position in the complex paradigm, and it is the one that most profoundly and broadly determines the implementation of the social need of society and the government for the education and the upbringing of children in schools, both theoretically and practically.

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## References

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- Abulalrub, I. & Stensaker, B. (2017). How are universities responding to demands for improved learning environments? *Journal of Further and Higher Education*, 45(5), 721–732. <https://doi.org/10.1080/0309877X.2017.1311991>.
- Allman, B. (2018). Socioculturalism. In R. Kimmons & S. Caskurlu (Eds.), *The Students' Guide to Learning Design and Research*. EdTech Books. <https://edtechbooks.org/studentguide/socioculturalism>
- Atzory, M. (2015, December 1). Blockchain technology and decentralized governance: Is the state still necessary? SSRN. <https://ssrn.com/abstract=2709713>

- Demchenko, I., Maksymchuk, B., Bilan, V., Maksymchuk, I., & Kalynovska, I. (2021). Training future physical education teachers for professional activities under the conditions of inclusive education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 191–213. <https://doi.org/10.18662/brain/12.3/227>
- Dykan, V., Pakharenko, O., Saienko, V., Skomorovskyi, A., & Neskuba, T. (2021). Evaluating the efficiency of the synergistic effect in the business network. *Journal of Eastern European and Central Asian Research*, 8(1), 51–61. <https://doi.org/10.15549/jeccar.v8i1.646>
- Evsyukov, O., & Telegina, S. (2013). Vyznachennia znachushchosti innovatsii v osviti (teoretychnyi aspekt) [Determining the significance of innovation in education (theoretical aspect)]. *Molod i rynok* [Youth & Market], 12, 111–114. [http://nbuv.gov.ua/UJRN/Mir\\_2013\\_12\\_25](http://nbuv.gov.ua/UJRN/Mir_2013_12_25)
- Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. Basic Books.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford University Press.
- Gygli, S., Haelg, F., Potrafke, N., & Sturm, J. E. (2019). The KOF globalisation index-revisited. *The Review of International Organizations*, 14, 543–574 <https://link.springer.com/content/pdf/10.1007/s11558-019-09344-2.pdf>
- Konjuh, V. V. (2010). Osvitni eksperymenty v URSR doby “vidlyhy” [Educational experiments of the Thaw period]. *Visnyk Cherkaskoho universytetu. Seriya: Istorychni nauky* [Bulletin of the Cherkasy University. Series: Historical Sciences], 182, 110–114. [http://nbuv.gov.ua/UJRN/VchuI\\_2010\\_182\\_22](http://nbuv.gov.ua/UJRN/VchuI_2010_182_22)
- Kornosenko, O., Khomenko, P., Taranenko, I., Zhamardiy, V., Shkola, O., Tolchieva, H., Saienko, V., Baticieva, N., & Kyzim, P. (2021). Professional competencies as a component of professional training of a fitness trainer-teacher in higher education institutions. *Journal for Educators, Teachers and Trainers*, 12(1), 72–81. <https://digibug.ugr.es/handle/10481/69165>
- Kosholap, A., Maksymchuk, B., Branitska, T., Martynets, L., Boichenko, A., Stoliarenko, O., Matsuk, L., Surovov, O., Stoliarenko, O., & Maksymchuk, I. (2021). Neuropsychological bases of self-improvement of own physical health of future teachers in the course of university education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 171–190. <https://doi.org/10.18662/brain/12.3/226>
- Kryukov, O. I., & Lutsenko, S. M. (2015). Innovatsiina osvita yak odyin iz osnovnykh resursiv modernizatsii suchasnoi derzhavy [Innovation education as one of the main resources in modernisation of the modern state]. *Pedagogika vyshchoi ta serednoi shkoly* [Pedagogy of Higher and Secondary Education], 44, 221–226. [http://nbuv.gov.ua/UJRN/PVSSh\\_2015\\_44\\_43](http://nbuv.gov.ua/UJRN/PVSSh_2015_44_43)

- Kuhn, T. (1996). *The structure of scientific revolutions*. University of Chicago Press.
- Lazurenko, O. O. (2015). Do pytannia shchodo rozvytku poniattia “emotsiina kompetentnist” u psykholohii [Developing the concept of “emotional competency” in psychology]. *Naukoyi obliad* [Scientific Review], 1(11), 1–10.  
<https://www.naukajournal.org/index.php/naukajournal/article/view/370/55>
- Leu, S. O. (2016). Uchnivstvo v profesiinii osviti y navchanni krain YeS [Apprenticeship in vocational education and training in EU countries]. *Profesiina pedahobika* [Professional Pedagogics], 12, 116–127.  
[http://www.irbis-nbu.gov.ua/cgi-bin/irbis\\_nbu/cgiris64.exe?I21DBN=LINK&P21DBN=UJRN&Z21D=&S21REF=10&S21CNR=20&S21STN=1&S21FMT=ASP\\_meta&C21COM=S&S21P03=FILE=&S21STR=Nvipto\\_2016\\_12\\_15](http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiris64.exe?I21DBN=LINK&P21DBN=UJRN&Z21D=&S21REF=10&S21CNR=20&S21STN=1&S21FMT=ASP_meta&C21COM=S&S21P03=FILE=&S21STR=Nvipto_2016_12_15)
- Mateiuk, O. P., Mateiuk, Yu. O., & Mateiuk, O. A. (2016). Innovatsiina osvita yak sotsialno-kulturnyi fenomen, tsinnisne nadbannia osobystosti ta osnova rozvytku sotsialno-profesiinoi kompetentnosti maibutnoho fakhivtsia [Innovative education as a social and cultural phenomenon, a valuable personal asset and the basis for developing social-professional competence of prospective specialists]. *Visnyk Natsionalnoi akademii Derzhavnoi prykordonnoi sluzhby Ukrainy. Seriya: Pedahobika* [Bulletin of the National Academy of the State Border Guard Service of Ukraine. Series: Pedagogy (Electronic Edition)], 1. [http://nbu.gov.ua/UJRN/Vnadped\\_2016\\_1\\_5](http://nbu.gov.ua/UJRN/Vnadped_2016_1_5)
- Nychkalo, N. H. (2008). *Transformatsiia profesiino-tekhnichnoi osvity Ukrainy* [Reforming vocational education in Ukraine]. Pedahohichna dumka.  
<https://core.ac.uk/download/pdf/159616071.pdf>
- Nychkalo, N. H. (2014). *Rozrytok profesiinoi osvity v umovakh hlobalizatsiinykh ta intebratsiinykh protsesiv* [Advancing professional education in the era of globalization and integration]. Vydavnytstvo NPU imeni M. P. Drahomanova. <https://lib.iitta.gov.ua/709906/1/%D0%9C%D0%BE%D0%BD%D0%BE%D0%B3%D1%80%D0%B0%D1%84%D1%96%D1%8F%20%D0%9D%D0%B8%D1%87%D0%BA%D0%B0%D0%BB%D0%BE.pdf>
- Padalka, O. S., & Kalenyuk, I. S. (2013). *Ekonomika osvity ta upravlinnia* [The economics of education and management]. Pedagogichna Dumka.  
<http://enpuir.npu.edu.ua/bitstream/handle/123456789/4691/padalka-ekonom-osvita.pdf;jsessionid=EAF84CB6C7F6F9575432F698126538FE?sequence=1>
- Parzhnytskyi, V. V. (2012). Profesiina pidhotovka kvalifikovanykh robitnykiv u profesiino-tekhnichnykh navchalnykh zakladakh Ukrainy: dosvid 60–80-kh rr. khkh st. [Professional training of skilled workers in vocational education

- institutions in Ukraine: The Experience of the 1960s-1980s]. *Naukovi zapysky Nizhynskoho derzhavnoho universytetu im. Mykoly Hobolia. Seriya: Psykholoho-pedahohichni nauky* [Research Notes. Series “Psychology and Pedagogy Research” (Nizhyn Mykola Gogol State University)], 2, 188–190. [http://nbuv.gov.ua/UJRN/Nzspp\\_2012\\_2\\_50](http://nbuv.gov.ua/UJRN/Nzspp_2012_2_50)
- Prots, R., Yakovliv, V., Medynskiy, S., Kharchenko, R., Hryb, T., Klymenchenko, T., Ihnatenko, S., Buzhyna, I., & Maksymchuk, B. (2021). Psychophysical training of young people for homeland defence using means of physical culture and sports. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 149–171. <https://doi.org/10.18662/brain/12.3/225>
- Tamozhnska I., Tymofiienko N., Demianiuk A., Klyap M., & Tsurkan M. (2023). Features of professional and pedagogical activity of a higher education teacher. *Amazonia Investiga*. 12(63). 148–155. <https://doi.org/10.34069/AI/2023.63.03.13>.
- Vdovych, S. M., & Palka, O. V. (2013). *Suchasni osvritni tekhnolohii movnoi pidbotovky maibutnikh fakhivtsiv sfery obsluhovuvannya* [Current technologies to equip service industry professionals with language skills]. *Pedahohichna dumka*. [http://lib.iitta.gov.ua/4599/1/Vdovych\\_Palka\\_2013.pdf](http://lib.iitta.gov.ua/4599/1/Vdovych_Palka_2013.pdf)