2025. Vol. 1, No. 2

ISSN 3083-6859 (online); ISSN 3083-6840 (print)

UDC 378.147-051:005.336.2

Development of Professional and Pedagogical Competence of Vocational Subject Lecturers in Technical Higher Education Institutions: Research Implementation

Roman Hurevich¹, Tetiana Horokhivska²

- ¹ Doctor of Pedagogical Sciences, Professor, Full Member (Academician) of the National Academy of Pedagogical Sciences of Ukraine, Mykhailo Kotsyubynsky Vinnytsia State Pedagogical University,
 - 32, Ostrozky str., 21001, Vinnytsia, Ukraine, r.gurevych2018@gmail.com, ORCID: 0000-0003-1304-3870

 ² Doctor of Pedagogical Sciences, Professor, Lviv Polytechnic National University,
 - 12, S. Bandera str., 79013, Lviv, Ukraine, tetiana.m.horokhivska@lpnu.ua, ORCID: 0000-0001-5997-4676

http://doi.org/10.23939/veritas2025.02.104

Abstract. The article is devoted to the problem of developing the professional and pedagogical competence of instructors in technical higher education institutions. Based on a theoretical analysis of psychological, pedagogical, and philosophical research on the professional development of personality, and in accordance with the logic of differentiating the basic concepts of "competence", "competency", "professional competence", "pedagogical competence", and "teacher's professional competence", the professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions and its main components have been defined. A structural-functional model for the development of professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions is presented as a theoretically grounded, holistic framework outlining how improved (modernized) professional development of academic staff should occur within the process of continuing education. The stepwise implementation of the proposed structural-functional model is described in accordance with five consecutive stages: motivational-instructional, prognostic-design, cognitive-informational, activity-process, and reflectiveresultative. The diagnostic methodological framework for assessing the level of professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions is outlined, encompassing criteria, corresponding indicators, and levels of component development. The results of an experimental evaluation of the structural-functional model's effectiveness indicate that, by the end of the study, the experimental group demonstrated significantly higher numbers of participants achieving productive and creative levels for each criterion of professional and pedagogical competence compared to the control group. Based on the results of the experimental work, it is concluded that the broad implementation of innovations aimed at modernizing and optimizing the process of professional development for instructors of specialized disciplines in technical higher education institutions is advisable.

Keywords: professional-pedagogical competency, lecturers of professional disciplines, technical universities, pedagogical conditions, structural-functional model, advanced training of lecturers, continuing professional development.

Suggested Citation:

Hurevich, R., Horokhivska, T. Development of Professional and Pedagogical Competence of Vocational Subject Lecturers in Technical Higher Education Institutions: Research Implementation. *Veritas: Legal and Psychological-Pedagogical Research*. 1(2), 104–114. DOI: doi.org/10.23939/veritas2025.02.104

Journal homepage: https://science.lpnu.ua/veritas

Article history: Received: 17.06.2025. Revised: 25.08.2025. Accepted: 28.11.2025.

Copyright © The Author(s). This is an open access Article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)1

Introduction

Contemporary reform processes in the economic, socio-political and spiritual-cultural life of Ukraine, as well as its integration into the European and global educational space, place fundamentally new demands on the national higher education system, as it plays a decisive role in developing the country's scientific and intellectual potential. In this context, the effective implementation of higher education tasks is based on the quality of the human resources of educational institutions, which is underpinned by a number of regulatory and legal documents: the Law of Ukraine "On Education" (2017), "On Higher Education" (2014), "On Scientific and Scientific and Technical Activity" (2016), the National Strategy for the Development of Education in Ukraine for 2012-2021 (2013), the Strategy for the Development of Higher Education in Ukraine for 2022-2032 (2022); the sectoral Concept of Development of Continuing Pedagogical Education (2013), the Resolution of the Cabinet of Ministers of Ukraine on the Procedure for Advanced Training of Pedagogical and Scientific-Pedagogical Workers (2019), etc.

In view of this, one of the priority tasks facing higher education is the professional training of lecturers from technical universities, whose professional-pedagogical competency directly and indirectly affects the state of development of the technical sector of the economy. Practice shows that the system of professional development for lecturers from technical universities does not meet the current needs of Ukrainian society: most scientific and teaching staff lack pedagogical education, which largely determines the success of pedagogical activities; the development of professional and pedagogical skills is ineffective, based on trial and error and the use of traditional teaching methods; there is a tendency towards professional burnout among lecturers; professional development practices are mainly focused on updating subject knowledge, which does not contribute to personal and professional development, etc.

At the same time, the urgency of solving this problem is currently determined by the intensification of a number of contradictions. At the conceptual level, there is a gap between: the sufficiently high level of development of modern concepts of personality development and the insufficient definition of the role and place of professional-pedagogical competency in

the professional development of higher education lecturers; dynamic changes in the professional activities of lecturers from technical universities, caused by the constant growth of requirements for their competitiveness, pedagogical-professional competency, and the traditional system of postgraduate pedagogical education. At the regulatory and organisational level, there is a gap between: the growing demands of modern technical universities for the development of the professional-pedagogical competency of lecturers and the insufficient level of provision of the organisational and pedagogical conditions necessary for this; significant positive achievements of foreign experience in the development of professional-pedagogical competency of higher education ecturers and the inadequate level of its use in domestic technical universities. At the content and technological level, there is a gap between: the objective need for the targeted development of the professional-pedagogical competency in lecturers of professional disciplines from technical universities and the lack of appropriate scientific and methodological support for this process; the need to use innovative forms, methods, means, modern pedagogical technologies and the actual state of their implementation in the educational process of professional development, the predominance of the traditional cognitively-oriented approach.

Literature Review

Contemporary issues related to the study of the peculiarities of professional formation, development and self-development of higher education teachers as subjects of professional and pedagogical activity have become the subject of research by domestic and foreign scholars. Among these issues are the modernisation of the higher education system based on a competence-oriented approach; psychological and pedagogical mechanisms for the professional training and development of higher education teachers; theoretical and methodological foundations for the development of professional pedagogical culture, professional skills, and pedagogical professionalism among teachers; theoretical and methodological foundations for continuing professional education; andragogical features of adult education; trends in the development of postgraduate education for pedagogical and scientificpedagogical workers. At the same time, in recent years, publications have appeared by authors devoted to the problems of the formation and development of various types of competences, such as: life (O. Demchuk [1]); general cultural (N. Tsukanova [2]); cultural studies (O. Kravchenko-Dzondza [4]); ethical (K. Pavelkiv [5]); sociocultural (N. Basay [6]); communicative (I. Androshchuk [7]); psychological and pedagogical (O. Homoniuk [8]); socio-pedagogical (Z. Shevtsiv [9]); sociopsychological (L. Danylevych [10] et al.).

One type of human competence that defines a broad, comprehensive spectrum of a person's compliance with the requirements of professional activity at the personal and activity levels is professional competence. Research into the phenomenon of professional competence is presented in the works of authors such as I. Androshchuk, N. Melnyk, O. Storonska, M. Vorobel [11; 12; 13] and others. The peculiarities of forming the professional competence of lecturers of higher education institutions of non-pedagogical profile as an integral characteristic of the subject of labour, the level of his professional training, which determines the unity of theoretical and practical readiness for the actual implementation of tasks in the relevant professional field, are outlined in the works of O. Danysko, M. Holovan, O. Krasnov, V. Liakhovskyi, R. Lisenko, I. Niemtchenko, R. Ryabushko, I. Semenovska [14; 15; 16] and others.

Given that each competency manifests itself in activity, contemporary researchers correlate the professional competency of a teacher with pedagogical activity, thus highlighting the pedagogical component in the structure of this concept. In particular, the research of M. Miastkovska, I. Kobylyanska, M. Radchenko [17; 18] and others is devoted to justifying the need to single out the pedagogical component in the structure of professional competence.

One type of professional competence for teachers is professional-pedagogical competency, which is determined by the level of professional education, experience, and individual abilities of a person, their motivated desire for continuous self-education and self-improvement, and a creative and responsible attitude towards their work. It is no coincidence that the issue of this competence has arisen in the education system and is a channel for professional development, since such a characteristic as "skill", which traditionally characterised mastery of the profession, has be-

come insufficient in the current conditions of reforming the national education system. Understanding the essence of professional-pedagogical competency, as well as certain aspects of its formation in pedagogical and scientific-pedagogical workers, is the subject of research by A. Demkiv [19], O. Orlovska [20], L. Otroshchenko [21], V. Sydorenko [22], and others.

In particular, according to R. Hurevich and M. Kademia, the level of professional-pedagogical competency of a teacher depends on his or her personal qualities, intellectual activity, abilities, cognitive needs, and motivation for professional activity. Researchers associate the understanding of professional and pedagogical competence with the activities of a teacher, their ability to perform certain professional actions based on the necessary professional knowledge and skills [23, p. 11-13]. From the perspective of professional and psychological suitability, the professional-pedagogical competency of lecturers of specialised subjects is characterised by Ukrainian researcher S. Demchenko [24]. The author defines this concept as "a complex, multi-level, stable structure of a teacher's mental traits, formed as a result of the integration of experience, theoretical knowledge, practical skills, and personal qualities that are important to them, and has the following essential features: mobility, flexibility, and critical thinking" [24].

However, despite the considerable interest among scholars in the professional training of academic staff, the issue of developing professional and pedagogical competence among instructors of specialized disciplines in technical higher education institutions has not been the subject of targeted, systematic research. This is manifested in the lack of a unified understanding of the essence of the phenomenon of professional and pedagogical competence, the absence of developed and experimentally tested pedagogical conditions, and the lack of a theoretically defined and methodologically substantiated model for its development within the system of professional development.

Purpose

In light of the above, the aim of this article is to experimentally evaluate the effectiveness of a structural-functional model for the development of professional and pedagogical competence among instructors of specialized disciplines in technical higher education institutions.

Methodology

Within the framework of this article, professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions is understood as a complex, integrative, professional-personal construct that characterizes a set of value-motivational resources, a system of socially and professionally significant personal qualities and abilities, a body of psychological, pedagogical, and subject-specific knowledge, professional skills and abilities, communicative experience, and self-awareness. This construct ensures the ability to successfully perform professional and pedagogical activities and pursue ongoing self-development [25, p. 42].

The following key methodological principles form the basis for understanding the essence of professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions:

Professional and pedagogical competence is an integral component of an academic staff member's overall professional competence.

It represents a harmonious combination of general cultural, psychological-pedagogical, subject-specific, and methodological preparation, practical experience, and professionally significant personal qualities and values, which together ensure the success of professional and pedagogical activity.

As a complex personal-professional phenomenon, professional and pedagogical competence determines the extent to which an instructor meets the requirements of professional activity and reflects their readiness to perform professional and pedagogical functions.

A systemic element of professional and pedagogical competence is the instructor's professional and pedagogical activity itself.

Professional and pedagogical competence develops through continuous pedagogical education, the necessity of which is dictated by the dynamic transformations of the socio-cultural environment, presenting new challenges that can be addressed precisely through the development of professional and pedagogical competence.

The basis of our experimental work was a structural and functional model of the development of professional-pedagogical competency in lecturers of professional disciplines from technical universities, which we consider to be a theoretically sound, comprehensive set of ideas about how the improved (modernised) professional development of lecturers in the process of advanced training in the postgraduate education system. The components (blocks) of the structural-functional model include target-based, theoretical-methodological, procedural-technological, monitoring-effective components (blocks). The targetbased block of the model is represented by the main goal, which predicts the purposeful development of professional-pedagogical competency in lecturers of professional disciplines, which corresponds, on the one hand, the state's social demand for lecturers, and on the other hand, their personal needs focused on the development of professional-pedagogical competency. This goal is specified by tasks, the comprehensive solution of which will contribute to the effective implementation of the defined goal, namely: the formation of an appropriate focus on the development of professional-pedagogical competency; solving the tasks of developing the professional qualities of teachers; expanding and deepening professional and pedagogical knowledge; improving skills and abilities as components of professional and pedagogical competence; providing opportunities for self-realisation and self-improvement, etc. The theoreticalmethodological block covers methodological approaches, principles and functions that form the basis for the development of professional-pedagogical competency in lecturers of professional disciplines. The procedural-technological block contains pedagogical conditions, a professional programme, traditional and innovative forms of teaching, pedagogical technologies, innovative teaching methods, tools, and stages of technology for developing the professional-pedagogical competency in lecturers. The monitoring-effective block of the model combines the component structure of the professional-pedagogical competency in lecturers, criteria, levels of development of the professional and pedagogical competence of teachers of specialised disciplines, and the final result.

The development and implementation of the concept of professional-pedagogical competency in lecturers of professional disciplines from technical universities involved the phased implementation of the structural and functional model of professional-pedagogical competency in lecturers of professional disciplines from technical universities that we had developed. It has been established that the development of professional-pedagogical competency of stu-

dents during advanced training should be carried out in five consecutive stages (motivational-instructional, prognostic-designing, cognitive, procedural, reflexiveproductive).

The goal of the motivational-instructional stage is to strengthen lecturers' awareness of the need to develop professional-pedagogical competency and a value-based attitude towards professional and pedagogical activities. During its implementation within the framework of advanced training courses, participants should understand the essence of professional-pedagogical competency, diagnose the individual characteristics of its components, identify expectations from the educational process, and develop motivational attitudes towards innovative activities and continuous self-development. The prognostic-designing stage is aimed at planning the process of developing the professional-pedagogical competency of lecturers, developing its content, forms and methods, taking into account the main legislative, regulatory and industry trends and characteristics of the professional and pedagogical activities of lecturers of professional disciplines, their work experience, individual needs and level of readiness for improvement. The aim of the cognitive stage is to improve the level of professionally-oriented pedagogical knowledge and information about professional-pedagogical competency through active integrative-theoretical training. Its implementation involves participants of advanced training courses mastering systematic knowledge of psychology and pedagogy in higher education, relating to the specifics of pedagogical interaction in higher education institutions, methods of designing, organising and managing studentse educational activities, effective forms, methods and means of pedagogical influence, etc. The procedural stage of developing the professional-pedagogical competency in lecturers of professional disciplines involves developing participants' professional and pedagogical practical skills and abilities; improving professionally important personal qualities necessary for successful professional and pedagogical activity in general. Its essence is determined by the focus of the educational process in advanced training courses on the existing professional and pedagogical experience of students and the organisation of reflective analysis of the productivity of their own practical activities based on the use of acquired scientific knowledge. Its implementation in advanced training courses for lecturers of professional disciplines The goal of the reflexive-productive stage is to develop the participants' focus on the practical consolidation of methods of pedagogical reflection,

self-assessment and self-analysis of their own professional and pedagogical development, the formation of the ability to self-regulate this process and predict directions for further professional improvement and self-improvement. involves the active involvement of participants in various types of individually oriented practice (self-assessment of their professional-pedagogical competency, individual assessment of their own socially and professionally significant qualities, features of setting goals for professional and pedagogical activity, constructing an individual trajectory for further professional development and self-improvement, etc.).

To optimize the process of professional development for instructors of specialized disciplines in technical higher education institutions, a professional program entitled "Development of Professional and Pedagogical Competence of Higher Education Instructors" and a working program "Seminar on Pedagogical Knowledge" have been developed. These programs ensure a systematic, technological sequence for the development of professional and pedagogical competence among participants. The program consists of five modules, the content of each being determined based on the types and nature of professional and pedagogical activities of instructors of specialized disciplines in technical higher education institutions.

An experimental verification of the effectiveness of developing the professional-pedagogical competency in lecturers of professional disciplines from technical universities was conducted at Lviv Polytechnic National University, Zhytomyr Polytechnic State University, Sumy State University, and Lviv State University of Life Safety. To ensure the representativeness of the sample for the pedagogical experiment, 560 lecturers of professional disciplines (including 440 in the formative experiment), 9 lecturers of advanced training courses, and 15 lecturers were involved as experts.

Based on the analysis of theoretical sources on the problem of pedagogical diagnosis and our own educational experience, a diagnostic apparatus for assessing the level of professional-pedagogical competency in lecturers of professional disciplines was developed, covering criteria (axiological-motivational, integrative-cognitive, organizational-methodical, operational, personal-communicative, research-related, evaluative-reflexive), corresponding indicators and levels of development of components of professional-pedagogical competency of lecturers (adaptive, normative, productive and creative).

Each level was assessed using a developed methodological apparatus covering fifteen reliable and valid methods for diagnosing the quantitative and qualitative characteristics of the pedagogical phenomenon under study: the axiological-motivational criterion was diagnosed using the "Aptitude for Teaching" test, the "Assessment and Self-Assessment of Teaching Qualities" diagnostic chart, and the "Analysis of the Motives of Scientific and Teaching Staff' methodology; integrative-cognitive criterion - using the methodology "Diagnostics of professional preparedness of lecturers" and comprehensive test control; organizational-methodical criterion was diagnosed using the assessment card "Quality of organisationalmethodological activity of lecturers"; the operational criterion was assessed using the "Pedagogical Situations" methodology; the personal-communicative criterion was diagnosed using the "Communicative and Organisational Skills" (COS-2) methodology, the "Determining the Level of Reflection in Interpersonal Interaction" test, and the "Assessment of Pedagogical Communication Skills" methodology; the researchrelated criterion was determined based on the results of evaluating the coursework of participants enrolled in advanced training courses for lecturers and taking into account the rating assessment of the scientific work of lecturers in accordance with the "Regulations on the assessment of the work of lecturers and the determination of their ratings" in force at the higher education institution; the evaluative-reflexive criterion involved the use of the questionnaire "Development of evaluative-reflective activity skills", the test "Assessment of pedagogical reflection" and the diagnostic chart "Assessment and self-assessment of a lecturer's readiness for self-development".

To determine the overall level of professional-pedagogical competency of lecturers, a generalised $R_{\rm PPK}$ indicator was used, taking into account weighting coefficients specified by an expert group with a high degree of consensus (concordance coefficient W=0.81).

Results and Discussion

Prior to the experimental evaluation of the effectiveness of developing professional and pedagogical competence among instructors of specialized disciplines in technical higher education institutions, a diagnostic assessment of the current state of its development in the participants was conducted using a specially designed diagnostic toolkit. The results are presented below in Fig. 1.1.

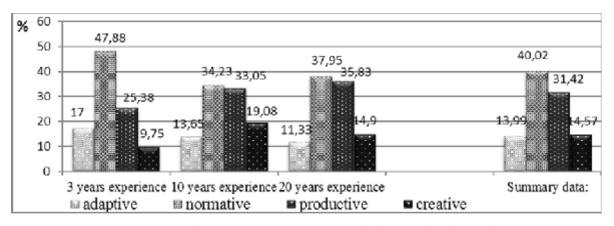


Fig. 1.1. Distribution of Instructors of Specialized Disciplines by Level of Professional and Pedagogical Competence Development (Baseline Stage of the Experiment)

The baseline stage of the experiment revealed issues associated with the limitations of the traditional system of professional development for academic staff teaching specialized disciplines in technical higher education institutions. The analysis of the instructors' questionnaires led to the following conclusions:

· instructors rate their subject-specific knowledge significantly higher than their methodological preparation;

- they report low levels of knowledge in developmental and educational psychology, particularly in the psychology of student age;
- · more than three-quarters of respondents do not associate the success of their professional activities with the level of their professional and pedagogical competence;
- · many experience difficulties in identifying prospective and current goals and objectives

of the educational process, as well as in selecting effective teaching methods;

 the vast majority do not engage with scientific and pedagogical issues during their professional practice.

According to the generalised results, 14.57 % of lecturers of professional disciplines achieved a creative level of professional-pedagogical competency, 31.42 % achieved a productive level, 40.02 % achieved a normative level, and 13.99 % achieved an adaptive level. We attribute these low results primarily to the lack of a psychological and pedagogical foundation among most lecturers of professional disciplines, which could serve as a basis for pedagogical creativity, as well as to the dominance of technocratic thinking, a lack of sensitivity to the emergence of psychological and pedagogical problems and a focus on their timely diagnosis and resolution. This does not fully meet the needs of the educational process, does not ensure the ability of lecturers to effectively build pedagogical interaction, solve complex educational tasks, and provide high-quality training of specialists for various industries and the service sector. At the same time, the best indicators are characteristic of lecturers with 10-20 years of experience in higher education - they are the most motivated and have stronger pedagogical knowledge, scientific research and evaluative-reflective qualities. Lecturers with more than 20 years of experience naturally prevail in terms of organisational, methodological, activity and operational criteria. However, in our opinion, their experience is currently insufficient for the proper performance of

pedagogical functions in accordance with the everincreasing requirements of higher technical education.

The analysis of the results of the baseline study provides grounds to assert that the professional development of academic staff requires targeted improvement. Overall, the current state of higher technical education underscores the need to reconsider the objectives, conditions, content, tools, forms, and methods for developing the professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions.

In order to prove the effectiveness of the model, well-founded pedagogical conditions and methods for developing the professional-pedagogical competency in lecturers of professional disciplines from technical universities in the process of improving their professional qualifications, tasks related to their development in the process of improving their qualifications were carried out in accordance with a strategy of gradual, step-by-step changes and optimisations. Their effectiveness was verified by comparing the dynamics of the development of components of professional-pedagogical competency for each of the criteria with the involvement of experts, studying the results of selfassessment, taking into account the opinions of students, administration, etc. Fig. 1.2 shows the percentage values of the level of development of professional-pedagogical competency of lecturers in the experimental group for all criteria at the end of the intervention work.

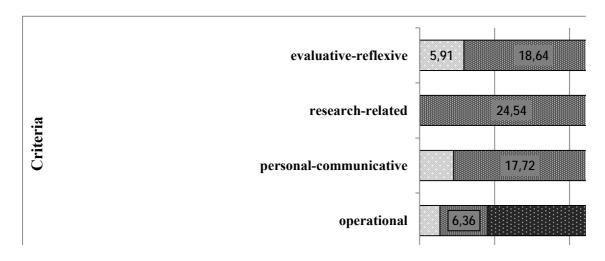


Fig. 1.2. Distribution of Instructors in the Experimental Group by Criteria of Professional and Pedagogical Competence at the End of the Intervention Phase

The results obtained (Fig. 1.3) showed that at the end of the study, in the experimental group, compared to the control group, there were significantly more teachers with a productive and creative level for each criterion of professional-pedagogical competency. In particular, as a result of the experiment, the largest increase in the number of lecturers with a creative level occurred in the axiological-motivational (by 31.36 %), as well as organisational-methodical and operational criteria (by 30.45 % each). The smallest dynamics in the experimental group was found in the research-related criterion (only 15.45 %).

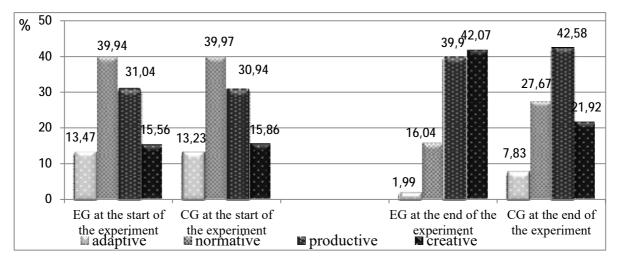


Fig. 1.3. Distribution of Instructors of Specialized Disciplines in the Experimental and Control Groups by Level of Professional and Pedagogical Competence Development (Formative Stage)

In general, during the professional development process, the number of lecturers with a creative level of professional-pedagogical competency increased in both groups (Fig. 1.3), but due to the experimental factors, this increase was significantly higher in the experimental group, amounting to 42.07 % according to the creative criterion, compared to 21.92 % in the control group. On the other hand, there were fewer students with adaptive (1.99 %), normative (16.04 %) and productive (39.9 %) levels of professional-pedagogical competency in the experimental group than in the control group (7.83 %, 27.67 % and 42.58 %, respectively).

At the same time, statistical verification using the $\chi 2$ criterion showed that the characteristics of professional-pedagogical competency of the participants in the experimental group and the control group before the start of the formative experiment coincided, but at the end they differed with the necessary level of reliability. This gives grounds for a reasonable assertion that the differences identified are related to the application of a set of proposed innovations in the process of improving the qualifications of lecturers.

Thus, the results of implementing our innovations demonstrate the effectiveness of the developed methodological provisions, as well as the impact of the authorial model and substantiated pedagogical conditions aimed at modernizing and optimizing the professional development process for instructors of specialized disciplines in technical higher education institutions. Based on the experimental data, we conclude that there is a significant predominance of indicators of professional and pedagogical competence development among academic staff who underwent professional development according to our methodology. Therefore, the underlying methodology is valid, the objectives have been achieved, and the tasks successfully completed.

Conclusions

The experimental evaluation of the effectiveness of the structural-functional model for developing professional and pedagogical competence among instructors of specialized disciplines in technical higher education institutions allows us to assert the following:

ü Professional and pedagogical competence of instructors of specialized disciplines in technical higher education institutions constitutes a complex, integrative, professional-personal construct, characterized by a combination of value-motivational resources, a system of socially and professionally significant personal qualities and abilities, a set of psychological-pedago-

Roman Hurevich, Tetiana Horokhivska

gical and subject-specific knowledge, professional skills and abilities, communicative experience, and self-reflective experience, which collectively ensure the capacity for successful professional-pedagogical activity and ongoing self-development;

ü The defined structural-functional model for developing professional and pedagogical competence is understood as a system of content, principles, forms, methods, and substantiated pedagogical conditions designed to achieve the intended outcome – a positive dynamic in the development of professional and pedagogical competence among instructors of specialized disciplines in technical higher education institutions;

 $\ddot{\mathbf{u}}$ Experimental data, verified statistically using the χ^2 criterion, demonstrate a significant predominance of professional and pedagogical competence development indicators among academic staff trained according to our methodology;

ü The results of implementing innovations aimed at modernizing and optimizing the professional development process for instructors of specialized disciplines in technical higher education

institutions convincingly demonstrate their effectiveness and practical relevance.

Acknowledgements. None.

Funding. The authors declare no financial support for the research,

authorship, or publication of this article.

Author contributions. Roman Hurevich -50 %, Tetiana Horokhivska -50 %. The authors approve this work and take responsibility for its integrity.

Conflict of interest. The authors declare no conflict of interest.

Institutional review board statement. Not applicable.

REFERENCES

- 1. N HUMANITIES STUDIES. (2019). *State and society*, *17*(1(II)), 44–58. DOI: https://doi.org/10. 38014/ehs-ss.2019.1-II.04
- 2. Tsukanova, N. (2022). Forming the general cultural competence of elementary school students. *Current Issues of the Humanities*, 53(2), 339–343. DOI: https://doi.org/10.24919/2308-4863/53-2-50
- 3. Tkachov, S., Tkachova, N. (2022). Polycultural competence as a pedagogical phenomenon. *Innovative Pedagogy*, 49(2), 13–15. DOI: https://doi.org/10.32843/2663-6085/2022/49.2.2
- 4. Kravchenko-Dzondza, O. (2018). Cultural competence of future teachers in the context of the cultural paradigm of education. *Youth & Market*, 8(163), 90–94.
- 5. Pavelkiv, K. (2022). Ethical competence in professional pedagogical activity of modern foreign language teacher: Theoretical aspect. *Social Work and Social Education*, 2(9), 272–280. DOI: https://doi.org/10.31499/2618-0715.2(9).2022.267363
- 6. Basay, N. P. (2017). Features of the formation of socio-cultural competence of primary school pupils in the process of foreign language teaching. *Scientific Bulletin of Uzhhorod University*. *Series "Pedagogy. Social Work"*, 2(41), 20–24.
- 7. Androshchuk, I. (2022). Communicative competence as an important means of participants' effective interaction in the educational process. *Youth & Market*, 3-4(201–202), 34–38. DOI: https://doi.org/10.24919/2308-4634.2022.259914
- 8. Homoniuk, O. (2020). Development of psychological and pedagogical competence of teachers of higher education institutions in the context of continuing education. *Modern Information Technologies and Innovation Methodologies of Education in Professional Training: Methodology, Theory, Experience, Problems, 57*, 155–164. DOI: https://doi.org/10.31652/2412-1142-2020-57-155-164
- 9. Shevtsiv, Z. (2019). Forming of the integrated social-pedagogical competence of the future teacher of primary school to inclusive education. *Educational Space of Ukraine*, 15, 160–169. DOI: https://doi.org/10.15330/esu.15.160-169
- 10. Danylevych, L. A. (2017). Psychological aspects of the development of socio-psychological competence in psychology students. *Scientific Bulletin of Kherson State University*. *Psychological Sciences Series*, 2(1), 89–93.

- 11. Androshchuk, I. (2023). Professional competence as an important condition for the successful activity of skilled workers in the service sector. *Professional Pedagogy*, 2(27), 39–44. DOI: https://doi.org/10.32835/2707-3092.2023.27.39-44
- 12. Melnyk, N. (2017). Phenomenon of "professional competence" in Ukrainian and European pedagogical theory. *Pedagogical Education: Theory and Practice. Psychology. Pedagogy. Collection of Scientific Works*, 28, 54–60.
- 13. Storonska, O., Vorobel, M. (2023). Professional competence of a teacher under conditions of digitalization of education. *Youth & Market*, 10(218), 72–76. DOI: https://doi.org/10.24919/2308-4634.2023.290462
- 14. Niemtchenko, I., Liakhovskyi, V., Lisenko, R., Krasnov, O. H., Ryabushko, R. (2023). The professional competence of a teacher at a higher medical educational institution is an important indicator of their professional and pedagogical activity. *Current Issues in Modern Medicine: Bulletin of the Ukrainian Medical Dental Academy*, 23(4), 277–280. DOI: https://doi.org/10.31718/2077-1096.23.4.277
- 15. Holovan, M. S. (2014). Professional competence of a higher education institution teacher. *Problems of Modern Pedagogical Education. Series: Pedagogy and Psychology*, 44(3), 79–88.
- 16. Semenovska, I., Danysko, O. (2022). The professional competence of the high school teacher as a factor of innovative changes in education. *Pedagogical Sciences*, 80, 42–46. DOI: https://doi.org/10.33989/2524-2474.2022.80.278193
- 17. Miastkovska, M., Kobylyanska, I. (2023). Pedagogical competence as a necessary component of professional competence of future technical specialists. *Safety Education*, 7(1–2), 30–35. DOI: https://doi.org/10.31649/2524-1079-2022-7-1-030-035
- 18. Radchenko, M. (2021). Pedagogical competence part of the professionalism of the future teacher. *Youth & Market*, 10(98), 278–281. DOI: https://doi.org/10.32839/2304-5809/2021-10-98-57
- 19. Demkiv, A. M. (2023). Professional and pedagogical competence of educational and methodological centers teachers in the sphere of civil defense: Structure and content. *Bulletin of Alfred Nobel University. Series "Pedagogy and Psychology"*. *Pedagogical Sciences*, 1(25), 104–114.
- 20. Orlovska, O. V. (2012). Professional and pedagogical competence of teachers. *Pedagogical Discourse*, 11, 207–209.
- 21. Otroshchenko, L. (2015). The professional-pedagogical competence of a teacher as a condition of effective didactic process in the higher educational institution of economic specialization. *Pedagogical Sciences: Theory, History, Innovative Technologies*, 1(45), 346–354.
- 22. Sydorenko, V. (2014). Professional and pedagogical competence as an essential component of pedagogical skills of the teacher of Ukrainian language and literature in the system of postgraduate education. *Pedagogical Sciences: Theory, History, Innovative Technologies, 6*(40), 409–421.
- 23. Hurevich, R. S., Kademiya, M. Yu. (2013). Professional competence of a teacher a necessary condition for his professionalism. *Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems*, 35, 9–14.
- 24. Demchenko, S. O. (2005). Development of professional and pedagogical competence of teachers of special disciplines in higher technical educational institutions (Abstract of thesis for the degree of Candidate of Pedagogical Sciences: 13.00.04 Theory and Methods of Professional Education). Kirovograd State Pedagogical University, Kirovograd.
- 25. Horokhivska, T. (2020). Criteria and indicators for the development of professional and pedagogical competence of teachers of specialised disciplines at technical higher education institutions. *Collection of Scientific Works of the National Academy of the State Border Guard Service of Ukraine. Series: Pedagogical Sciences, 3*(22), 37–47.

Roman Hurevich, Tetiana Horokhivska

Розвиток професійно-педагогічної компетентності викладачів фахових дисциплін технічних закладів вищої освіти: реалізація дослідження

Роман Гуревич¹, Тетяна Горохівська²

¹ Доктор педагогічних наук, професор, дійсний член (академік) НАПН України, Вінницький державний педагогічний університет імені Михайла Коцюбинського, вул. Острозького, 32, 21001, Вінниця, Україна, r.gurevych2018@gmail.com, ORCID: 0000-0003-1304-3870

² Доктор педагогічних наук, професор, Національний університет "Львівська політехніка", вул. С. Бандери, 12, 79013, Львів, Україна, tetiana.m.horokhivska@lpnu.ua, ORCID: 0000-0001-5997-4676

Анотація. Статтю присвячено проблемі розвитку професійно-педагогічної компетентності викладачів технічних закладів вищої освіти. На основі теоретичного аналізу психолого-педагогічних, філософських досліджень з проблем професійного становлення особистості, а також відповідно до логіки пояснення розмежування базових понять "компетентність", "компетенція", "професійна компетентність", "педагогічна компетентність", "професійна компетентність педагога" визначено професійно-педагогічну компетентність викладачів фахових дисциплін технічних закладів вищої освіти, її основні компоненти. Представлено структурно-функціональну модель розвитку професійно-педагогічної компетентності викладачів фахових дисциплін технічних закладів вищої освіти як теоретично обгрунтований цілісний комплекс уявлень про те, як має відбуватися покращений (модернізований) професійний розвиток науково-педагогічних працівників у процесі підвищення кваліфікації в системі післядипломної освіти. Розкрито поетапну реалізацію побудованої структурно-функціональної моделі відповідно до п'яти послідовних етапів (мотиваційно-настановчий, прогностично-проєктувальний, когнітивно-пізнавальний, діяльнісно-процесуальний, рефлексивно-результативний). Окреслено діагностичний методичний апарат оцінювання рівня професійно-педагогічної компетентності викладачів фахових дисциплін технічних закладів вищої освіти, що охоплює критерії, відповідні показники і рівні розвиненості компонентів професійно-педагогічної компетентності викладачів. За результатами експериментальної перевірки ефективності структурно-функціональної моделі розвитку професійнопедагогічної компетентності викладачів фахових дисциплін технічних закладів вищої освіти констатовано, що наприкінці дослідження в експериментальній групі, порівняно з контрольною групою, виявлено значно більше досліджуваних із продуктивним і креативним рівнем за кожним критерієм професійно-педагогічної компетентності. На підставі результатів проведеної експериментальної роботи зроблено висновок про доцільність широкого впровадження інновацій, спрямованих на модернізацію й оптимізацію процесу підвищення професійної кваліфікації викладачів фахових дисциплін технічних закладів вищої освіти.

Ключові слова: професійно-педагогічна компетентність, викладачі фахових дисциплін, технічні заклади вищої освіти, педагогічні умови, структурно-функціональна модель, підвищення кваліфікації викладачів, неперервний професійний розвиток.