



PROFESSIONAL MOBILITY OF A TEACHER IN THE CONDITIONS OF DIGITALIZATION OF SOCIETY

LA MOVILIDAD PROFESIONAL DEL PROFESORADO EN EL CONTEXTO DE LA DIGITALIZACIÓN DE LA SOCIEDAD

Iryna Boiarynova^{1*}

E-mail: bojarinova.io13@gmail.com

ORCID: <https://orcid.org/0000-0002-9228-464X>

Liudmyla Mironets²

E-mail: mironets19@gmail.com

ORCID: <https://orcid.org/0000-0002-9741-7157>

Oksana Zhyhaylo³

E-mail: okzhigajlo@ukr.net

ORCID: <https://orcid.org/0000-0001-8297-2951>

Olha Bilychenko⁴

E-mail: olgabelichenko64@gmail.com

ORCID: <https://orcid.org/0000-0002-9292-9938>

Volodymyr Karhut^{5*}

E-mail: v.y.karhut@udu.edu.ua

ORCID: <https://orcid.org/0009-0004-9449-6517>

Anzhelika Kurchatova⁶

E-mail: kurchat67@gmail.com

ORCID: <https://orcid.org/0009-0006-7369-0200>

¹ Detached structural unit «Professional pedagogical specialty college of Oleksandr Dovzhenko Hlukhiv National Pedagogical University». Ukraine.

² Sumy State Pedagogical University named after A.S. Makarenko. Ukraine.

³ Drohobych Ivan Franko State Pedagogical University. Ukraine.

⁴ State Higher Educational Institution "Donbas State Pedagogical University". Ukraine.

⁵ Dragomanov Ukrainian State University. Ukraine.

⁶ Admiral Makarov National University of Shipbuilding. Ukraine.

*Corresponding autor

Suggested Citation (APA 7th Edition)

Boiarynova, I., Mironets, L., Zhyhaylo, O., Bilychenko, O., Karhut, V., & Kurchatova, A. (2025). Professional mobility of a teacher in the conditions of digitalization of society. *Revista Conrado*, 21(106), e4480.

ABSTRACT

The article proves the importance, content, and directions of the formation of professional mobility of a teacher in the conditions of digitalization of society. Digital mobility is considered a key element of professional mobility. The qualities and components that are fundamental for the formation of development and identification of professional mobility of a teacher in the conditions of digitalization of society are highlighted. The results of the ascertaining stage of the experiment showed an insufficient level of formation of professional mobility of a teacher in the conditions of digitalization of society. At the formative stage of the experiment, pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society were introduced in the experimental groups. At the control stage, the effectiveness of the implementation of pedagogical conditions, and the role

of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society were checked. The effectiveness of the implementation of pedagogical conditions and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society is evidenced by the dynamics of the levels of professional mobility of teachers in the experimental groups. As a result of the study, scientific and methodological recommendations were developed for students and teachers regarding the formation of professional mobility of teachers in the context of the digitalization of society.

Keywords:

Professional mobility, Teacher, Digitalization of society, Digital mobility, Professional activity, Higher education.



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

Vol 21 | No.106 | September-october | 2025
Continuous publication
e4480



RESUMEN

El artículo demuestra la importancia, el contenido y las direcciones de la formación de la movilidad profesional del docente en las condiciones de digitalización de la sociedad. La movilidad digital se considera un elemento clave de la movilidad profesional. Se identifican las cualidades y componentes que son fundamentales para configurar el desarrollo e identificación de la movilidad profesional docente en las condiciones de digitalización de la sociedad. Los resultados de la etapa de constatación del experimento mostraron un nivel insuficiente de formación de la movilidad profesional del profesorado en las condiciones de digitalización de la sociedad. En la etapa formativa del experimento, en los grupos experimentales se introdujeron las condiciones pedagógicas para la formación de la movilidad profesional del docente en las condiciones de digitalización de la sociedad. En la etapa de control se comprobó la eficacia de la implementación de las condiciones pedagógicas, el papel de las formaciones y seminarios en la conformación de la movilidad profesional del profesorado en las condiciones de digitalización de la sociedad. La eficacia de la implementación de las condiciones pedagógicas, el papel de las capacitaciones y seminarios en la conformación de la movilidad profesional de los docentes en las condiciones de digitalización de la sociedad se evidencia en la dinámica de los niveles de movilidad profesional de los docentes en los grupos experimentales. Como resultado del estudio, se desarrollaron recomendaciones científicas y metodológicas para estudiantes y docentes sobre la formación de la movilidad profesional docente en el contexto de la digitalización de la sociedad.

Palabras clave:

Movilidad profesional, Docente, Digitalización de la sociedad, Movilidad digital, Actividad profesional, Educación superior.

INTRODUCTION

In the context of modern transformations taking place in society, the problem of reforming all spheres of human life is becoming increasingly acute. This is due to the widespread use of Internet communications, and the rapid evolution of digital technologies, which lead to significant changes in traditional formats around the world, and the improvement of people's socio-cultural activities. Due to the formation of digital models of technological competencies of Internet users and professional interaction in the public consciousness of a person, the phenomenon of professional mobility of a teacher in the context of the digitalization of society is spreading and emerging, which can positively affect the formation of digital mobility of specialists of all specialties. Professional mobility of a person in the context of the digitalization of society today

includes the ability to work effectively in a variety of digital environments, including the use of various technologies and programs. In particular, flexible work schedules and remote work are gaining increasing popularity, requiring specialists to adapt to space, time, and place.

Knowledge in the field of programming and IT is becoming important for many professional fields in the conditions of the digitalization of society, and the development of digital competencies and continuous learning are key factors in maintaining the relevance of a specialist in a dynamic professional environment. Given the international nature of most business processes and globalization, the following are considered to be the essential qualities of a qualified specialist: the ability to communicate effectively using digital tools with representatives of different communities and awareness of human cultural characteristics. Therefore, today, competitive and full-fledged specialists are those who possess the necessary competencies in the field of professional mobility of a specialist in the conditions of digitalization of society (Leonov, 2023).

The above-mentioned actualizes the formation of professional mobility of future specialists in the educational sphere in the conditions of digitalization of society while studying in higher education. Professional mobility of a teacher in modern conditions determines the active movement of employees, is inherent in the functioning of the labor market, and is an indicator of the innovative development of each individual. Therefore, today the problem of determining the personal qualities of a person, training professionally mobile specialists who can ensure their innovative manifestation in professional activity arises, which determines the integration of the problem of forming professional mobility of a teacher in the conditions of digitalization of society into pedagogical science.

Professional mobility of teachers makes it possible to involve the latest methods and technologies in work, respond to changes promptly, and form important skills for a successful life in society among applicants for the educational space.

Literature review

Scientists consider the professional mobility of a teacher in the conditions of digitalization of society as a change in activity, a process of movement, which includes changes in cognitive and professional processes, ideas, views, programs, etc.

Researcher I. Horbachova (2017) defined the concept of "professional mobility of a teacher", identified the competencies of professional mobility of a specialist, clarified the components of professional self-realization of teachers of general educational institutions, and revealed their content.

The emergence of the problem of forming professional mobility of a specialist in the conditions of digitalization of society, taking into account the specifics of the development of the agricultural industry, was highlighted by Herasymova (2015). The scientist analyzed the socio-historical prerequisites for the development of professional mobility, showed the influence of gender segregation on the formation of professional mobility in the labor market in the conditions of digitalization of society, developed pedagogical conditions for the formation of professional mobility, presented a methodological system for the formation of professional mobility of a specialist in the conditions of digitalization of society, as a result of its formation – considered readiness for professional mobility. The conceptual principles of the formation of professional mobility of future specialists in the agricultural sector are also substantiated by Dychkovskiy (2020). They include a contextual approach, an andragogic approach, a gender approach, as well as methodological principles. The fact of the “mobile turn” that occurred as a result of the digital turn, the digital transformation of society and the economy is substantiated. A model of the formation of professional mobility has been developed for future specialists in the agricultural sector. At the same time, the mobile turn is considered a rejection and a radical change of past practices in favor of digital technologies. In general, the digital mobile turn forces entire industries or individual organizations to transform their processes, strategies, and operations in the context of informatization, computerization, and digitalization, and to change the ways of using and perceiving information. The digital turn was justified by Kakiyara & Sørensen (2001) as a technological transformation, a methodological and cultural shift in society and various fields of science, as a radically different mode of mobility of modern socio-cultural processes, encompassing various forms of mobility.

The problem of professional mobility of individuals and social relations in the period of digital transformation is raised by Leonov (2023). It is determined that mobility is a complex interdisciplinary category that can be characterized in a narrow personal context and a broad socio-economic context. It is found that the theory of mobility has evolved significantly in development, expanding to a deeper analysis of social space from the primary focus on movement between social groups and various aspects of individuals' lives. The importance of the professional mobility of an individual is emphasized and attention is focused on such a relevant component of it as digital mobility. The contextual, temporal, and spatial dimensions of digital mobility are analyzed. The phenomenon of digital nomadism is presented as a promising model of digital mobility for the future labor market. The challenges associated with the spread of digital mobility to all areas of

modern professional life are substantiated (digital divide of social groups and generations, digital inequality, manipulative management of digital data, digital dementia, digital parkourism, digital addiction, etc.).

Dobryden & Brytskyi (2024), in the context of fulfilling modern educational tasks of the school, considered the problem of professional mobility of teachers, identified the main factors and showed their impact on the professional mobility of teachers, developed recommendations for improving the educational process, in particular, the adaptability of teachers to changing conditions.

Diachok (2019), revealed quality as an indicator of pedagogical continuing education, researched professional mobility, identified its level, and developed a structure of professional mobility. Professional mobility for a modern pedagogical worker is considered a necessary quality. The main qualities that are important in the formation of a professional mobile specialist are identified. By the norms put forward by society, criteria for assessing the pedagogical activity of educational workers are proposed (professional skills, professional self-development, creativity in the period of modernization and reform, the introduction of innovative technologies into the educational process, pedagogical technologies of educational activity).

Scientists consider the professional mobility of a teacher in the conditions of digitalization of society as a change in activity, as a process of movement, which includes changes in cognitive and professional processes, ideas, views, programs, etc. They prove the importance of the formation of the problem of professional mobility of a specialist in the conditions of digitalization of society. Professional mobility for a modern pedagogical worker is considered a necessary quality. The main qualities that are important in the formation of a professional mobile specialist are highlighted. The challenges associated with the spread of digital mobility to all spheres of modern professional life are substantiated. However, researchers do not pay enough attention to the formation of professional mobility of a teacher in the conditions of the digitalization of society.

Purpose of the research: verification of the effectiveness of the developed pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society.

METHODOLOGY

To solve the set goal, a set of research methods was determined: theoretical – systematization of scientific ideas of scientists on the raised problem, analysis, and their generalization to substantiate the developed pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society

and to determine the essence of the basic concepts of the study; empirical – diagnostic methods, questionnaires, interviews, observations to determine the dynamics of the formation of professional mobility of a teacher, a pedagogical experiment to verify the effectiveness of the pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society; statistical – methods of mathematical statistics to prove the reliability of the results of experimental research and processing of experimental data.

The purpose of the research work is to verify the effectiveness of the pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society.

The hypothesis of the study – the effectiveness of the formation of professional mobility of a teacher in the conditions of digitalization of society in the system of methodological work of higher education institutions will increase through the introduction of the developed pedagogical conditions into the educational process.

During the 2022-2024 academic year, a pedagogical experiment was conducted.

Respondents were divided into groups. Experimental groups actively participated in the experimental work (70 people); control groups (68 people) worked traditionally.

The pedagogical experiment took place in three stages: ascertaining, forming, and controlling.

To clarify the initial level of formation of professional mobility of a teacher in the conditions of digitalization of society, at the ascertaining stage of the pedagogical experiment, criteria with appropriate indicators were specified, and diagnostic tools were determined. The survey method (questionnaire) was used during the study.

The results of the ascertaining stage of the experiment showed an insufficient level of formation of professional mobility of a teacher in the conditions of digitalization of society. At the ascertaining stage of the pedagogical experiment, the skills of formation of professional mobility of a teacher in the conditions of digitalization of society were mostly at an average level.

This suggests that teachers are not sufficiently familiar with the practice and theory of professional mobility of an individual and it is necessary, to increase the levels of this quality, to conduct special work in preparing teachers for professional activity.

At the formative stage of the experiment, pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society were introduced in the experimental groups.

For EG teachers, to acquire programming skills, a training course “Using modern web applications in professional activity” was held.

At the control stage, the effectiveness of the implementation of pedagogical conditions, and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society was checked.

The effectiveness of the implementation of pedagogical conditions and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society is evidenced by the dynamics of the levels of professional mobility of teachers in the experimental groups. We see significant dynamics of qualitative and quantitative indicators in the EG, which was revealed by comparing the results before and after the pedagogical experiment, and the CG – a slight increase in the dynamics of the attitude of teachers to the development of innovative activity in educational institutions. We explain this by conducting special work in the EG on the preparation of a teacher for innovative activity in the conditions of digitalization of society.

Based on the analysis, it was concluded that significant changes occurred in the EG respondents, who demonstrated professional mobility skills at a high level (the increase was +34.6%).

The reliability of the obtained results was confirmed by mathematical statistics methods – the 2 criterion (chi-square).

A null hypothesis (H0) was formulated to clarify the reliability of the experimental results and that the difference in the experimental and control samples is caused by representativeness errors. We note that the alternative hypothesis (H1) that the difference in the data of the control samples and the experimental samples is due to the implementation of pedagogical conditions for the formation of professional mobility of the teacher in the conditions of digitalization of society.

The use of the Pearson χ^2 criterion to test the proposed hypotheses turned out to be appropriate because the samples of the respondent groups are independent and random, the members of each sample are also independent of each other, the properties are measured on an order scale that has the categories: low level, medium level, high level ($c = 3$).

For the number of degrees of freedom $v = c - 1 = 2$ and the significance level $\alpha = 0.01$, the critical value of the statistic $T_{kr.} = 0.020$. If the calculated value $T_{kr.} > T_{kr.}$ (according to the decision rule), then the null hypothesis H0 is rejected and the alternative H1 is accepted: the differences in the distributions of respondents of the control

and experimental groups by the levels of formation of professional mobility of the teacher in the conditions of digitalization of society and professional mobility skills with a probability of $p = 0.99$ are statistically significant. $T_{kr.} > T_{kr.} (19.697 > 0.02)$ – the obtained value of the statistic gives grounds to conclude with a probability of $p = 0.99$ that there is a significant difference between the results of the experimental and control groups.

Compared with the CG, significant positive changes were found in the EG.

This makes it possible to state the effectiveness of the work done on the formation of professional mobility of a teacher in the conditions of digitalization of society.

As a result of the study, recommendations of a scientific and methodological nature were developed for students and teachers on the formation of professional mobility of a teacher in the conditions of digitalization of society.

RESULTS AND DISCUSSION

The importance, content, and directions of the formation of professional mobility of a teacher in the conditions of digitalization of society.

The teaching profession, its versatility and importance, forms in every person an internal awareness of professional development, and endless opportunities, teaches to correlate with universal human-personal value orientations, the ability to perceive the modern world in motion, to adapt to the changing rapid conditions of the digitalization of society. For this, it is necessary to form the professional mobility of a teacher precisely in such conditions of society (Knysh et al., 2024).

Such versatility of the teaching profession, as professional mobility, determines the main dominants:

- professional and educational opportunities for a future highly qualified employee;
- requirements imposed on an educational institution by the labor market and society in terms of speed, levels of formation of professional mobility of a future highly qualified pedagogical employee, and the quality of his training.

Professional mobility is a pedagogical category, a new category that is developing quite rapidly.

Let us reveal the directions of formation of professional mobility of the teacher in the conditions of digitalization of society:

1. development in various spheres of professional work of a new set of professional knowledge, taking as a basis the situation in the labor market, which is the basis of professional mobility;

2. the emergence of integrated pedagogical professions, which include knowledge of different types of activities, which allows the teacher to master based on one profession different types of professional knowledge – new professions;
3. development of professions that have a super-specialized, general professional character.

With this approach, using the specified directions of the formation of professional mobility in higher education institutions, there is a tendency to combine specializations and specialties.

Since a component of a teacher's professional mobility is readiness for change, a modern teacher must possess the following qualities to raise the level of social prestige of pedagogical work: speed of decision-making, creative thinking, ability to adapt to new circumstances, ability to frequent learning, ability to correctly assess and monitor the state of the surrounding educational space (Diachok, 2019).

The following dimensions consider the mobility of the individual:

- pedagogical innovation – as an activity to use and create innovations in the educational process of today;
- professional – the ability to successfully and quickly master status movements in the space of the professional hierarchy, new technologies, and new equipment within the profession, to master new and related professions;
- socio-economic – the ability and willingness to adapt to changing conditions in the labor market (Herasymova, 2015).

The consideration of mobility implies human traits, certain qualities of a person, which are in the same row among mobility, flexibility, openness, dynamism, activity, adaptability, initiative, etc. Mobility is embedded in a wide range of cultural landmarks as an important value and characteristic of a modern lifestyle (Leonov, 2023).

Mobility, influencing the emotional state of the individual, is part of the daily practice of most people, social interaction. It contributes to the fulfillment of social roles, and the affirmation of identity and social activity, and can lead to social isolation and alienation.

Of great importance for the choice of people's experience in daily movements of various kinds are the emotional and sensory aspects of mobility (feelings of self-actualization, identity, and satisfaction (Florida, 2008).

Digital mobility is a key element of professional mobility.

The key element of professional mobility for a modern specialist is digital mobility, which is integrated with

professionalization and professionalism, which is associated with the qualities: of openness, activity, dynamism, and flexibility in professional activity. Important components of professional skills are competence, career growth, maturity, competitiveness, and digital mobility of the individual (Puhach et al., 2021).

Professional skills are closely related to self-realization, self-actualization, self-development, the process of personal and professional self-improvement in the formation of digital competencies, rapid mastery of new digital technologies, the ability to master digital tools, support cybernetics, organize a workplace in cyberspace (Lavrentyeva, 2022).

Digital mobility, which is a necessary element in the formation of professional mobility of a teacher in the conditions of digitalization of society, is associated with the development of network structures, and the Internet space. This creates conditions for interaction where length and distance do not affect the ability of people to interact or communicate. Digital social networks become platforms where educational and professional activities take place without the need for physical presence, virtually, which opens up innovative horizons in improving the workflow (Leonov, 2023). Modernity in the formation of professional mobility of a teacher in the conditions of digitalization of society requires him to focus on time mobility caused by digital technologies. Acceleration and saving time in professional training and the workplace are the main changes in social activity caused by new technologies (Mytnyk et al., 2024).

Global processes of learning and professional activity are accelerated by the Internet and innovative technologies, there is interpenetration, invasion, merger, and intervention of various forms of mobility in various social, cultural, societal, professional, and economic spheres of life. Digital mobility includes the integration of mobility management systems and digitalization to create optimized networks for more effective information transfer, and achievement of strategic development goals (Castells, 2010). Therefore, several projects are being initiated around the world to support digital mobility in quality social services, science, education, meaningful leisure, etc., to meet and realize the diverse needs of people. For example, the EU-funded INDIMO (INclusive DIgital MObility solutions) project supports operators, policymakers, and researchers in integrating and reviewing the user perspective in the process of deploying and developing digital mobility solutions. The project deploys a digital mobility toolkit, which is a comprehensive service that includes a universal guide, cybersecurity recommendations, universal language interface icons, and a policy assessment tool. The project aims to develop strategies for designing digital mobility. The toolkit has been applied and tested

in five pilot projects in Antwerp (Belgium), Madrid (Spain), Emilia-Romagna (Italy), Galilee (Israel), and Berlin (Germany) (European Commission, 2023).

Qualities and components that are fundamental for the formation of the development and identification of professional mobility of a teacher in the conditions of digitalization of society.

Let us consider the qualities that are fundamental for the development, formation, and identification of professional mobility:

- possession of a high level of independent acquisition of generalized professional knowledge, experience in their improvement in the conditions of digitalization of society;
- according to the analysis of the social and economic situation in the state, the transition from one type of activity to another;
- the ability to effectively use a system of generalized professional techniques to perform any tasks in the pedagogical sphere;
- readiness to implement optimal methods of performing professional tasks, their operational selection, relying on the labor market situation on advanced world trends in the formation of professional mobility of a teacher in the conditions of digitalization of society (Plakhotnik et al., 2022).

Professional mobility of a teacher in the conditions of digitalization of society allows us to highlight the following components for specifying the educational goal of training mobile teachers:

- formation of professional universal skills of activity in the conditions of digitalization of society, which ensure orientation towards innovative activity and mobility as a quality of personality;
- strengthening in the conditions of digitalization of society the managerial training of future pedagogical personnel;
- ensuring broad professional pedagogical training of specialists of pedagogical professions as a basis for the possible development of other specializations and specialties in the conditions of digitalization of society (Diachok, 2019).

The result of the formation of professional mobility of future teachers in the conditions of digitalization of society is: attracting practitioners to the teaching profession, improving the quality of training of teaching staff in the conditions of digitalization of society, increasing the indicators of emotional intelligence and intellectual development of the individual, updating the composition of teaching staff in educational institutions by improving the quality of educational innovation activities in educational

institutions, orientation on the teaching profession, improving the competitive selection of applicants (Kuchai et al., 2017).

General issues of conducting and organizing a pedagogical experiment.

The purpose of the research work is to verify the effectiveness of pedagogical conditions for the formation of professional mobility of a teacher in the conditions of the digitalization of society.

The study hypothesizes that the effectiveness of the formation of professional mobility of a teacher in the conditions of the digitalization of society in the system of methodological work of higher education institutions will increase through the introduction of the developed pedagogical conditions into the educational process.

During the 2022–2024 academic year, a pedagogical experiment was conducted.

Respondents were divided into groups:

Experimental groups actively participated in the experimental work (70 people); control groups (68 people) worked traditionally.

The pedagogical experiment took place in three stages: ascertaining, forming, and controlling.

The ascertaining stage included:

- analysis of the studied pedagogical literature;
- drawing up a program for the pedagogical experiment;
- formation of experimental and control groups;
- clarification of levels, criteria, and indicators of professional mobility of teachers;
- selection of diagnostic tools to identify levels of professional mobility of a teacher in the conditions of digitalization of society;
- theoretical substantiation of pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society.

The formative stage provided:

- experimental verification of the effectiveness of pedagogical conditions for professional mobility of teachers based on the acmeological approach in the system of methodological work of the secondary educational institution;
- development and use of scientific and methodological support for the implementation of pedagogical conditions for professional mobility of teachers based on the acmeological approach in the system of methodological work of the secondary educational institution;
- analysis of current results, control sections.

The control stage included:

- interpretation, processing, and analysis of the data obtained;
- comparison of the experimental results obtained with the predicted ones for the formation of professional mobility of a teacher in the conditions of digitalization of society;
- formulation of research conclusions;
- determination of prospects for further research on the specified problem;

To clarify the initial level of formation of professional mobility of a teacher in the conditions of digitalization of society, at the ascertaining stage of the pedagogical experiment, criteria with corresponding indicators were specified, and diagnostic tools were defined.

Let us describe the criteria with corresponding indicators:

- the motivational criterion had the following indicators: the nature of the manifestation of interest in educational innovations in professional and educational activities and the need to position one's own personal «I»);
- the cognitive criterion had the following indicators: completeness of assimilation of knowledge about the types, components, essence, and features of the formation of professional mobility of a teacher in the conditions of digitalization of society in methodological work; formation of skills of professional mobility of a teacher in the conditions of digitalization of society);
- the reflective criterion had the following indicators: formation of self-assessment based on self-analysis, development of adaptability to changes in the educational environment.

The results of the ascertaining stage of the experiment showed an insufficient level of formation of professional mobility of a teacher in the conditions of digitalization of society.

As part of the study, a study was conducted on the general state of development of professional mobility of teachers in the conditions of digitalization of society. To identify the development of criteria and indicators of professional mobility of a teacher in the conditions of digitalization of society, the following tasks were defined: to determine the levels of professional mobility of teachers and to identify the attitude of teachers to the development of innovative activity in educational institutions.

The study used the survey method (questionnaire).

We will show the nature of the identification of the attitude of teachers to the development of innovative activity in educational institutions (number of people, %) – an ascertaining cross-section.

Experimental group:

The stable nature of teachers' attitude to the development of innovative activity in educational institutions – 10.6% of respondents;

The situational nature of teachers' attitude to the development of innovative activity in educational institutions – 59.4% of respondents;

The indifferent attitude of teachers to the development of innovative activity in educational institutions – 30% of respondents.

Control group:

The stable nature of teachers' attitude to the development of innovative activity in educational institutions – 10.1% of respondents;

The situational nature of teachers' attitude to the development of innovative activity in educational institutions – 61.3% of respondents;

The indifferent attitude of teachers to the development of innovative activity in educational institutions – 28.6% of respondents.

Thus, information was obtained about the attitude of teachers to the development of innovative activities in educational institutions. As evidenced by the analysis of data from the ascertaining stage of the study, the situational nature of teachers' interest in the development of innovative activity in educational institutions equally prevails in the EG and CG.

We found out in the study what exactly prevents teachers from taking an active part and being interested in the development of educational innovations. Let us show in percentages with examples the total number of respondents who chose the following answers:

- work with papers – 100% of respondents;
- low salary – 95% of respondents;
- indifferent attitude to professionalism – 20% of respondents;
- insufficient encouragement of innovative activity by the administration – 70% of respondents;
- lack of innovative technical means in the workplace – 55% of respondents.

The most difficult thing in their work is determined by novice teachers:

- work with documentation ("paper" work) – 25% of respondents;
- peculiarities of mutual understanding with colleagues and management – 10% of respondents;
- individual work – 23% of respondents;

- creation of necessary motivational conditions – 39% of respondents;
- preparation for classes taking into account innovations – 28% of respondents;
- work with students at risk, with deviant behavior – 35% of respondents.

At the ascertaining stage of the experiment, we were interested in the level of formation of professional mobility of teachers in the conditions of digitalization of society.

Let us show the levels of formation of professional mobility skills of teachers in the conditions of digitalization of society at the ascertaining stage.

High level of formation of professional mobility skills of teachers in the conditions of digitalization of society (they clearly imagine their possibilities in the conditions of digitalization of society, and they master professional mobility skills at a creative level):

- EG – 7.5% of respondents;
- CG – 8.3% of respondents.

The average level of formation of teachers' professional mobility skills (they do not clearly imagine their possibilities in the conditions of digitalization of society, they master professional mobility skills at the reconstructive level):

- EG – 60.7% of respondents;
- CG – 62.5% of respondents.

The low level of formation of teachers' professional mobility skills (they do not imagine their possibilities in the conditions of digitalization of society, they master professional mobility skills at the reproductive level)

- EG – 31.8% of respondents;
- CG – 29.2% of respondents.

Thus, at the ascertaining stage of the pedagogical experiment, the teacher's professional mobility skills in the conditions of digitalization of society were mostly at an average level.

This suggests that teachers are not sufficiently familiar with the practice and theory of professional mobility of an individual and that, to increase the levels of this quality, it is necessary to conduct special work in preparing teachers for professional activity.

The formative stage of the experiment.

At the formative stage of the experiment, pedagogical conditions for the formation of professional mobility of a teacher in the conditions of the digitalization of society were introduced in the experimental groups:

- stimulation of teachers to develop professional mobility, which is a component of professional acme;

- ensuring professional mobile communication during the use of ICT between subjects of the educational process;
- formation of competencies of professional mobility of a teacher in the conditions of the digitalization of society to organize professional interaction of subjects of the educational process.

In the EG, scientific and methodological support for the implementation of pedagogical conditions for the formation of professional mobility of a teacher in the conditions of the digitalization of society was introduced, and an author's methodological seminar was held for students, teachers, methodologists: "Formation of professional mobility of a teacher in the conditions of the digitalization of society".

From the introduction of virtual forms in EG during the formation of professional mobility of a teacher in the conditions of digitalization of society, we expected the following results:

- the possibility of working out forms of network interaction through the creation of their own websites, and blogs between individual teachers;
- the creation of a single educational resource (educational and methodological, legal, regulatory, personnel);
- exchange of best practices via the Internet;
- the creation of network models of the use of Internet technologies and media educational technologies in various subjects in the educational process;
- through the introduction of educational innovative technologies, the creation of conditions for the development of creative potential in the personality of a teacher;
- ensuring the preparation of teachers for effective interaction with the modern information environment and the development of media culture in them.

The measures taken in EG made it possible for teachers to:

- introduce innovative techniques, develop original programs, apply innovative forms and methods of teaching and education in professional activities; mobilize the active participation of education seekers in various types of activities;
- to develop classes using innovative methods, to promote active participation in learning;
- to introduce individual elements of interactive learning, and innovative technologies;
- to influence the formation of professional mobility of teachers in the conditions of digitalization of society, to motivate them to exchange effective experience and self-improvement;

- to create innovative products of pedagogical activity in the conditions of digitalization of society and to popularize them through scientific publications.

Today, social networks are one of the most popular services that hold the attention of most of the Internet audience and are a universal means of communication. Therefore, in the EG during the experimental work, we developed the instrumental competencies of professional mobility in respondents by using social networks to increase self-esteem, find like-minded people and colleagues in the interests of the emergence of an open environment favorable for interaction, etc.

A training course «Using modern web applications in professional activities» was held for EG teachers to acquire programming skills.

Analysis of the results of the experimental study at the control stage of the pedagogical experiment.

At the control stage, the effectiveness of the implementation of pedagogical conditions, and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society was checked.

The effectiveness of the implementation of pedagogical conditions and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society is evidenced by the dynamics of the levels of professional mobility of teachers in the experimental groups.

Let us show the dynamics of qualitative and quantitative indicators, which were revealed by comparing the results before and after the pedagogical experiment in the EG and CG.

First, let us show the dynamics of the attitude of teachers to the development of innovative activity in educational institutions.

Experimental group – ascertaining stage:

The stable nature of the attitude of teachers to the development of innovative activity in educational institutions – 10.6% of respondents;

The situational nature of the attitude of teachers to the development of innovative activity in educational institutions – 59.4% of respondents;

Indifferent attitude of teachers to the development of innovative activity in educational institutions – 30% of respondents.

Experimental group – control stage:

The stable nature of the attitude of teachers to the development of innovative activity in educational institutions – 51.0% of respondents;

The situational nature of the attitude of teachers to the development of innovative activity in educational institutions – 31.2% of respondents;

The indifferent attitude of teachers to the development of innovative activity in educational institutions – 17.8% of respondents.

Control group – ascertaining stage:

The stable nature of the attitude of teachers to the development of innovative activity in educational institutions – 10.1% of respondents;

The situational nature of the attitude of teachers to the development of innovative activity in educational institutions – 61.3% of respondents;

The indifferent attitude of teachers to the development of innovative activity in educational institutions – 28.6% of respondents.

Control group control stage:

The stable nature of teachers' attitude to the development of innovative activity in educational institutions – 19.1% of respondents;

The situational nature of teachers' attitude to the development of innovative activity in educational institutions – 58.9% of respondents;

The indifferent attitude of teachers to the development of innovative activity in educational institutions – 22.0% of respondents.

We see significant dynamics of qualitative and quantitative indicators in the EG, which was revealed by comparing the results before and after the pedagogical experiment, and the CG – a slight increase in the dynamics of teachers' attitudes to the development of innovative activity in educational institutions. We explain this by conducting special work in the EG on the preparation of teachers for innovative activity in the conditions of the digitalization of society.

We will show the results of the formation of the skills of professional mobility of teachers in the conditions of the digitalization of society at the control stage of the experiment, comparing them with the ascertaining stage of the study.

Levels of formation of the teacher's professional mobility skills in the conditions of digitalization of society at the control stage of the study (%) (Figure 1).

High level of formation of the teachers' professional mobility skills at the control stage (%) – (clearly imagine their opportunities in the conditions of digitalization of society, master the skills of professional mobility at a creative level):

- EG – 42.3% of respondents;
- CG – 18.8% of respondents.

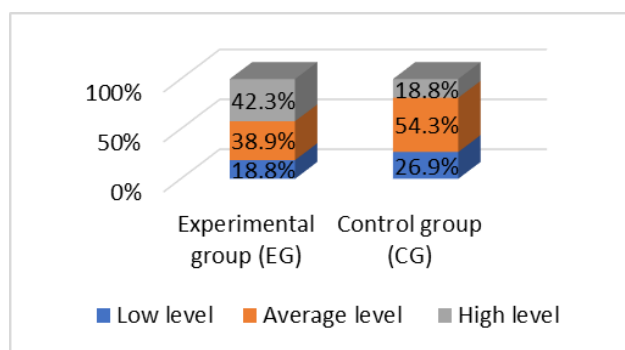
The average level of formation of the teachers' professional mobility skills (unclearly imagine their opportunities in the conditions of digitalization of society, master the skills of professional mobility at a reconstructive level):

- EG – 38.9% of respondents;
- CG – 54.3% of respondents.

Low level of formation of professional mobility skills of teachers (do not imagine their possibilities in the conditions of digitalization of society, at the reproductive level they master professional mobility skills):

- EG – 18.8% of respondents;
- CG – 26.9% of respondents.

Fig 1. Teachers' Professional Mobility Skills Levels.



Source: Own elaboration

Based on the analysis, it was concluded that significant changes occurred in EG respondents, who demonstrated professional mobility skills at a high level (the increase was +34.6%).

Such positive changes can be explained by special work in EG on preparing teachers for innovative activities in the conditions of the digitalization of society.

The reliability of the results obtained was confirmed by mathematical statistical methods – the χ^2 criterion (chi-square).

A null hypothesis (H0) was formulated to clarify the reliability of the results of the experiment and that the difference in the experimental data of the control and experimental samples is caused by representativeness errors. We note that the alternative hypothesis (H1) that the difference in the data of the obtained control samples and experimental samples is due to the introduction of pedagogical conditions for the formation of professional mobility of the teacher in the conditions of digitalization of society.

The use of the Pearson χ^2 criterion to test the proposed hypotheses turned out to be appropriate because the samples of respondent groups are independent and random, the members of each sample are also independent of each other, the properties are measured on an order scale that has the categories: low level, medium level, high level ($c = 3$).

For the number of degrees of freedom $v = c - 1 = 2$ and the significance level $\alpha = 0.01$, the critical value of the statistic $T_{kr.} = 0.020$. if the calculated value $T_{ksp.} >> T_{kr.}$ (according to the decision rule), then the null hypothesis H_0 is rejected and the alternative H_1 is accepted: the differences in the distributions of respondents in the control and experimental groups by the levels of formation of professional mobility of a teacher in the conditions of digitalization of society and professional mobility skills with a probability of $p = 0.99$ are statistically significant. $T_{exp.} >> T_{kr.}$ ($19.697 >> 0.02$) – the obtained value of the statistic gives grounds to conclude with a probability of $p = 0.99$ that there is a significant difference between the results of the experimental and control groups.

Compared with the CG, significant positive changes were found in the EG.

This makes it possible to state the effectiveness of the work done on the formation of professional mobility of a teacher in the conditions of digitalization of society.

As a result of the study, recommendations of a scientific and methodological nature were developed for students and teachers regarding the formation of professional mobility of a teacher in the conditions of the digitalization of society.

1. to develop the readiness and ability of a teacher to successfully and quickly master the latest teaching technologies in the conditions of digitalization of society, to acquire new skills and knowledge, to carry out advanced educational projects that will ensure the effectiveness of professional activity;
2. to form professional mobility of teachers in the conditions of digitalization of society to reveal their own potential in various types of pedagogical activity in the conditions of European integration of the educational space for professional self-expression, ensuring growth, and implementing modern information and communication, interactive technologies;
3. to contribute to ensuring growth. Creative personality of a teacher in the conditions of digitalization of society, capable of self-development and educational innovation, to promote the disclosure of creative and intellectual abilities, to use and select optimal forms of work, methods, and techniques for the formation of professional mobility in the conditions of digitalization of society, which will provide equal opportunities

for professional and personal development of the individual in independent life;

4. to create conditions for lifelong learning in higher education institutions in the conditions of digitalization of society.

CONCLUSION

The article proves the importance, content, and directions of the formation of professional mobility of a teacher in the conditions of digitalization of society. Digital mobility is considered a key element of professional mobility. The qualities and components that are fundamental for the formation of the development and identification of professional mobility of a teacher in the conditions of digitalization of society are highlighted.

The purpose of the research work was to verify the effectiveness of the pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society.

The study hypothesizes that the effectiveness of the formation of professional mobility of a teacher in the conditions of digitalization of society in the system of methodological work of higher education institutions will increase through the introduction of the developed pedagogical conditions into the educational process.

During the 2022–2024 academic year, a pedagogical experiment was conducted.

Respondents were divided into groups. Experimental groups took an active part in the experimental work (70 people); control groups (68 people) worked traditionally.

The pedagogical experiment took place in three stages: ascertaining, formative, and control.

To clarify the initial level of formation of professional mobility of a teacher in the conditions of digitalization of society, at the ascertaining stage of the pedagogical experiment, criteria with corresponding indicators were specified, and diagnostic tools were defined. During the study, the survey method (questionnaire) was used.

The results of the ascertaining stage of the experiment showed an insufficient level of formation of professional mobility of a teacher in the conditions of digitalization of society. At the ascertaining stage of the pedagogical experiment, the skills of formation of professional mobility of a teacher in the conditions of digitalization of society were mostly at an average level.

This suggests that teachers are not sufficiently familiar with the practice and theory of professional mobility of an individual and it is necessary, to increase the levels of such quality, to conduct special work in preparing teachers for professional activity.

At the formative stage of the experiment, pedagogical conditions for the formation of professional mobility of a teacher in the conditions of digitalization of society were introduced in the experimental groups:

For teachers of the EG, to acquire programming skills, a training course "Using modern web applications in professional activities" was conducted.

At the control stage, the effectiveness of the implementation of pedagogical conditions, and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society was checked.

The effectiveness of the implementation of pedagogical conditions and the role of training and seminars for the formation of professional mobility of a teacher in the conditions of digitalization of society is evidenced by the dynamics of the levels of professional mobility of teachers of the experimental groups. We see significant dynamics of qualitative and quantitative indicators in the EG, which was revealed by comparing the results before and after the pedagogical experiment, and in the CG – a slight increase in the dynamics of the attitude of teachers to the development of innovative activity in educational institutions. We explain this by conducting special work in the EG on preparing teachers for innovative activities in the conditions of the digitalization of society.

Based on the analysis, it was concluded that significant changes occurred in the EG respondents, who demonstrated professional mobility skills at a high level (the increase was +34.6%).

The reliability of the results obtained was confirmed by mathematical statistical methods – the χ^2 criterion (chi-square).

A null hypothesis (H_0) was formulated to clarify the reliability of the experimental results and that the difference in the experimental and control samples is caused by representativeness errors. We note that the alternative hypothesis (H_1) that the difference in the data of the control samples and experimental samples is due to the implementation of pedagogical conditions for the formation of professional mobility of the teacher in the conditions of digitalization of society.

The use of the Pearson χ^2 criterion to test the proposed hypotheses turned out to be appropriate because the samples of the respondent groups are independent and random, the members of each sample are also independent of each other, the properties are measured on an ordered scale with categories: low level, medium level, high level ($c = 3$).

For the number of degrees of freedom $v = c - 1 = 2$ and the significance level $\alpha = 0.01$, the critical value of the statistic $T_{cr.} = 0.020$. if the calculated value $T_{exp.} > T_{cr.}$ (according to the decision rule), then the null hypothesis H_0 is rejected and the alternative H_1 is accepted: the differences in the distributions of respondents in the control and experimental groups by the levels of formation of professional mobility of a teacher in the conditions of digitalization of society and professional mobility skills with a probability of $p = 0.99$ are statistically significant. $T_{exp.} > T_{cr.}$ ($19.697 > 0.02$) – the obtained value of the statistic gives grounds to conclude with a probability of $p = 0.99$ that there is a significant difference between the results of the experimental and control groups.

Compared with the CG, significant positive changes were found in the EG.

This makes it possible to state the effectiveness of the work done on the formation of professional mobility of a teacher in the conditions of digitalization of society.

As a result of the study, recommendations of a scientific and methodological nature were developed for students, and teachers on the formation of professional mobility of a teacher in the conditions of digitalization of society.

The issues of forming professional mobility of teachers in the system of methodological work require further study and research.

REFERENCES

- Castells, M. (2010). *The rise of the network society. The information age. Economy, society, and culture*. The Wiley-Blackwell. <https://doi.org/10.1002/9781444319514>
- Diachok, N. V. (2019). The pedagogue's mobility as the way of realization conditions of the new pedagogical concept of education. *Educational Discourse*, 1-2(24-25), 128-140. <https://od.kubg.edu.ua/index.php/journal/article/view/553>
- Dobryden, A. V., & Brytskyi, O. V. (2024). Professional Mobility of Teachers in the Context of Educational Tasks of a Modern School. *Pedagogical Academy: Scientific Notes*, (11). <https://doi.org/10.5281/zenodo.14153913>
- Dychkovskiy, S.I. (2020). Discourses of tourist mobility in the context of socio-cultural processes. *Ukrainian Culture: Past, Present, Development Paths*, 34(34), 251-260. http://nbuv.gov.ua/UJRN/ukrkm_2020_34_42
- European Commission. (2023). *Inclusive digital mobility solutions*. <https://cordis.europa.eu/project/id/875533>
- Florida, R. (2008). *Who's your city?: How the creative economy is making where to live the most important decision of your life*. Basic Books. <https://doi.org/10.1111/j.1467-9787.2010.00668.15.x>

- Herasymova, I. H. (2015). *Formation of professional mobility of future specialists in the agricultural sector: monograph*. Vinnytsia: PP "TD "Edelweiss and K". <http://repository.vsau.org/getfile.php/15841.pdf>
- Horbachova, I. I. (2017). Professional mobility of a teacher in a changing educational environment. *Theory and methods of teaching and upbringing*, (43), 59–68. http://nbuv.gov.ua/UJRN/znpkhnpu_ttm-niv_2017_43_8
- Kakihara, M., & Sørensen, C. (2001). Expanding the «mobility» concept. *ACM SIGGROUP Bulletin*, 22(3), 33–37. <https://doi.org/10.1145/567352.567358>
- Knysh, I., Drobin, A., Filimonova, T., Koycheva, T., Kushnir, A., & Kuchai, O. (2024). The use of information technologies in the educational space of Ukraine (on the example of STEAM technologies). *Revista Conrado*, 20(100), 437–448. <https://conrado.ucf.edu.cu/index.php/conrado/article/view/3979>
- Kuchai, T. Kuchai, O., & Pyrzyk, I. (2017). Studying the peculiarities of education development in Japan (in terms of primary education). *Science and Education*, 25(5), 34–40. <https://doi.org/10.24195/2414-4665-2017-5-7>
- Lavrentyeva, O. O. (2022). Formation of professional digital competence of students of engineering and pedagogical specialties of agro-industrial profile in the conditions of innovative development of a higher education institution. *Scientific Notes of the Volodymyr Hnatyuk Ternopil National Pedagogical University. Series: Pedagogy*, 1(2), 6–14. <https://doi.org/10.25128/2415-3605.22.2.1>
- Leonov, M. A. (2023). Digital mobility of the future specialist: Current trends. *Alfred Nobel University Journal of Pedagogy and Psychology*, 2(26), 179–189. <https://doi.org/10.32342/2522-4115-2023-2-26-18>
- Mytnyk, A., Uninets, I., Ivashkevych, E., Rashkovska, I., Ivashkevych, E., & Kuchai, O. (2024). Formation of professional competence in future psychologists using innovative technologies. *Revista Conrado*, 20(100), 293–304. <https://conrado.ucf.edu.cu/index.php/conrado/article/view/3963>
- Plakhotnik, O., Strazhnikova, I., Yehorova, I., Semchuk, S., Tymchenko, A., Logvinova, Ya., & Kuchai, O. (2022). The Importance of Multimedia for Professional Training of Future Specialists. *International Journal of Computer Science and Network Security*, 22(9), 43–50. <https://doi.org/10.22937/IJCSNS.2022.22.9.7>
- Puhach, S., Avramenko, K., Michalchenko, N., Chychuk, A., Kuchai, O., & Demchenko, I. (2021). Formation of Specialists' Legal Competence in the System of Life Long Education. *Revista Romaneasca Pentru Educatie Multidimensionala*, 13(4), 91–112. <https://doi.org/10.18662/rrem/13.4/472>