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SELF-DEVELOPMENT OF A HIGHER SCHOOL TEACHER IN THE CONDITIONS OF CONTINUING EDUCATION USING DIGITAL TECHNOLOGIES AND CRITICAL ANALYSIS

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The article analyzes the self-development of a higher education teacher in the context of lifelong learning using digital technologies, substantiates legislative documents and scientific works in a certain direction. The essence of continuing education and the features of self-development of a higher education teacher (professional and subject development, psychological and pedagogical development, professional competence, research activity, social and communicative development, personal development, and ways to improve professional competence in the context of continuing education) are considered. It is proven that self-development involves an active position of a higher education teacher, which includes the search for new knowledge, practical application, and the ability to reflect.

For self-development, a teacher can use a wide range of digital education resources: online courses and platforms (MOOCs): Coursera, EdEra, Prometheus, Udemy, etc.; electronic libraries and scientific databases: Scopus, Web of Science, Google Scholar. Thus, the digitalization of education is a holistic change in the paradigm of education, which requires the teacher to constantly update knowledge, skills and abilities. It is confirmed that despite significant advantages, the digitalization of education also creates certain challenges for higher education teachers. Ways to overcome these difficulties are identified: planning, time management, microlearning; setting personal goals, participating in grants, conferences, competitions; drawing up an individual self-education program, using open educational platforms; short IT courses, training, mutual learning with colleagues; gradual integration of innovations, combining methods ("blended learning"); delegation of part of the tasks.

Thus, the digitalization of education is a powerful catalyst for the self-development of a higher education teacher. It not only provides new tools and resources, but also requires a change in professional, in particular critical thinking, constant learning and adaptation to new realities, which ultimately contributes to improving the quality of education and the professional growth of the teacher. The results of a study among higher education teachers are presented, which indicates the need for

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constant work in a certain direction. Thus, the self-development of a higher education teacher involves not only a deep awareness by the teacher of the need for constant professional and personal growth, but also continuous self-education in the conditions of digitalization of education.

Keywords: self-development of a higher education teacher, continuing education, digitalization of education, digital technologies, critical thinking, professional competence.

САМОРОЗВИТОК ВИКЛАДАЧА ВИЩОЇ ШКОЛИ В УМОВАХ НЕПЕРЕРВНОЇ ОСВІТИ ЗАСОБАМИ ЦИФРОВИХ ТЕХНОЛОГІЙ ТА КРИТИЧНОГО АНАЛІЗУ

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У статті проаналізовано саморозвиток викладача вищої школи в умовах ціложиттєвого навчання засобами цифрових технологій, обґрунтовано законодавчі документи та наукові праці у визначеному напрямі. Розглянуто сутність неперервної освіти та особливості саморозвитку викладача вищої школи (професійно-предметний розвиток, психолого-педагогічний розвиток, професійну компетентність, дослідницьку діяльність соціально-комунікативний розвиток, особистісний розвиток, та шляхи підвищення професійної компетентності у контексті неперервного освіти. Доведено, що саморозвиток передбачає активну позицію викладача вищої школи, що включає пошук нових знань, їх практичне застосування, здатність до рефлексії. Для саморозвитку викладач може використовувати широкий спектр ресурсів цифрової освіти: онлайн-курси та платформи (MOOCs): Coursera, EdEra, Prometheus, Udemy тощо; електронні бібліотеки та наукові бази даних: Scopus, Web of Science, Google Scholar. Отже, цифровізація освіти – це цілісна зміна парадигми освіти, яка вимагає від викладача постійного оновлення знань, умінь та навичок. Підтверджено, що незважаючи на значні переваги, цифровізація освіти для педагогів вищої школи також створюються певні виклики. Визначено шляхи подолання цих труднощів: планування, тайм-менеджмент, мікронавчання; постановка особистих цілей, участь у грантах, конференціях, конкурсах; складання індивідуальної програми самоосвіти, використання відкритих освітніх платформ; короткі ІТ-курси, навчальні тренінги, взаємовивчення з колегами; поступова інтеграція інновацій, комбінування методів ("blended learning"; делегування частини завдань). Відтак, цифровізація освіти є потужним катализатором саморозвитку педагога вищої школи. Вона не тільки надає нові інструменти та ресурси, але й вимагає зміни професійного, зокрема критичного мислення, постійного навчання та адаптації до нових реалій, що в кінцевому підсумку сприяє підвищенню якості освіти та професійному зростанню викладача. Представлено результати дослідження серед викладачів вищої школи, що свідчить про необхідність постійної роботи у визначеному напрямі. Таким чином, саморозвиток викладача вищої школи передбачає не тільки глибоке усвідомлення педагогом потреби в постійному професійному й особистісному зростанні, але й неперервної самоосвіти в умовах цифровізації освіти.

Ключові слова: саморозвиток викладача вищої школи, неперервна освіта, цифровізація освіти, цифрові технології, критичне мислення, професійна компетентність.

Introduction of the issue.

Continuous self-development of a higher education teacher in the context of digitalization of education is one of the current problems of world and Ukrainian pedagogical science. The relevance of the study is due to modern challenges, changes occurring in the social, economic, information and technical sectors of modern society, the need to prepare the next generation for life in a highly automated information environment, which is emphasized in

regulatory and legislative documents, in particular the Law of Ukraine "On Education" (2017). This law is fundamental and establishes the principle of "lifelong learning" as one of the key ones. It defines the concepts of formal, non-formal and informal education, which is the basis of continuous education.

The Concept of Education Development in Ukraine until 2027 and other strategic documents consider continuous education as a strategic priority for the

development of human capital and adaptation to the challenges of a globalized world. Researchers are actively studying how technological changes affect the professional activities of a teacher, his competences and the need for constant self-development. The Concept and Strategy for Digitalization of Education in Ukraine have been developed and are also reflected in the Law of Ukraine "On Education" (2017) and other by-laws that enshrine the principles of digitalization, development of digital competencies and continuing education. They are a methodological basis for understanding the role of teacher self-development. The Concept for the Development of Digital Education, national strategies define priorities and directions for the development of digital skills of all participants in the educational process, including teachers.

Current state of the issue. Ukrainian researchers are actively studying the role of continuing education in modern society, its impact on the development of the individual and a professional. In the context of modern challenges, the priority area "Information and Communication Technologies" is being updated. The report of the President of the National Academy of Pedagogical Sciences of Ukraine V.G. Kremen (2024) outlined the main results of the scientific, scientific and technical (experimental), scientific and organizational, expert and educational activities of the National Academy of Pedagogical Sciences of Ukraine in 2023. It was noted that the activities of the academy were carried out in the conditions of a full-scale war unleashed by the Russian Federation and were aimed at systematic scientific and methodological support of education, the implementation of the priorities of the state educational and scientific policy, increasing the scientific potential in the field of education, pedagogy and psychology, strengthening its influence on the modernization of all links of national education in order to bring victory in the war closer, implement the post-war restoration of the country, and its European integration. Scientists of the

National Academy of Sciences of Ukraine are developing a methodology for using information and digital technologies to assess the effectiveness of pedagogical research (Institute for Digitalization of Education), which are being implemented in the activities of other institutions of the Academy and higher education institutions.

It is worth paying attention to the works of the following scientists: Academician I. Ziaziun laid the foundations of understanding continuing education in the context of pedagogical skills; V. Kremen substantiates the fundamental aspects of the development of education in Ukraine, including the role of continuity [4]; L. Luk'yanova, O. Anishchenko, O. Ohienko investigate the features of continuing education in Ukraine and abroad [5; 6]; O. Dubasenik, O. Samoilenko develop the foundations of andragogy (for specialists in the field of adult education) [3]; P. Luzan investigates the development of vocational education, which is an important component of continuing education; L. Vasylenko studies the problems of postgraduate education, advanced training of teachers, the formation of their professional competencies in the context of continuing education; O. Didenko considers the issues of managing the quality of adult education, the development of competencies in the system of continuing education. A. Vasilyuk, A. Stohovskyi investigate the phenomenon of adult education in the perspective of changes: innovations, technologies, forecasts: collective monograph At the same time, theoretical analysis of scientific works and the current state of higher education indicate the presence of contradictions between the level of information and digital education of education seekers and the needs of Ukrainian society at the current stage of its development; the requirements that are set for modern education for the implementation of information and communication technologies in the learning process, and their insufficient use in modern higher education institutions; the level of

possession of information and communication competence of education seekers and regulatory documents regarding their formation.

The role of self-development of a higher school teacher in the context of digitalization of education is one of the most relevant topics in Ukrainian pedagogical science. Domestic scientists are actively researching the impact of digitalization on the self-development of a teacher.

Thus, V. Bykov's scientific research focuses primarily on the informatization of education and the development of distance learning. His works are distinguished by deep analysis and proposals for practical solutions for the integration of modern information and communication technologies (ICT) into the educational process. L. Petrenko actively researches the professional digital competence of a teacher, the development of digital educational ecosystems. Her work concerns the preparation of future teachers for the development of digital educational ecosystems [8]. H. Henseruk, I. Hrebenyk also research digital competence as one of the professionally significant competencies. The Ivan Ziaziun Institute of Postgraduate and Adult Education of the National Academy of Sciences of Ukraine conducts systematic research in the field of postgraduate education and adult education, including aspects of the role of continuity and digitalization and their impact on the self-development of teachers [5; 6].

Aim of the research is to analyze the features of self-development of a higher education teacher in the context of lifelong learning using digital technologies.

Results and discussion. Continuing education for a higher education teacher is a constant, systematic process of updating, deepening and expanding knowledge, skills and abilities, covering both formal and informal learning. It goes beyond one-time advanced training courses and becomes an integrated part of everyday professional activity. Let's analyze the key role of continuing

education in the self-development of a teacher. Lifelong learning involves: adaptation to change, dynamism of knowledge, considering that science and technology are developing at an incredible speed. Continuing education allows a teacher to be up to date with the latest research, theories and practices in the relevant field, which is critically important for modern educational courses. At the same time, the educational environment is being transformed, which involves the introduction of digital technologies, new pedagogical approaches and the globalization of education, requiring the teacher to constantly adapt and develop new competencies.

Self-development covers various aspects of a teacher's professional and personal activity: professional and subject development (deepening knowledge in their field, studying related disciplines, getting acquainted with the latest scientific research and developments) [2; 11], methodological development (mastering innovative pedagogical technologies, interactive teaching methods, digital tools, developing their own educational materials); psychological and pedagogical development (mastering pedagogical communication skills, conflict management, understanding the age and psychological characteristics of students, forming their motivation for learning) [1; 9]; digital competencies (improving skills in working with electronic educational platforms, multimedia tools, tools for creating and processing digital content, cybersecurity); research activities (involvement in scientific projects, writing articles, participation in conferences, which contributes to the renewal of knowledge and the development of analytical abilities; social and communicative development (development of teamwork skills, networking, effective communication with students, colleagues, administration and external partners); personal development (in particular, the development of leadership qualities, creativity, emotional intelligence, stress resistance, the ability to self-reflect and critical thinking), as

well as the development of activity and initiative [9; 12].

There are different means and ways of improving professional competence, for example, through continuous learning, which allows the teacher to update the content of their lectures, seminars, practical classes, integrating the latest research and real cases, which makes learning more interesting and useful for students [11]. Mastering innovative methods and digital technologies involves the constant study and implementation of new interactive, problem-oriented, project-based, distance and blended learning methods that make the pedagogical process more effective and exciting. The development of digital skills considers that continuous education contributes to the mastery of new software products, online learning platforms, and tools for creating multimedia content, which is necessary in the context of digitalization of education.

Competitiveness and career growth are supported: in the modern academic world, the requirements for teachers are constantly increasing since continuing education allows a teacher to remain competitive in the labor market, meet qualification requirements, and also opens new opportunities for career growth (obtaining academic titles, participating in international projects, grants).

An important role is played by stimulating research activities: constant replenishment of knowledge through continuing education is a source of new ideas for scientific research. A teacher who is involved in research activities can share this experience with students, involving them in scientific work [2; 10; 12]. Personal growth: continuing education is not limited only to professional skills. It contributes to the development of critical thinking, creativity, self-reflection, adaptability, which are important personal qualities for any professional.

Continuous development supports a high level of motivation and satisfaction from professional activity, prevents professional burnout. All this affects the quality of training of education seekers: a

teacher who is constantly learning is an example for students. He transmits not only knowledge, but also the values of continuous learning, forming in future specialists an understanding of the need for continuous improvement throughout life. This is especially relevant for the pedagogical sphere, where future teachers themselves must be role models for their students. Known forms of continuous education: formal education: master's and postgraduate programs (second higher education), advanced training courses, retraining, internships; informal education: participation in conferences, seminars, webinars, trainings, master classes, online courses (MOOCs); informal education: independent study of literature (scientific, methodological), watching educational videos, podcasts, communication with colleagues, mentoring, participation in professional communities.

Therefore, continuing education is an integral part of the self-development of a higher education teacher. It allows a teacher not only to meet the requirements of the time, but also to be a leader of change, an innovator, a mentor and a source of inspiration for his students, ensuring a high quality of the educational process aimed at training competitive specialists. Accordingly, the *self-development* of a higher education teacher is a *continuous, purposeful process* of improving professional, personal and social qualities, which ensures their competitiveness, efficiency and compliance with modern requirements of the educational environment. This is an active, conscious activity of a teacher aimed at expanding his own capabilities and achieving new acme peaks in the profession.

Thus, self-development involves an *active position of a higher education teacher*, which includes the search for new *knowledge* (search for sources of information, participation in webinars, trainings, seminars, conferences), *practical application* (implementation of new knowledge and skills in one's own pedagogical practice, experimentation with methods), *the ability to reflect*

(constant analysis of one's own activities, identification of strengths and areas for improvement, correction of the self-development plan, use of various resources).

For self-development, a teacher can use a wide range of resources, including digital technologies:

- *Online courses and platforms (MOOCs):* Coursera, EdEra, Prometheus, Udemy, etc.;

- *Electronic libraries and scientific databases:* Scopus, Web of Science, Google Scholar;

- *Professional publications and periodicals:* scientific journals, methodological manuals;

- *Professional communities:* participation in forums, groups on social networks, exchange of experience with colleagues;

- *Mentoring and coaching:* communication with experienced colleagues, receiving feedback;

- *Self-education:* reading professional literature, watching educational videos, listening to podcasts;

Therefore, the digitalization of education plays a key role in the self-development of a higher education teacher, transforming his professional activity and expanding opportunities for continuous learning. Such an approach can be considered as a holistic change in the educational paradigm, which requires the teacher to constantly update his knowledge, skills and abilities.

Challenges and issues. Despite significant benefits, the digitalization of education also poses certain challenges for higher education educators.

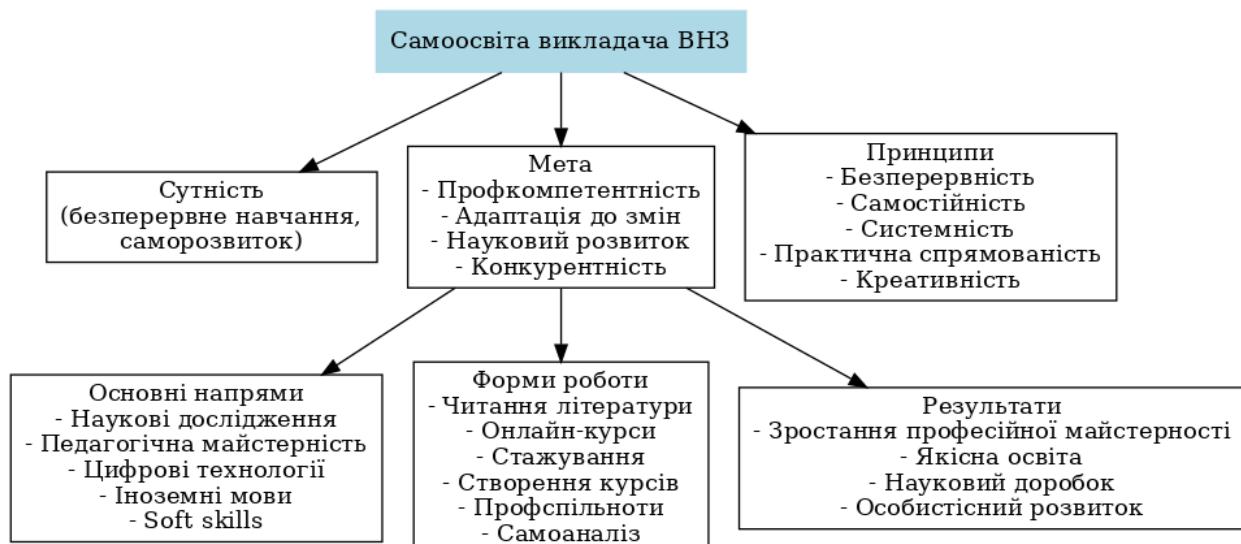
- *Increasing workload:* the need to master new tools and create digital content can increase the workload;

- *Speed of change:* technologies are developing extremely quickly, which requires constant updating of knowledge and skills;

- *Lack of proper support:* teachers do not always receive sufficient methodological and technical support for the effective implementation of digital technologies;

- *Preservation of the human factor:* it is important to prevent the loss of personal communication and an individual approach to the student in conditions of complete digitalization.

Ways to overcome these difficulties have been identified: planning, time management, microlearning (short online courses, podcasts); setting personal goals, participating in grants, conferences, competitions; drawing up an individual self-education program, keeping an educational diary; using open educational platforms (Coursera, EdX, Prometheus), electronic libraries; short IT courses, training courses, mutual learning with colleagues; gradual integration of innovations, combining methods ("blended learning"; delegating part of tasks, setting priorities; initiating the creation of internal professional development programs, participating in communities; personal development trainings, mentoring, coaching. Thus, the digitalization of education is a powerful catalyst for the self-development of a higher education teacher. It not only provides new tools and resources, but also requires a change in professional thinking, constant learning and adaptation to new realities, which ultimately contributes to improving the quality of education and the professional growth of the teacher.

**Fig. 1. Self-development of a higher education teacher**

The results of self-development of a higher education teacher can be represented by the following components: improving the quality of teaching (updating the content, using modern methods, individualizing learning); professional growth, acquiring professional competence (the opportunity to occupy higher positions, participate in international projects, gain recognition in the professional community); personal realization (satisfaction with professional activities, development of potential, increased self-esteem); formation of a "teacher of the future": (preparation for the challenges and opportunities of the digital society, the ability to adapt to modern changes).

The self-development of a higher education teacher has a significant, multifaceted impact on the development of education seekers, especially in the pedagogical sphere. This occurs not only through the transfer of relevant knowledge, but also through the formation of certain values, motivation and professional competencies in education seekers. In the process of studying the features of the self-development of a higher education teacher, we analyzed the problem of digitalization of education and the formation of professional competence, in particular information and communication competence of education seekers in higher education institutions. Based on the analysis of scientific and

pedagogical literature, the terminological apparatus of the study was clarified and formulated: "self-development of a higher education teacher", "continuing education", "digitalization", "digitalization of education", "digital technologies", "professional competence", "information and communication competence".

In the process of research, based on the analysis of scientific and methodological literature and expert assessment, pedagogical conditions for the formation of professional competence and mastery of ICT by students were determined, which were subject to assessment, qualitative and quantitative processing. It was found that among the outlined conditions, a major role is played by the teacher's motivation for self-development; the creation of an educational and developmental environment; the availability of material and technical and personnel support; mastery of digital technologies, the formation of cognitive interest in the problem of digitalization of education, information and communication activities among students.

The research was carried out in the process of studying such academic disciplines as "Methodology of pedagogical research and academic integrity in the educational sector", "Adult learning technology", "Fundamentals of pedagogical creativity", "Current problems of professional education", etc. At the same time, software and digital

devices are being updated and improved, and teaching methods are changing with the involvement of web services and resources. The latter confirms the importance of such a pedagogical condition as the formation of a positive attitude towards the problem of digitalization of education and information and communication competence of education seekers, their direction towards continuous self-development.

To diagnose the level of self-development and self-education of teachers, a scale was proposed that included the levels of self-development of higher education teachers: high, sufficient, basic. The results were processed on a 100-point scale.

The results obtained made it possible to distinguish three levels of teachers' ability for self-development and self-education:

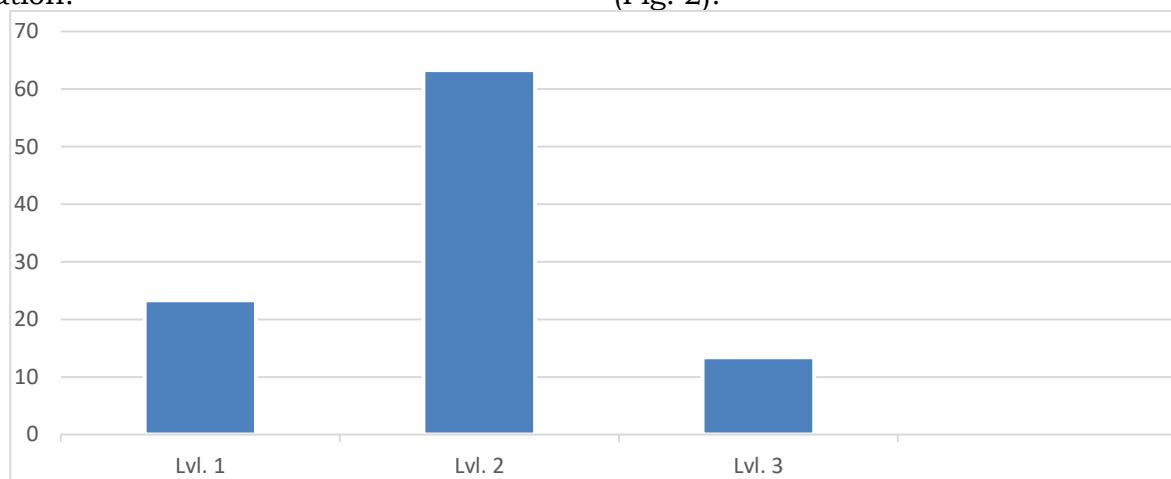


Fig. 2. Level of self-development of a higher education teacher

Thus, there are certain problems regarding the further self-development of higher education teachers. The main pedagogical condition for the formation of interest in self-development and the desire to acquire professional and information-communication competence is the cognitive interest of education seekers. The experiment demonstrates the effectiveness of the implementation of digital technologies of self-development with an orientation towards the formation of professional competence of education seekers. The reliability of the conclusions was confirmed by the methods of

mathematical statistics. You can add the results of your research.

Teachers who strive for self-development and self-education are motivated to constantly update their knowledge, plan time for their own self-development, for the implementation of new ideas. They continue to develop despite difficulties and obstacles. They study a lot of scientific and methodological literature, strive to learn new things, actively carry out scientific and research activities, involving students in it, improve their activities, and strive to discuss issues that interest

them. Believe in their abilities, actively carry out scientific and research activities, involving students in them, reflect, allocating time for this. Analyze their feelings and experiences, believe in their abilities, realize the influence that the environment has on them. Teachers manage, direct their professional development and receive positive results and satisfaction from mastering new things. They have a positive attitude towards their professional improvement of the level of professional competence.

It is also important to analyze the features of the development of critical thinking and analytical abilities of the teacher's personality. These include: diversity of views (the teacher's self-development allows him to present students with different points of view on pedagogical problems, analyze them from different aspects, which contributes to the development of critical thinking); involvement in discussions: (the teacher's awareness of the latest research and theories allows him to organize deep, meaningful discussions that stimulate students to independently search for the truth and justify their own views); formation of soft skills (flexible skills); communication and cooperation (using team projects, group tasks in his practice, which contributes to the development of cooperation skills and effective communication in students). The essence of problem-based learning is that a teacher, who is constantly looking for new approaches, teaches students to independently solve problems, formulate hypotheses and look for non-standard

ways to solve them, which is the basis for the professional growth of education seekers.

Conclusions and research

perspectives. Thus, the self-development of a higher education teacher begins with a deep awareness by the teacher of the need for constant professional and personal growth. This is due to such factors as the dynamism of the educational environment, which involves the rapid development of technologies, changing requirements for specialists, the emergence of new teaching methods that require constant updating of knowledge and skills. Personal growth is characterized by the desire for professional excellence, the realization of one's potential and increasing personal effectiveness.

At the same time, the teacher is aware of responsibility to students, the desire to provide high-quality and relevant education, to train competitive specialists. That is why self-development involves systematicity and planning, which requires defining goals (short-term and long-term, in particular, mastering a new methodology, learning a foreign language, writing a scientific article). In addition, it is necessary to develop an individual trajectory of self-development / individual plan, that is, to create a personal development program that includes specific actions, deadlines, resources and assessment criteria. The process of self-education should be continuous, multi-vector, and comprehensive.

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