INTRODUCTION
Quality lifelong learning, starting with student life, should focus not only on the teacher’s pedagogical skills, but also on the tools available in the learning process, on the way students think and behave. Meeting these conditions requires new methods and forms of implementation of such training. In the age of digital technology, a huge amount of knowledge has become available. This requires structural changes in the ways in which knowledge is shared, which is crucial for lifelong learning. During lifelong learning, knowledge must be passed on to students at the right time, without distractions. Traditional educational proposals for conducting classes in classrooms proved to be ineffective, as the acquisition of competencies in the process of lifelong learning is nonlinear.

One of the most important elements of personality development lies outside of formal research. The period of education in an educational institution is short, compared to the time spent outside it. For most adults, high school is left behind due to the change of orientation classroom paradigms to production ones. Depending on the job chosen, a person who has completed compulsory education, a bachelor’s degree, or even a postgraduate degree, is faced with the question of the ability to learn to adapt to different environments. In this context, self-education can be a solution to the problem. Self-education is a process by which a person acquires information, skills and new abilities outside the institutionalized education system.

Lifelong learning requires resilience to maximize human potential to meet future needs. The development of lifelong learning is popularized through interdisciplinary discourse and research, which has led to the need to update its content (it has become interactive, universal and embedded in rich social contexts). Ways to involve students in lifelong learning should be spelled out in government programs, with the necessary government funding, promotion of programs, or something, but this issue remains in the paradigm of fleeting attention of government educational institutions. The global trend of involving students in lifelong learning really requires effective ways to implement it. The study will attempt to analyze the system of such methods based on student experience.

LITERATURE REVIEW
Issues related to the implementation of the idea of ensuring readiness for lifelong learning are widely discussed at various levels; they are devoted to many publications, both theoretical and practical. According to Sarıgöz (2019), lifelong learning is a supportive process that strengthens the knowledge and skills acquired by individuals and helps to use these abilities in real life. One of the main factors of education is motivation. The level of literacy of each person must be constantly evolving. Student-centered education should become a habit through a variety of educational trainings.
The European Commission defines lifelong learning as a purposeful lifelong learning activity aimed at improving knowledge, skills and competences in a personal, civic, social and/or employment-related perspective. As a rule, training is classified into three types: formal, non-formal and informal training (FLORIN, HEDLUND, & ÅKERBLOM, 2020). The concepts of formal, non-formal and informal learning demonstrate not only the vertical dimension of learning (as a general concept of lifelong learning), but also its horizontal dimension (content of this learning) (ADAMSON, 2020).

Wijnen-Meijer (2020), discussing the content and competencies of lifelong learning, mainly focuses on the fact that a person needs to learn to be able to work immediately after graduation. Nevertheless, in fact, you should also think about what graduates need after graduation with the prospect of the next 10 years. As the social environment is constantly changing, students need to become adaptive experts who are able to effectively perform routine tasks, at the same time find solutions to new problems, and adapt their way of working to new circumstances. Lifelong learning is self-regulating, as it is a process in which different phase’s cycle together. Among them are the phase of productivity, the phase of self-reflection and the phase of thoughtfulness.

Lifelong learning theory is a variant of ethics between social actors or individuals who practice such learning (BLUNDELL, 2020; SAWANG, 2020). The elements necessary for self-education should be conceptualized, organized, implemented and maintained (ENGLISH & MAYO, 2021) for not only a short period and limited to a minimum number of goals, but also implemented as a long-term process (OPREA, 2021).

Unseld (2021) points out that higher education in 2020 underwent adaptive changes due to the COVID-19 pandemic, which consisted of nationwide experiments in standard online learning as well as in lifelong learning. Instead of meeting the classroom requirements of the education program, students have the opportunity to extend their studies for years, based on what meets their current needs (confirmation of this way of acquiring knowledge are certification programs for one-time online class, training sessions, etc.).

The research by Bjursell, Bergmo-Prvulovic, and Hedegaard (2021) indicates an increase for work during a pandemic, which affects participation in lifelong learning (Atchoarena and Howells, 2021). There is a risk of growing social inequality, as neither distance work nor lifelong learning are evenly distributed among students. Scientific research on distance work and lifelong learning should operate with methods of acquiring knowledge for each new environment of the recipient (office, home, online meetings and virtual reality).

Lifelong learning is one of the types of learning that contributes to the reengineering of society through the constant dissemination of knowledge, information, know-how and “rearmament” of citizens in order to invest their resources in their relevant environment (BAIO, 2021).

The research by Mariano, Hammonds, & Spear (2021) states that lifelong learning includes additional methods of analyzing the development of critical thinking skills and metacognition in students. Students who participate in the process of assessing their abilities operate with critical thinking, metacognition, mutual teaching and teaching evaluation.

The introduction of a lifelong learning approach into the curriculum provides students with the means by which they can navigate life’s difficulties (Adamson, 2020). Lifelong learning is an integral and separate component of high school culture (STARICOFF, 2020).

The development of a lifelong learning system in higher education creates a constructivist learning environment with its own creative approach to learning (VOLOSHINA, KOTLYAROVA, 2017), as it can offer solutions to many social and educational problems (emigration flows of young people, better employment and self-realization of young people) (GEDVILIENE, & VAIČIUNIENE, 2016). Lifelong learning policies are subject to different approaches to education management. Particular attention needs to be paid to clarifying the content of the following categories:

- economic difficulties (employment, flexicurity, financing and mobility);
• the process of monitoring the acquired knowledge in continuing education (examination, comparison, transposition, supervision and control) (RUSITORU, KALLIONIEMI & TAYSUM, 2020).

Lifelong learning practices promote andragogy, self-directed learning, experimental learning, multiple intelligence, and transformational learning. A comprehensive interpretation of learning actualizes the interest in strengthening the social order (FLEMING, 2016). Thus, despite the outlined problems on the research topic (content and competences of lifelong learning, adaptive changes through a pandemic, additional methods of analyzing the development of critical thinking skills and metacognition), there is a need to continue research to find effective forms and methods of lifelong learning.

AIMS
The purpose of the study is to find out the formal and methodological system of ways to involve students in lifelong learning and provide recommendations for their implementation.

Research tasks:

• to conduct a sociological survey among students in order to identify a list of forms and methods of implementing the concept of lifelong learning;

• to single out effective forms and methods of realization of the concept of lifelong learning in higher school on the basis of sociological research;

• to offer a model of approximate components of the methodological basis for the implementation of the concept of lifelong learning in higher education.

METHODS AND RESEARCH METHODOLOGY
The methodological basis of the study covers the following methods

• pedagogical methods (pedagogical observation, conversation, questionnaire, pedagogical experiment);

• sociological methods (sociological survey, method of expert evaluation, method of information analysis);

• statistical methods (ranking method, descriptive statistics);

• method of studying and generalizing the advanced pedagogical experience (used to identify the current level of solving educational problems);

• method of propositional generalization (for concluding a system of forms and methods of introduction of lifelong learning).

The research was conducted in bachelor degree students of different faculties of Vinnytsia Mykhailo Kotsiubynsky State Pedagogical University (Ukraine), in order to determine the effectiveness of forms and methods of involving students in lifelong learning. The total sample of respondents was 200 persons. The study involved 4 faculties (Educational and Scientific Institute of Pedagogy, Psychology, Training of Higher Qualifications; Faculty of Foreign Languages; Faculty of Natural Geography; Faculty of History, Law and Public Administration), with 50 student representatives from each. Respondents were asked to evaluate the effectiveness of forms and methods of lifelong learning that they could choose for themselves based on these characteristics.

RESULTS
With the change of the paradigm of higher professional education in the context of European educational reforms, the leading principles of modern education are the quality of education, the organization of effective independent work of students, lifelong learning. The variety of forms and methods of effective organization of lifelong learning should be based on the use of effective methods and technologies. Consider those that students could potentially choose
to study after university and provide summary assessments obtained because of sociological research (see Fig. 1; Fig. 2).

**Fig. 1. Methods of effective lifelong learning**

![Methods of effective lifelong learning](image1)

*Source: Search data.*

According to the results of the survey, students could potentially choose gamification methods (66% of respondents), multimedia in the complex (13% of respondents), digital tools (16% of respondents) and machine memorization (5% of respondents) to study after university.

**Fig. 2. Forms of effective lifelong learning**

![Forms of effective lifelong learning](image2)

*Source: Search data.*

According to the survey, according to the respondents, the following forms of education were found to be the most effective: P-invariant GMNet, educational training, podcasts, and scientific debates with results of 58%, 18%, 13%, and 11%, respectively.
Thus, the results of the survey indicate such potentially successful pairs "method-form" for the implementation of the concept of lifelong learning (table 1):

| Methodology                  | Form                        |
|------------------------------|-----------------------------|
| gamification techniques      | P-invariant of GMNet        |
| multimedia in the complex    | educational training        |
| digital tool                 | podcasts                    |
| machine memorization         | scientific debate           |

Table 1. Pairs "method-form" for the implementation of the concept of lifelong learning

Source: Search data.

Students have identified the components of key competencies that they will acquire in the learning process by these forms and methods:

- independent acquisition of missing knowledge to solve new extracurricular tasks;
- development of skills to apply the acquired knowledge in practice;
- formation of communicative competence in the process of group work;
- development of research skills, analytical thinking.

In order to implement effectively the concept of lifelong learning and its further implementation in student education (at the level of automatism), the teacher must follow this scheme of organization of work in higher education institutions:

- clearly distinguish the results of memorization, understanding and application of perceived material;
- check the compliance of the course structure;
- involve speakers for active discussion of the topic;
- present different learning models;
- offer the choice of an effective model after testing;
- update the variability of competencies;
- demonstrate methods for testing problem solutions and evaluating their efforts;
- to involve in independent performance of home exercises;
- demonstrate work models (what concepts should be included, the desired level of complexity, a comprehensive description of the work, the evaluation system of the exercise);
- joint development of educational goals;
- implementation of self-esteem;
- availability of feedback;
- introduction of a gratitude system;
- acceptance of self-reflection.

DISCUSSION

Thus, we understand that the category "methods of involving students in lifelong learning" is based on an understanding of such paradigms:

1. The use of digital technologies and gamification (DIEZ, 2019) both in foreign scientific intelligence and in the domestic scientific sphere, in the system of continuing education contributes to the achievement of academic and post-academic excellence.
2. Digital technologies can work based on increasing student attention, motivation to discuss, interest in work, globalization of knowledge.

3. In the multimedia involvement of the representative of inclusion in the educational process are methods of cognitive load, which create a means to slow down or counteract the effects of age-related decline in cognitive abilities in students.

4. Practices based on the theory of cognitive load can also facilitate the activation of prior knowledge and improve attention control. This is stated in the scientific intelligence Graves (2018).

5. Among digital tools (CENDON, 2018; REGMI, 2020) Ed-Way (soft-skills) methods can be indicative. They help to identify the following skills: control, autonomy, leadership, self-improvement, teamwork (GOODWILL & CHEN, 2021). They will develop flexibility, initiative, creativity in the system of lifelong learning of students (ESCUDE-MOLLON, BELTRAN-PUEYO, SAIZ-SANCHEZ, & ESTELLER-CURTO, 2016; RHINEHART, 2019).

6. Machine learning algorithms in the neural communication system (Hutson, 2018) help to divide each educational element into two values, which are combined to influence how much one neuron, can activate another. This method of memorizing information allows obtaining high practical results, as it serves as a model not only for the acquisition of knowledge, but also explains the scheme of the brain.

Thus, we understand that in the category of “forms of student involvement in lifelong learning”, based on the understanding of such paradigms:

1. Podcast (SCHMITZ, 2021) as a form of involvement in lifelong learning encourages students to audible perception of information.

2. Methods of scientific debate (BOYADJIEVA, ILIEVA-TRICHKOVA, 2021) require scientific justification.

3. In new lifelong learning services, the user experience (UX) plays a key role in the proper delivery of content and in supporting the transition of learning between different contexts through adaptive learning tools. On this basis, the concept of applying case study (DIRIN, LAINE, & NIEMINEN, 2020) can be used as a way of emotional analysis of scientific innovations.

4. Scientists Su, Guo, Tan, & Chen (2020) considered the method of P-invariant learning GMNet. The study showed that with its help in the learning system you could accurately and constantly accumulate the learned experience.

**CONCLUSIONS**

Involving students for lifelong learning should be based on an integrated system, which includes:

- training courses focused on professional development;
- methods of providing requests for various educational courses that better meet the interests of students in improving personal qualities, development of skills and abilities, support hobbies;
- distance forms as an additional option in institutionalized formats of education, when the educational institution includes online courses.

A promising direction in the development of the concept of lifelong learning is the transition to modular learning using the P-invariant GMNet, educational training, podcasts, scientific debates, consisting of a set of offline and online blocks to form the necessary user competencies. On this basis, we occasionally distinguish between the concept of continuing and distance education. Distance forms of work organization are only a tool for implementing the concept of continuing education. They are an additional way of organizing training, with technical support and technical support of IT specialists, as well as supervision by the teacher.
of the basic course (for example, as in the distance learning system Moodle). Moreover, the value here is not even the teaching materials as such, but the communication between the teacher and students, and between the students themselves. An important area of further research is the implementation of international experience in lifelong learning. The practical significance of the study was to determine the basic forms and methods that are most significant for students.

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Forms and methods of involving students in lifelong learning

Resumo
O artigo tenta identificar formas eficazes de levar jovens estudantes a implementar o conceito de "aprendizagem ao longo da vida" no ensino superior com base em uma pesquisa. São generalizadas 200 respostas de entrevistados de diferentes faculdades da Universidade Pedagógica Estadual Vinnytsia Mykhailo Kotsiubynsky de EQL. Verificou-se que os métodos formais e metodológicos mais eficazes são gamificação, multimídia no complexo, ferramentas digitais, memorização de máquinas; P-invariante GMNet, treinamento educacional, podcasts, debates científicos. O estudo indica a falta de uma análise científica abrangente do conceito de aprendizagem ao longo da vida no paradigma da metodologia de sua implementação. Estabelece-se como resultado da introdução de tais elementos para a implementação bem-sucedida do conceito de formação durante a vida, os professores devem aderir às regras metódicas de sua realização.

Palavras-chave: Aprendizagem ao longo da vida. Ensino superior. Metodologia. Personalidade. Formas de educação.

Abstract
The article attempts to identify effective ways to earn student youth to implement the concept of "lifelong learning" in higher education based on a survey. 200 answers of respondents from different faculties of the Vinnytsia Mykhailo Kotsiubynsky State Pedagogical University of EQL are generalized. It was found that the most effective formal and methodological methods are gamification, multimedia in the complex, digital tools, machine memorization; P-invariant GMNet, educational training, podcasts, scientific debates. The study indicates the lack of a comprehensive scientific analysis of the concept of lifelong learning in the paradigm of the methodology of its implementation. It is established as a result of introduction of such elements for successful implementation of the concept of training during life teachers should adhere to methodical rules of its realization.

Keywords: Lifelong learning. Higher school. Methodology. Personality. Forms of education.

Palabras-clave: Aprendizaje permanente. Escuela superior. Metodología. Personalidad. Formas de educación.