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CHAPTER 1
GENERAL PEDAGOGY AND HISTORY OF PEDAGOGY

PEDAGOGICAL ANALYSIS OF THE CONTENT AND STRUCTURE OF ECOLOGICAL CULTURES OF ENVIRONMENTAL SPECIALISTS

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Abstracts. *In the face of escalating environmental challenges, the imperative for sustainable development has never been more urgent. Central to this pursuit is the cultivation of an ecological culture, particularly among those who will one day lead, manage, and innovate within the realm of environmental sciences. This paper seeks to delve into the pedagogical underpinnings that foster such a culture, specifically within the educational pathways of environmental specialists. The concept of ecological culture, with roots tracing back to the 1980s, represents not merely an academic discipline but an essential paradigm through which humanity's survival and the biosphere's integrity are interconnected. The notion of ecological culture encompasses a broad spectrum of understandings and practices that reflect a harmonious interaction between humans and their natural environment. Historically viewed as a subset of broader cultural dynamics, it has evolved from the peripheral to the central focus of educational agendas in response to global ecological crises. This evolution underscores the shift from viewing ecological issues as isolated challenges to recognizing them as integral to all aspects of societal development. This article examines the structural and content-related aspects of ecological culture in the training and education of environmental specialists. By analyzing theoretical developments and practical applications, it aims to highlight how ecological education not only imparts knowledge but also shapes the ethical and practical frameworks within which future environmental stewards operate. In doing so, it explores how an interdisciplinary approach can enrich this educational process, preparing students not just to understand but also to act upon environmental challenges with insight and responsibility. This holistic approach is crucial for fostering a generation of specialists capable of steering our society towards a sustainable future, emphasizing the critical role of education in shaping ecological consciousness and action.*

Keywords: *natural resources; ecological training; educational institutions; methods of formulating ecological culture; pedagogical analysis.*

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Introduction. The most expedient direction that will ensure the continued existence of all mankind is sustainable development, the main tasks of which are a balanced solution of socio-economic problems and preservation of the natural environment. Such development determines the need for people to live in accordance with the laws of nature, to be aware of certain requirements and prohibitions provided by these laws; all this will become possible when a new type of ecological culture is formed. Problem definition entities and structures concept «ecological culture» began to be intensively studied since the 80s of the past century. Thorough disclosure various aspects of it can be found in the works of famous people scientists of Ukraine and abroad It should be said that ecological culture can be called both attributive, that is, an organic component of human life from the beginning of its origin, and phenomenal (from the XX century), when society is more and more convinced of the need to implement widespread changes, in the reorientation of human thinking, which will lead to a healthy, fulfilling, happy life in harmony with nature and the surrounding world.

Concept «structure» ecological culture (from the Latin strukture - to build, to build), can be defined as a structure and the internal form of system organization, as the unity of stable, regular relationships between its elements. The structure of ecological culture as an objective unity of components, exists in reality and does not depend on our knowledge or ignorance about her.

For complete definition entities concept «ecological culture» we will first turn to concepts «culture and "ecology». The term "culture" comes from the Latin «cultura», what means «processing, agriculture, upbringing, education, development, adoration, respect». Thus, this term is interpreted ambiguous and multifaceted. In ancient times the term «culture» was most often used for the designation of human agricultural activity , or the upbringing and education of children (v including regarding their improvement your physical condition). Subsequently, this term acquired universal value, pond category, what characterizes personality.

Environmental culture is the level of people's perception of nature, the world around them, and their assessment of their position in the universe, the attitude of a person to the world. Here it is necessary to immediately clarify that what is meant is not the relationship between man and the world, which also involves feedback, but only his relationship to the world, to living nature. In connection with the global ecological crisis, it is necessary to clarify what relations between man and nature can be considered harmonious, how human activity affects the environment, and to note why it is so important to talk about ecological culture, especially now. It should also be noted that the level of ecological culture is directly proportional to the ecological situation in the world and is directly dependent on the perception of the biosphere.

Literature review. The analysis of studies shows that there is theoretical developments of entities ecological culture, which was subject of research.

Culture, as a complex social phenomenon, has several "vectors" - subject-practical and spiritual, socio-historical and personal. Thus, the concept of «culture» is defined by L. Bueva as «...a set of material and spiritual values, created humanity in process socio-historical activity, covering, with one hand technical means production, material values, and from the second - spiritual values assets in the field of science, art,

literature, morality, education, etc.». Consonant to considerations specified authors and definition "cultures" in philosophical dictionary, and exactly:

In their definitions communication is being followed cultures with subject-creative activity, during whose happens self-development and self-affirmation a person.

Analysis of scientific literature by topic of our research gives U.S possibility affirm, what process formation cultures is going in interconnection and interdependence with formation society and all its factors, which are included an important place is occupied by the ecological situation in the country The causes of environmental problems are scientists they see in low cultural levels society, in its not yet formed moral and ecological culture.

Now let's move on to definition the concept of «ecology». «Ecology» – a greek word, consists with «oikos» – House, dwelling, family and «logos» - concept, teaching. He was introduced to science in 1866, Ernst Haeckel, an outstanding German natural scientist He considered subject study of the ecology of the relationship of living beings with surrounding environment.

In ecological encyclopedic in the dictionary, ecology is understood as synthetic biological science about the relationship between alive organisms and environment their residence. Ecology refers to fundamental division biology, which explores the fundamental properties of life. Basic subject ecology – study aggregates of living organisms that interact with each other and form with the environment a certain unity (i.e. system), c boundaries which is carried out process transformation of energy and organic matter.

In the last years ecological education and enough attention is paid to education at all levels. A number of scientific works of educators devoted to the problem of formation of the phenomenon ecological culture personality. Ecological culture is considered as necessary component optimization relationships between society and nature that exist condition survival humanity.

They are found in the literature the most diverse interpretation concept «ecological culture». The most common is definition, what given in work M. Reimers: «Ecological culture - stage i a component of global development culture, what characterized by sharp, deep and universal awareness essential importance ecological problems in life and in the future development humanity»[14].

Ecological culture according to V. Krysachenko characterized as way self-organization essential human forces in specific conditions natural environment.

I. Zverev defines ecological culture as part of general human culture. On his opinion, ecological culture concerns everyone parties material and spiritual life our society, each a person and is expressed in such species scientific and practical activities that provide preservation and enrichment surrounding environment, create favorable conditions comprehensive development [6].

The main one trait ecological culture, believes I.D. Zverev, - there is «the ability to forecast remote consequences intervention a person in natural relationships, a broad view of multifaceted values of nature, skill submit all types of their activities to the requirements rational nature management, take care of the improvement of the

environment environment, prevent its destruction and pollution» [7, 9].

By statement L. Morozova, ecological culture is an important element of the general culture of mankind, and over time will settle down dominant place among others industries cultural activity. Examining this phenomenon, L. Morozova defines it as follow "Ecological culture is a creative, conscious activity people in process development and preservation vitally necessary values natural environment " [10, with. 90].

Almost all authors indicate the main ones components of ecological culture: system environmental knowledge; system of abilities and skills with rational using, enrichment and nature protection; system of environmental standards, values; social environmental practice.

Fenchak L.M. points out what essence the concept of "ecological culture" is defined on based on social order society of teaching and education specialist Formation of ecological culture is process complex, controversial and multi-stage AND offers the following structural elements ecological student culture : environmental knowledge - environmental thinking - ecological consciousness - ecological outlook - ecological ethics - ecological culture [16].

Each of them corresponds to a certain level or stage ecological formation mature a person However, without taking into account the outlook pedagogical aspects of determining the entire range of components affecting consciousness young people, you can't talk about formation ecological culture of the future specialist agrarian.

This is possible only with gradual transition from one stage to the next. From ecological knowledge to ecological culture - like that logic buildings this continuous chain, each stage of which (except the first and the latter) is based on the previous and prepares base for next All they interconnected, although each of them is relative independent. Between them exist certain succession Let's consider each of the named stages in more detail [17].

One from important elements and indicators, what characterize level ecological culture of the personality of the future agricultural specialists, have ecological knowledge. Exactly scientific, systematized environmental knowledge make up core theoretical equal environmental consciousness and culture, they are they can become basis for successful ecological activity people.

According to L. Nemec, the content of ecological of knowledge includes:

– understanding nature as the only one whole;
– dialectical understanding connection nature and society;
– the essence of the relationship between society and nature, a person and nature;
– moral and aesthetic influence of nature on a person;
– influence natural environment on health a person [11].

Ecological knowledge is systemic an element of environmental consciousness and culture. Nothing new is possible without ecological knowledge thinking, nor developing a solution strategy regional problems and further development cultures.

Ecological knowledge – its product social development They are growing in the process of historical formation of society, interaction between man and nature, from the empirical equal to equal theoretical systems, what make up basis ecological

outlook, consciousness and culture. Environmental level knowledge, in our opinion, affects the attitude people to nature, determines and regulates him.

Ecological knowledge are characterized certain structure I. Safonov in his own research singled out the following components [3]:

– knowledge of fundamental problems interaction society and nature, what include natural science and philosophy aspects;
– special environmental knowledge, which directly related with professional activity a person;
– ecological knowledge of the interdisciplinary character, i.e. knowledge that reflects the relationship of ecology - pedagogy, ecology - chemistry, ecology – economy etc.

N. Depenchuk and I. Drozdova to environmental of knowledge include [4]:

– characteristic general theories relationship a person with by nature;
– system natural science knowledge about the interaction of society and nature, stages development this one interactions;
– knowledge about socio-economic regularities nature management;
– history protection nature and organization her on modern stage;
– valuable ecological orientation;
– system legal and moral, scientifically based norms rules attitude to nature, skill and skills.

Trace to note what formation ecological cultures students higher agricultural educational institutions has its own features, to whose you can carry:

– relationship of global, regional and local information about ecological problems in educational and methodical complexes of disciplines everyone cycles preparation;
– legal support for environmental courses orientation;
– formation of co-evolutionary students approaches and views on environmental problems (study of relationships and interdependencies society and nature, which lays the foundations education of correct environmental behavior students agricultural technical schools in own future professional activity, allows have clear ideas about processes, what not lead to violation ecological balance in ecosystems);
– the vast majority of agricultural students of technical schools and colleges are natives of rural areas terrain, what closely connects their with surrounding environment and, accordingly, modern understanding ecological problems.

Environmental knowledge is the basis for higher education forms of human cognition - ecological thinking. Scientists own this phenomenon research are defined differently. So, R. Karpinska notes what ecological thinking synthesizes scientific knowledge as «..universal morality that transcends boundaries interpersonal relationship and includes the aesthetic attitude of a person to nature, elements of legal consciousness and philosophical understanding a person his own places in the surrounding world» [7, with. 25-28].

And academics V. Kaznachev and A. Yanshin note that «...ecological thinking is the level of knowledge, culture, upbringing, at which each in his professional and non-professional activity haunts purpose creation and organization of the best conditions for psycho-emotional, natural and social environment for further human development, preservation and development her health».

A special place in the chain of factors that condition the formation of ecologically mature person, takes ecological consciousness. under her on our opinion trace understand human the ability to perfectly reproduce reality in thinking.

With look content environmental scientists characterize it as «...a set of views, theories and emotions reflecting problems the relationship between society and nature in the plan their optimal solution in accordance with specific social and natural opportunities».

Aims. This paper seeks to delve into the pedagogical underpinnings that foster such a culture, specifically within the educational pathways of environmental specialists.

Methodology. Ecological consciousness is formed from knowledge and beliefs in the field of relationships society and nature, is based on ecologically expedient attitudes to natural resources, skills to apply scientifically determined decisions in relation to nature; reflects individual experience communication with natural systems Revealing structure ecological consciousness of our contemporary, scientists highlight those main components that reflect it social essence and regulatory functions. In connection with this, ecological consciousness contains [13]:

– conscious assimilation a person norm scientifically determined, ecologically appropriate, rational nature use and working out on this basis systems environmental beliefs, knowledge, skills, which provided optimal, in attitude to nature, him practical activity;

– mastering the norms of using technology, modern technologies and means organizations economic activity a person under from the point of view of a responsible attitude to problems ecology and preservation nature, legal culture and deep knowledge of nature conservation legislation, environmental situation, which was formed in the field of production activity, for place of residence, in the region and state, in global scales;

– understanding oneself as a part of nature which is for a person a source of health, humanism, patriotic feelings moral, aesthetic, sanitary and hygienic and others qualities, perception of nature as social values.

Environmental awareness is specific form reflection real ecological situations, a holistic vision of environmental problems, awareness unity people and environment, availability internal self-regulator ecologically civilized behavior, feelings responsibility, healthy way life, active participation in environmental protection measures.

The core of ecological culture and internal motivational regulator behavior is ecological outlook. By statement M. Bauer's ecological outlook is a totality principles, views, assessments, and knowledge that in generalized form determine integral understanding of the unity of the natural and social being, form ecologically oriented vital position [1].

However, essential for ecological worldview is not only knowledge, but and belief. Really, knowledge – logical component worldview, cognitively intellectual side outlook, and belief – moral and emotional and psychological attitude to knowledge, to reality.

Emerging environmental beliefs on basis worldview, is the source environmental needs - activity needs (practical her side), directed on preservation nature as conditions existence human society. Such way environmental beliefs are a deep recognition the truth of their knowledge about the unity of nature and society, the place and role of man in this unity, inadmissibility violation connections which provide her integrity.

The complexity of dependencies between knowledge, beliefs and practical activities as elements of activity affecting each other one necessary on our view, constantly to take into account in the process of environmental education and training for the purpose of forming ecological cultures students higher agricultural educational institutions I-II levels accreditation.

As note N. Depenchuk and I. Drozdova, subject study environmental ethics is relationships between people because of their attitudes towards nature, which is carried out on the basis of certain way production But the authors claim that the main meaning of ecological ethics – not in regulations actions human and in inclusion in the worldview of people of such knowledge about nature, which would serve as the basis of the correct attitude towards it [5].

Such an approach on today is very relevant.

Having analyzed the series original source with problems of environmental ethics, we discovered it elements:

– respect for life, which is based on a rule, what each form life is unique and therefore requires respect from the side a person;
– responsibility for life on Earth, destiny future generations and everyone alive creatures by quality surrounding environment;
– careful attitude to use of mineral raw materials without wastage, as one from means preservation Earth;
– solidarity a person with natural environment, which is based on moderation;
– social understanding as way understand others.

Presented factors they can become the rules which ones must to be guided humanity to be ecologically cultural and educated.

Structural elements of this quality are system scientific knowledge, aimed at knowledge processes and consequences activities of man and society in nature, ecological value orientations, knowledge of norms and rules behavior in the environment and readiness to environmental protection activities. The basis of this definition is the theory of activity, in the structure which we highlight such components ecological cultures:

– need-motivational (combination encouraging reasons activities);
– intellectual (specific knowledge, facts concept, theories, regularities);
– professional (active participation in environmental protection activities, application acquired abilities and skills for solving professional problems with taking into account ecological and moral imperatives).

Results. Let's stop more in detail on content characteristics these components ecological cultures.

Need-motivational component characterized by the fact that it is need-motivational sphere ecological activity student consist of a wide variety of interests,

needs, aspiration, imitation, etc. According to modern psychological and pedagogical ideas about we consider human behavior and activity internal and external motives for environmental activity. To motives, what arise directly in process activity and perform her as a result belong to:

– cognitive motives prompting to ecologically oriented activity with the goal knowledge of phenomena, processes and regularities development surrounding environment;

– aesthetic motives arising in communication process with by nature under time excursions, hikes, conversation;

– communicative motives, what are characterized aspiration to joint collective ecological (educational and practical activities, desire to participate in common business, communicate with friends in healthy (positive) communicative atmosphere);

– learning motives are related to interest to various forms of educational activity (in particular, to gaming and research).

Intellectual component of ecological students' cultures consists, first of all, of environmental knowledge. In general, they are containing scientific information in the field of theoretical and applied ecology Regularities development of nature and society (worldview aspect), information about the ecological state of the locality, one's country (environmental outlook and awareness). Learning by students specified provisions on levels understanding entities ecological phenomenon which are studied, will allow set and realize connections between phenomena and processes of nature, to identify them structure, causes and sources of functioning and, such way to form integral natural and scientific picture the world.

Professional activity component ecological culture is ecological actions that are carried out in accordance with the perceived purpose These actions are performed due to availability environmental knowledge and skills, and the consequences of such actions are specific personally or socially significant the results Ecological ability of students are shared on two groups:

– educational and cognitive - work skills with special literature ecological subjects, messages and reports from the studied literature;

– practical - the ability to predict individual consequences intervention a person in natural processes, the ability to correlate their utilitarian need with requirements rational nature use, the ability to explain and involve others (first of all your peers) to nature protection activity.

Professional activity component reflects nature and performance as educational activity with mastery environmental knowledge and skills, and specific practical activities of students from protection of the natural environment. Cannot consider ecologically cultural student, which has a fairly large amount of environmental knowledge, is able to analyze natural phenomena and relationship with nature, but does not reveal corresponding ecological activity.

Formation of ecologically oriented and ecologically mature personality by mastering the above components – it complex, polyhedral, controversial, and gradual process multi-stage continuous education, which implemented for by acting not only on human intelligence, but and on her emotions, on all spectrum her spiritual abilities

in combination social and family education.

But, according to M. Bauer, the level of mastery data components ecological cultures depends on many factors and, first, from age characteristics [2].

In terms of worldview and value aspects, Fenchak L.M. offers highlight the following degrees ecological maturity of the individual: informative and preparatory (preschool), basic – worldview (school), worldview - mature (higher), and professionally - professional (postgraduate).

Discussion. On our view, specified degrees ecological maturity is very valuable in system of continuous environmental education and in the process formation ecological cultures personality Given the specificity of our research, we consider it necessary to consider mastering components of environmental culture by students on worldview-mature levels a worldview-mature (higher) level to provide higher educational institutions of I-II levels accreditation They provide general and professional environmental education. general education completes the formation of an ecological worldview every student, and professional education teaches on professional level to decide ecological problems At the same time, professional environmental education you can conditionally share on humanitarian, natural, industrial and agricultural General and the first two species professional ecological education form ecological awareness, ecological and ethical qualities, ecological culture and understanding modern problems protection environment, and industrial and agricultural ecology differentiates and deepens everything said before and provides specialized knowledge to address these problems in specific industry folk economy [8].

It should also be noted that it is ecological education and education, which are provided higher educational institutions, is continuation of previous stages of training. In connection with this is education on these levels must be qualitatively higher, with a deeper level of knowledge about the environment [5].

Based on acquired knowledge on worldview- mature levels their valuable grades, functioning and deepening of ecological thinking of future specialists is formed a systemic view of nature is being formed environmental awareness that enables y any situations do ecologically smart choice and do not allow to apply damage to nature, to see not only limited neighbors, but and remote consequences anthropogenic actions.

Ecological culture includes in himself the ecological system existing in society education and education people. Level ecological culture of the individual with this view you can consider as level her ecological upbringing, and ecological education and education answer task formation of ecological culture. Based on this we think what directions formation of ecological culture of the future agricultural specialists perform ecological education, environmental education, and environmental activity.

Modern ecological education is education, which prioritizes eco-human and noosphere one’s values, which targeted on radical solution problems formation ecological personality culture. It should be noted that itself on itself ecological education does not solve this one problem if it is separated from others species education, as and solution problems formation of ecological culture is impossible without solving the entire chain of global problems humanity But, what more educated humanity, those more it aspires to ensuring personal environmental safety, creatively

suitable to this one problems.

We believe that environmental education in higher educational institutions I-II levels accreditation has to be carried out in close quarters connection with physical, chemical, engineering technical, economic, legal and humanitarian education in the process of studying all natural sciences and special disciplines, which to one degree or another affect different people aspects nature management.

Analysis scientific and pedagogical literature testified that today environmental education in system of higher education of Ukraine is being implemented and is developing by such scheme [9]:

Basic environmental education of students at based on the study of general humanitarian and natural sciences discipline;

Independent course on the basics of ecology up to 54 hours. depending on the profile faculty;

Further on the formation of environmental of knowledge under time study special and applied disciplines, as well as applied ecological practicums;

Generalization and fixing ecological of knowledge in practice, involvement students to research work with ecological topics;

Using conscious ecological of knowledge during the course and diploma designing.

In modern pedagogical literature, as in foreign and domestic, it is determined that education in the field of the environment is permanent process, which covers people of all ages at all levels of formal and non-formal education. She prepares people for life, teaches them to understand the main problems environment and gives skills and means, necessary for that in order to education could play a role in improving conditions life a person and preservation the environment.

In concepts continuous ecological education and upbringing in Ukraine are revealed fundamental principles ecological Education:

– continuity, systematicity and systematicity, which provide organizational conditions for the formation of ecological cultures personalities;

– education of understanding of integrity, unity the surrounding world, the inextricable connection of its components (a significant role in the organization this principle plays back doctrine about ecosystem, biosphere and noosphere);

– an interdisciplinary approach to formation ecological culture, what provides not mechanical inclusion various of knowledge environmental orientation to the content of different subjects, and their logical subordination main goals ecological education;

– coverage of environmental problems on global, national and regional studies levels;

– the focus of education on development value-motivational spheres personality [8].

Specific principles of environmental education define environmental education independent direction in system general education and education.

Weekend position in interpretable the concept of «ecological education" became its definition in scientific literature. I.Dedyu v encyclopedic dictionary writes that "ecological education is the formation of a person's conscious perception of the surrounding natural environment, beliefs if necessary thrifty attitude to nature, intelligent use of its resources, natural resources» [18, p. 358].

As noted A. Nekos «... none of the directions of education is integrated by others in such quantities as ecological. Ecological education – it a kind of integrator in modern education process» [11].

Problem solving ecological education turns out to be much more difficult on practice.

If ecological education a person is defined totality her of knowledge about features of society's interaction with nature, then ecological education has lot more complex content, because in addition to environmental knowledge, includes in himself wide spectrum the most diverse human qualities and characteristics of a certain worldview worldview, moral, legal, ecological, social principles and norms. Therefore, it is ecological education is unthinkable in separation from aesthetic, moral, legal education and upbringing. There are countless examples barbaric attitude towards the nature of people ecologically educated. Environmental education provides for the formation of such humanistic qualities of the personality, which, having become its internal property are functioning in practice of everyday life as an internal regulator and human behavior controller [19-25].

Ecologically a well-educated person is not out of compulsion, but rather out of principles will not allow himself to be harmed nature and other people. In this regard environmental education is crucial today condition preventing further degradation natural environment, software coevolution of nature and society, creation noosphere - such a symbiosis of society and nature, in which overcome a threat ecological crisis, and man and nature are in a state of harmonious balance [9-11].

The most important condition, and at the same time an indicator of the level of ecological development personality culture is a practical activity. In her appear and are fixed various motives of attitude towards nature and those positive personality qualities are formed, which determine the desire to live in harmony with by nature.

A. Nekos defines ecological activity as a person's actions aimed at the maximum it is possible to eliminate the main contradictions between effort a person to landscaping in wide understanding words and creation therefore ecologically safe environment. Otherwise saying ecological activities are actions aimed at creation environmental safety, based on consent from laws of nature.

So, only having mastered elements of ecological cultures - appropriate ecological knowledge, outlook- value orientations, thinking style, ecologically directed skills and skills, if there is a desire to take active participation in environmental protection activities and the ability to predict possible consequences development of nature - we can talk about formation ecologically literate and ecologically cultural specialists.

Conclusions. The paper brings into focus the necessity of integrating ecological education within the broader spectrum of educational disciplines to foster an enduring ecological culture among future environmental specialists. The conclusions derived from this analysis underscore several critical aspects:

1. Ecological education benefits from an interdisciplinary approach that bridges the gap between natural sciences, humanities, and technical subjects. This holistic integration ensures that students not only gain scientific knowledge but also develop the moral and ethical dimensions necessary to apply this knowledge responsibly.

2. The need for a continuous and systematic ecological education is paramount. It should begin at the earliest stages of formal education and continue through higher education. This approach is fundamental in shaping a deeply ingrained sense of ecological responsibility and awareness.

3.Theoretical knowledge of ecology must be complemented by practical applications. It is through hands-on experiences and real-world problem-solving that students can truly appreciate the impact of their actions on the environment and learn the skills necessary to mitigate negative effects.

4. Ecological education should aim to form not only knowledgeable but also ethically oriented individuals who view environmental stewardship as a personal responsibility. This requires cultivating values that prioritize sustainable practices and respect for nature.

5. Educational institutions must prepare students to tackle environmental challenges not only with knowledge and skills but also with a professional ethos that emphasizes ecological ethics in their field of work. This preparation should be viewed as a critical component of their professional identity and capability.

6. The formation of an ecological culture is not merely an educational goal but a societal necessity. As the ecological crises deepen, the impetus for a cultural shift towards sustainability becomes more urgent. Educators and policymakers must focus on nurturing an ecological consciousness that transcends academic learning and permeates all aspects of daily life.

7. While global ecological issues are important, ecological education should also focus on local environmental problems. This dual focus ensures that students can relate global challenges to their immediate surroundings, making the learning experience more relevant and impactful.

8. Encouraging research and innovation within ecological studies is essential. This not only advances the field but also stimulates student engagement and interest in pursuing ecological solutions creatively and effectively.

9. Engaging with local communities in ecological projects can enhance learning and foster a community spirit of environmental responsibility. It also helps students understand the practical implications of their academic knowledge and the social dimensions of ecological issues.

In conclusion, the pedagogical analysis reveals that developing an ecological culture within educational settings requires a committed, integrated, and proactive approach. By instilling ecological values and knowledge from an early age and reinforcing them through higher education and professional training, society can cultivate environmentally aware and responsible individuals poised to lead the change towards sustainable development.

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CHAPTER 2
INNOVATIONS IN THE MANAGEMENT OF EDUCATIONAL INSTITUTIONS

WEB QUEST TECHNOLOGY AS A TOOL FOR THE FORMATION OF IT COMPETENCE OF EDUCATION SEEKERS IN PHYSICS CLASSES

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Abstract. *The article reveals the relevance and peculiarities of the application of the "Web Quest" technology in the educational process of general secondary education institutions. The main goal of the research consists in improving the methodical system of competence- oriented teaching of physics based on the "Web-Quest" technology. During the research, the methods of comparative analysis, graphical display of results, visualization method, method of systematization, method of processing survey results and method of summarizing research results were used. A key aspect of this technology is the consideration of students as equal co-participants in the educational process, which involves a mutual relationship where the teacher and students together make decisions, determine goals and methods of achieving educational results. An analysis of the latest research is provided, which testifies to the effectiveness of using the "Web-Quest" technology for the formation of information and digital competence of students, increasing students' interest in the subject, developing critical thinking and independence. An example of the use of an educational web quest in physics on the topic "The influence of a magnetic field on living organisms" is given. The stages of students' work on tasks are revealed. R is elaborated methodical tips for teachers of features designing lessons in physics by application educational Web quest.*

Keyword: *Web-quest, competence approach, education seekers, physic, Google sites, Learningapps, Canva.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 4; tabl.: 2; bibl.: 12

Introduction. The implementation of the competency-based approach in general secondary education institutions of Ukraine has acquired the status of a normative requirement and has become one of the directions for the modernization of general secondary education. During the years of Ukraine's independence, a number of laws and government regulations were adopted in the field of educational legislation, which became the basis for the development and implementation of the modern content of education. The use of innovative learning technologies brought the competency-based approach to a qualitatively new level of development in accordance with European educational standards and led to the transfer of the competency-based idea to the level of mandatory regulatory implementation.

The expediency of the competence approach in modern physical education was investigated by researchers who substantiated that the competence approach has an effective effect on the transition from the cognitive paradigm of education to the activity one, which is oriented towards more relevant and necessary learning results in life.

One of the tasks of implementing a competency-based approach in school physical science education is the development of key competencies of students, the formation of new ways of thinking and activity in them.

During the tasks of the web quest, students develop critical thinking, solve complex problems based on the analysis of information collected by themselves, consider alternative views, make decisions independently and defend their point of view when presenting the results of their work (presentation, website, video clip etc.). Participants of the web quest not only search for information on the Internet, but also learn to effectively use the information space of the network for the development of their creative activities. The web quest provides an opportunity to diversify the educational process, make it more effective and exciting.

The founders of the "Web-quest" technology, B. Dodge and T. March, define it as a reference-oriented research activity, as a result of which students search for information using Internet resources and video conferences.

According to V. Schmidt, web quests are mini-projects based on searching for information on the Internet. Thanks to such a constructive approach to learning, students not only select and organize information obtained from the Internet, but also direct their own activity to the task set before them, related to their future profession.

B. Grudinin defines educational web quest as Internet search , purpose whose is training , that is receiving new ones knowledge , consolidation available knowledge , consolidation skills use network Internet and others subject skills.

According to N. Mentova, this is the e-quest problematic tasks with elements role games.

Modern researchers focus on the fact that the web quest is an innovative resource-oriented learning technology, the main goal of which is the independent search by students of information necessary for learning. The use of this technology has a motivating and stimulating effect on students, ensures the formation of information and digital competence in them, provides for the acquisition of experience in search

activity, expansion of horizons, development of creative potential, processing of large volumes of information, its analysis, systematization and further presentation.

Aims. The main goal of the research consists in improving the methodical system of competence- oriented teaching of physics based on the "Web-Quest" technology.

Methodology. During the research, the methods of comparative analysis, graphical display of results, visualization method, method of systematization, method of processing survey results and method of summarizing research results were used.

Results. We consider the physics "web quest" as an online learning technology that integrates innovative educational technologies (problem-based, research-based learning, game and project-based learning) with information and communication technologies and allows students to effectively use information found on the Internet independently in learning physics.

For these types of projects, but there are also tasks that students need to complete individually. Also, the topic of physical "web quests" can be diverse and should show signs of problems. Oral speeches, essays , web pages, web animations, etc. presented by the winners are the final product of the specified online technology .

Like any educational technology, the researched "web quest" technology is characterized by a logical structure and reveals the following components:

– "Introduction" (brief description and name of the quest);
– "Quest task" (formulation of a problem-oriented task and description of the final product);
– "Algorithm of work and necessary resources" (description of the sequence of actions, roles and resources necessary for completing quest tasks, supporting materials);
– "Evaluation" (description of criteria and parameters for evaluating the web quest - evaluation form);
– "Conclusion" (a brief description of what learners can learn);
– "Used materials" (links to network resources used to create the webquest), etc.

The analysis of physics curricula showed that during its study in the 11th grade, students are expected to complete the following topics of educational projects (tentative list) [11]:

1. The effect of an electric field on living organisms
2. Semiconductor devices and their application
3. Effect of magnetic field on living organisms
4. Electromagnetic waves in nature and technology
5. Quantum generators and their applications

Here is a sample of the educational web quest "The influence of a magnetic field on living organisms", which was implemented with students within the school course "Physics. 10-11 grades" (standard level).

The web quest "The influence of a magnetic field on living organisms" is developed in the form of a site on the E-platform - google .com, located by vocation (https://sites.google.com/) and contains the following attachments (pages):

–"Home page" - the purpose and tasks of the web quest are presented. The goal is to form students have positive motivation, interest in studying physics, skills of independent and research activity through the use of information and communication

learning technologies (ability to use Internet search engines, online services and platforms for creating physical interactive content); deepen and expand students' knowledge about the magnetic field, in particular: deepen and systematize students' knowledge about the magnetic field, its properties and regularities; establish the influence of the magnetic field on living organisms; to cultivate responsibility, the ability to work in a team, to defend one's opinion in front of the audience (Fig. 1).

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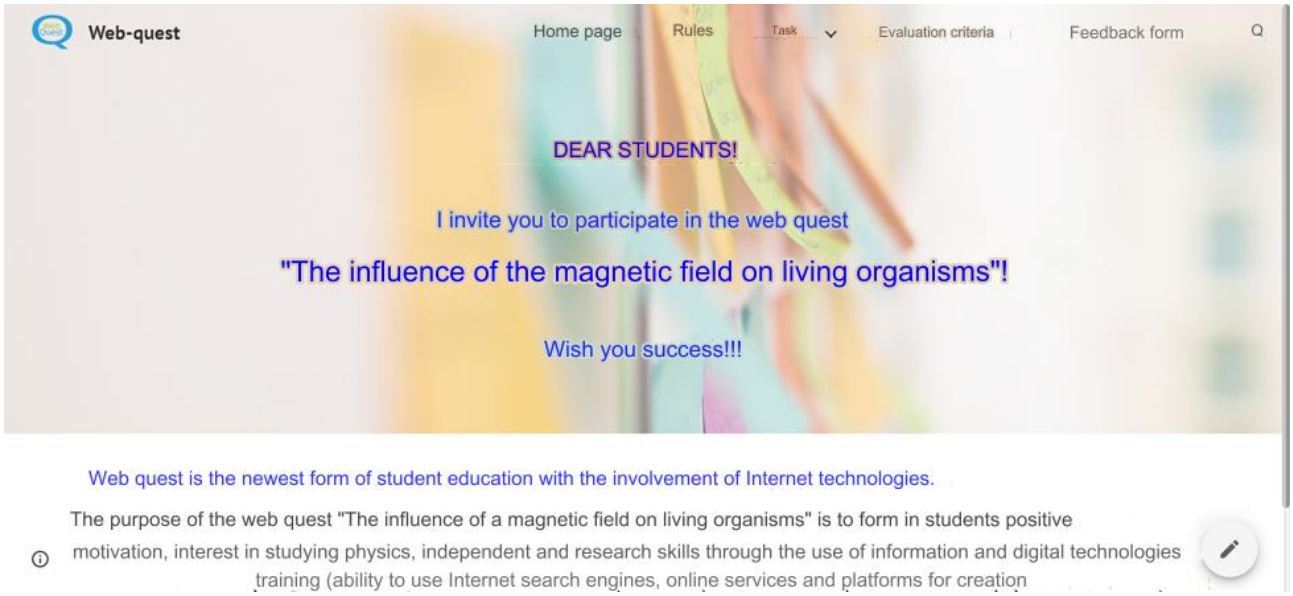


Figure 1. The main page of the physics web quest developed using the online service

Sourse: https://sites.google.com/

–"Rules" - the rules of the participants' work during the quest are described, the Web Quest Participant's Note is posted (adapted from [12]):

1) familiarize yourself with the topic and problem of the quest;
2) choose one of the proposed roles;
3) familiarize yourself with the tasks of your role;
4) study the list of Internet resources;
5) make a plan for finding information according to your role;
6) process information resources according to your role;
7) make a report in the form of a multimedia presentation, interactive exercises, a poster or in another suggested form;
8) familiarize yourself with the evaluation criteria for your report;
9) rate your role in the web quest;
10) discuss the results of work in a microgroup;
11) prepare to defend the web quest.

–"Task" - students are asked to divide into 3 teams: (to act in one of the roles): 1. "Physics"; 2. "Biologists"; 3. "Practices". Participants perform tasks of different levels of complexity simultaneously according to the chosen roles. Because the goals of Web research are not competing, team members teach each other how to use Internet applications and resources. The team sums up the joint performance of each task, and the participants exchange materials regarding the achievement of the collective goal.

–"Evaluation criteria". The web quest is a complex task, so the assessment of its performance should be based on by several criteria focused on the type of problematic task and the form of the presented result. Table 1 presents a description of the parameters and criteria evaluation of the web quest.

Table 1. Evaluation criteria for web quest participants

Structure work	Evaluation criteria	The maximum number of scores
Content	Complete disclosure of the topic; understanding the task (the answer is clearly oriented to the questions); logical sequence of presentation of the material; timeliness of task performance; having a creative approach to the task	5 points
Conclusions	Availability of logical conclusions to each task and a general conclusion to a set of tasks in accordance with the chosen role	2 points
Design	Adherence to a uniform design style; absence of grammatical errors; maintaining the harmony of the color palette; expressed individual approach to task performance; drawing up a report in the form of an oral presentation; web pages ; web animations; booklet; computer presentations etc.	5 points
General rating		12 points

Source: developed by authors

Self-evaluation of the participant's work in the group" is also provided in the specified attachment (Table 2).

Table 2. Self-assessment of the participant's work in the group

No	Assertion	Answer		
		Did not complete the task	50x50	Performed perfectly
1.	I studied the goal and set tasks			
2.	I offered hypotheses			
3.	I selected theoretical material for the project			
4.	I selected pictures from articles and publications			
5.	I rallied our mini-group			
6.	I defended the project			
7.	Helped friends who couldn't make it			
8.	I participated in the creation of the presentation			
9.	I participated in the generation of new ideas			
10.	I drew conclusions			
11.	I found and fixed errors			
12.	the project's questions			
Overall assessment				

Source: developed by authors

–"Physics group task"

- to the duties of "Physicists" includes: to investigate the causes of the Earth's magnetic field, magnetic storms and anomalies; describe changes in the magnetic field.

First, they are offered Internet sources to search for information, and then the tasks they must complete (Fig. 2):

1) using learningapps (https://learningapps.org) make an interactive crossword puzzle;
2) using the Canva app (https://www.canva.com), create a presentation on the topic "Earth's Magnetic Field".

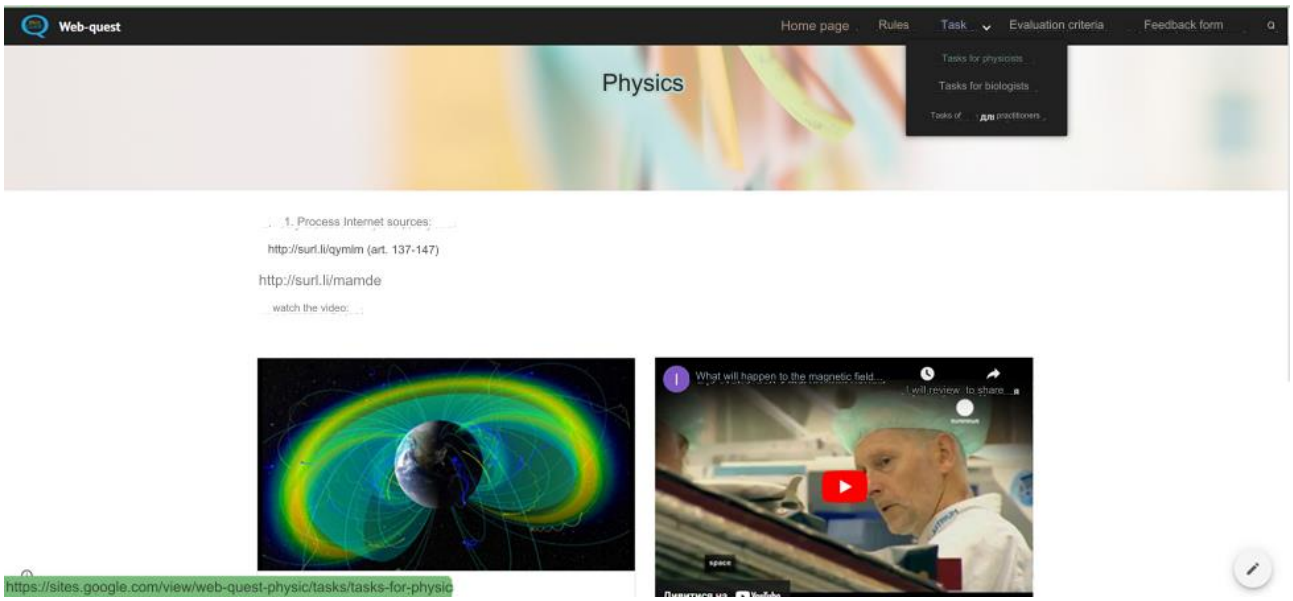


Figure 2. Interface of the page "Tasks for the group "Physics"

Source: developed by authors

–"Task for the group "Biologists""

- the responsibilities of "Biologists" include identifying and characterizing the impact (positive and negative) of a magnetic field on living organisms.

Having processed the sources proposed by the teacher, students must complete the following tasks:

1) using the learningapps application , complete the interactive exercise "Write in the blanks";

2) using the Google Sites application (https://sites.google.com), create a site on the topic "The effect of magnetic field on living organisms".

– "Tasks for the "Practice" group the duties of "Practitioners" include describing the interaction of man with the Earth's magnetic field in laboratory conditions.

Having processed the sources of the Internet, students must complete the following tasks:

1. using learningapps (https://learningapps.org), develop an interactive exercise "Find the word" on the topic "Can you feel the Earth's magnetic field?"

2. conduct a video review "Can a person feel a magnetic field?" (https://www.youtube.com/watch?v=Bb_1azm94uM). Create a booklet " Can you feel

the Earth's magnetic field? ” using the Canva online application (https://www.canva.com);

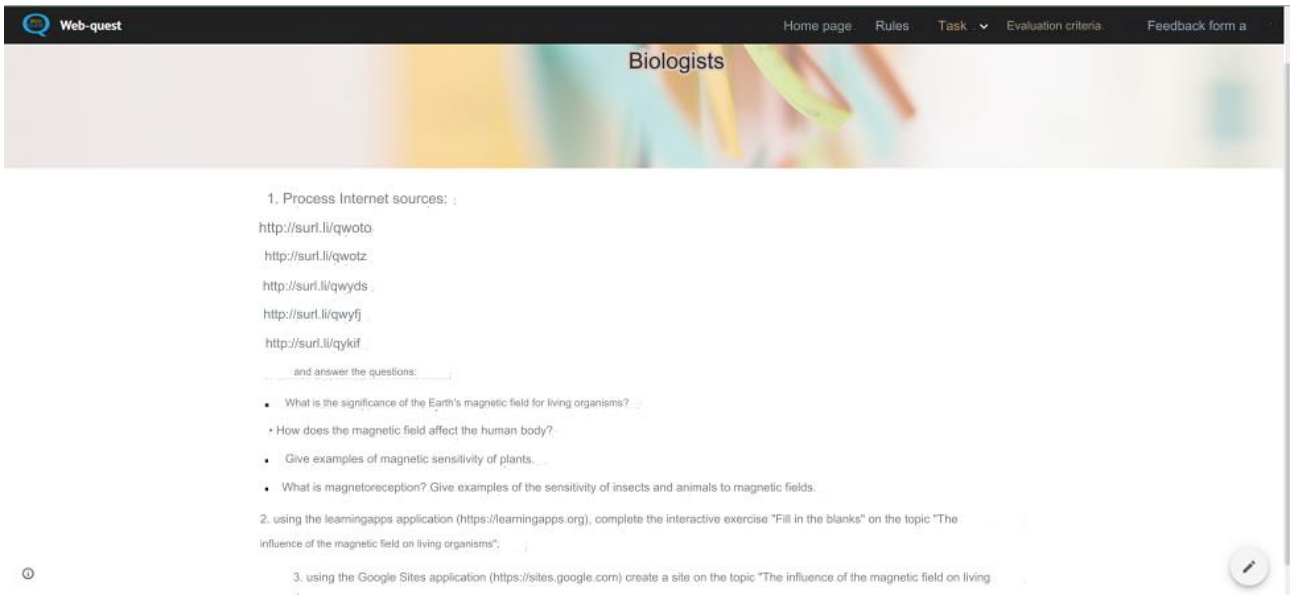


Figure 3. Interface of the page "Tasks for the group "Biologists"

Source: developed by authors

– "Feedback form"

– it added a Google Feedback Form, with the help of which students sent their performances, project works and links to them, discussion of each performance, evaluation of work results. Also, in this section, all the materials completed by the students during the web quest are displayed.

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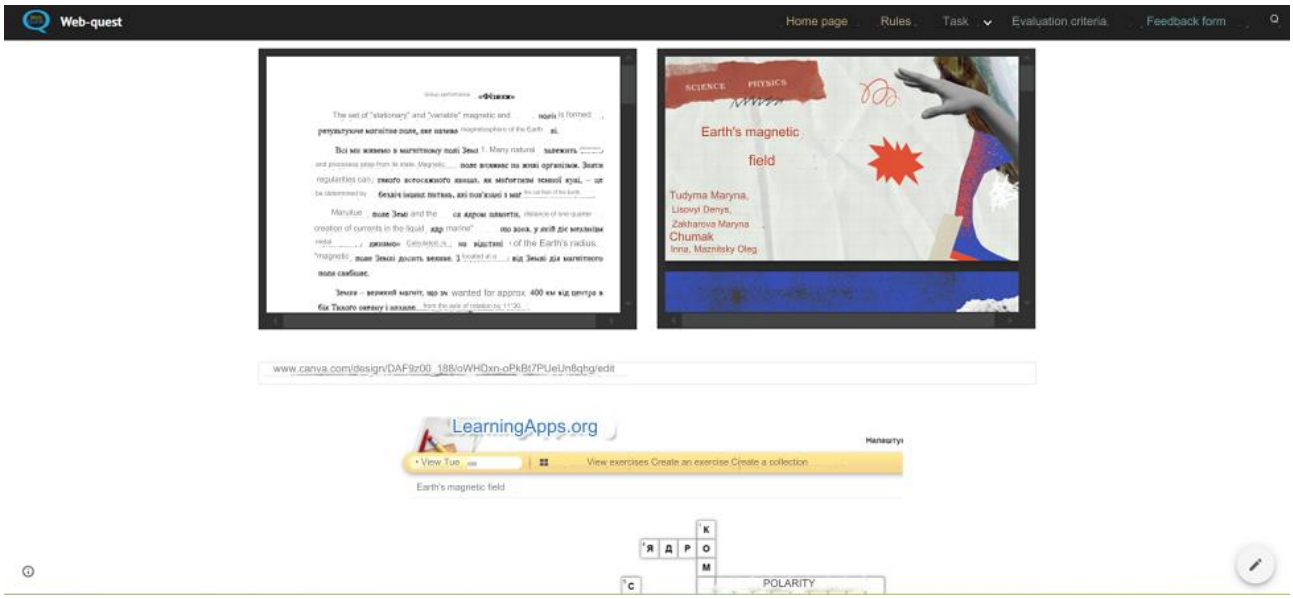


Figure 4. "Feedback form" page

Source: developed by authors

Conclusions. At the current stage of the development of digitalization of the educational system, the role of modern pedagogical technologies in the teaching of the subject "Physics" in general secondary education institutions is increasing, the use of which significantly increases the level of cognitive activity of students. As practical experience proves, it is the "web quest" that has a powerful didactic potential. The use of the "Web-Quest" technology by physics teachers in the educational process allows students to learn how to solve new, unusual tasks. Education seekers have: an increase in the level of motivation to study the subject; development of self-organization and a responsible attitude towards the execution of the quest; formation of information and digital competence, communication skills and concentration on the creation of the final project product, which is much more effective than traditional forms of education.

Author contributions. The authors contributed equally.

Disclosure statement. The authors do not have any conflict of interest.

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FEATURES OF THE DEVELOPMENT OF THE CREATIVE PERSONALITY OF THE FUTURE TEACHER

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Abstract. *The article reveals the theoretical aspects of the development of the creative individuality of the future teacher. The aim of this article is to explore and elucidate the critical features that contribute to the development of a creative personality in future teachers, enabling them to effectively foster creativity among their students and adapt to the dynamic educational environment. Objectives: to identify the essential traits and characteristics that define a creative personality in the context of teaching; to examine the current educational frameworks and pedagogies that support or hinder the development of creativity in teacher education programs; to analyze various case studies that illustrate successful integration of creative teaching methods and the development of creative personalities in educators; to assess how cultivating a creative personality affects teaching methods, classroom environment, and student engagement and learning outcomes; to provide practical recommendations for teacher education programs on fostering creativity in their curriculum and teaching practices. It has been established that creativity, as an individual quality of personality, enables a person to activate his needs, abilities and interests, to find various ways of manifestation of individual activity. At the same time, creative self-realization, as a component of creativity, contributes to the development of personal significance, self-improvement and ensures independence in solving creative tasks by an individual. The main components of an individual's creative activity are identified: cognitive (student activity in mastering knowledge, abilities and skills, activity in creative work, self-development and self-improvement); motivational (formation of motives for creative activity, purposefulness, organization, independence); content (the formation of an active attitude of students to pedagogical activity, the integrity of the content, forms and methods of creative activity); emotional – involves the individual's ability to actively perceive the surrounding reality, the ability to communicate with peers, teachers, acceptance of collective norms of life) and effective – determines the student's desire for creative knowledge of his personality, development of his own creative potential, self-assessment of his creative abilities, etc. The external circumstances and internal aspects of the educational process, the subjective features of the personality of the student of higher education are singled out, which include: the formation of the future teacher's motivation for creative activity by means of training technologies; formation of creative potential through the creation of a creative educational environment, stimulation of the process of creative realization, promotion of the student's sense of usefulness, self-worth; the presence of models of creative behavior, they can be teachers of a higher education institution, invited practicing teachers or other outstanding personalities in the field of student training; free expression of creativity for the purpose of self-realization of the student in the process of classroom and extracurricular work.*

Keywords: *creative individuality; individual; creative individuality of the future teacher; development of creative individuality formation.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 10

Introduction. In the post-war period, the reform of national education will take place through the provision of its anticipatory development, which will significantly actualize the importance of the creative individuality of a specialist and will encourage the search for effective ways of developing this essential integrative quality, in particular, in the future teacher. At the same time, in order for the creative individuality of the teacher to meet the social order of modern society, it should not only be bright and unique, but also capable of active creative self-development. The orientation of professional training of students of higher education institutions on the development of their creative individuality should be carried out, first of all, on the basis of humanism, through the use of partnership pedagogy, artistic pedagogy, which has a powerful cultural and creative development potential.

Literature review. The problem of the development of creative individuality was traditionally considered through the prism of aesthetics and a creative approach, and later entered pedagogical science as an artistic component of pedagogical activity, the research of which is devoted to the scientific works of L. Androschuk, K. Kapustinsky, N. Myropolska, O. Mykhailychenko, O. Otych, G. Poberezhnaya, O. Rudnytska and others. Accordingly, the purpose of the article is to study the theoretical foundations of the development of the creative individuality of the future teacher.

Aims. The aim of this article is to explore and elucidate the critical features that contribute to the development of a creative personality in future teachers, enabling them to effectively foster creativity among their students and adapt to the dynamic educational environment.

Objectives:

- to identify the essential traits and characteristics that define a creative personality in the context of teaching.
- to examine the current educational frameworks and pedagogies that support or hinder the development of creativity in teacher education programs.
- to analyze various case studies that illustrate successful integration of creative teaching methods and the development of creative personalities in educators.
- to assess how cultivating a creative personality affects teaching methods, classroom environment, and student engagement and learning outcomes.
- to provide practical recommendations for teacher education programs on fostering creativity in their curriculum and teaching practices.

These objectives aim to cover a comprehensive exploration of the subject, from theory through practical application, ensuring that the article provides valuable insights for educational theorists, practitioners, and policy makers.

Methodology. The methodological basis was system, process, synergistic, institutional approaches during the research. In the research process, general scientific methods were applied: dialectical, deduction, induction, monographic; a set of economic methods, including economic analysis and synthesis, expert, statistical methods of structural and dynamic analysis, index method, method of point assessment, cognitive modeling and scenario forecasting.

Results. Proceeding from the fact that the growing demands on the personality of the modern teacher, on the level of his professionalism and the nature of pedagogical

activity determine the need to modernize the professional training of students of pedagogical specialties in the conditions of a higher school. The analysis of the practice of higher education makes it possible to assert that the traditional system of student education does not fully meet the new requirements for their level of professionalism. The task is to change the position of the student in the educational process from a passive observer to an active participant in educational work, a subject of his own education and professional self-development. The issues raised by us are extremely relevant for modern educational practice, since the future teacher has a creative individuality, which is often inhumane in nature and alienated from his general and professional culture. The reasons for this state of affairs can be seen in the differences, first of all, between the social order for the creative individuality of teachers and the reproductive content of their professional training, oriented towards the «average» student; in addition, the need to implement an individual approach to the formation of the future teacher's personality and traditional forms of their professional training; as well as the individual goals of the student of higher education and the educational goals of the teacher as the organizer of the educational process.

We are convinced that creativity, as an individual quality of personality, enables a person to activate his needs, abilities and interests, to find various ways of manifestation of individual activity. At the same time, creative self-realization, as a component of creativity, contributes to the development of personal significance, self-improvement and ensures independence in solving creative tasks by an individual.

Let's dwell in more detail on creativity and its manifestations through the prism of training a future teacher. Thus, scientist L. Androschuk has her own point of view regarding the future choreography teacher, who proves that creativity is the basis and integral component of all stages of the formation of the individual style of such a teacher. Involvement of the creative process in the step-by-step formation of the individual style of activity of the future teacher presupposes, first of all, the development of a plan-strategy for the creative and individual growth of the student during his studies at the higher education institution and the launch of the mechanism of self-actualization of the individual. The result of the formation of the individual style of activity of the future choreography teacher in creativity and through creativity, the scientist is convinced, is a bright individuality with a unique professional «handwriting», capable of effectively forming the creative personalities of his students [1, p. 51]. We agree that creativity in all its manifestations ensures the effectiveness of forming the individual style of activity of the future teacher.

Representatives of pedagogical science studied the relationship between the concept of pedagogical creativity and accompanying features and properties, considered the individual style of activity of an individual as the most important sign of his creative character, as well as the ways and means of forming the creative individuality of an individual.

According to S. Sysoeva, pedagogical creativity is a process that reflects the teacher's self-development and self-improvement in his pedagogical activity, where participants interact with each other as subjects of the educational process [8]. The author emphasizes the specific features of the teacher's pedagogical creativity: the

object of activity is the child's personality, which is in constant development; co-creative nature of subjects of pedagogical interaction; the possibility of subjective novelty and originality of the process and result; time limitation of the teacher's and student's creative activity in the educational process; influence on the teacher's pedagogical creativity of many factors that are difficult to predict [8, p. 108].

According to E. Murtazaeva, the formation of pedagogical creativity and the actual creative style of pedagogical activity should take place in stages in institutions of higher education, such as: professional orientation and accumulation of knowledge; actualization of sensory experience; professional adaptation; accumulation and maturation of new didactic and methodical ideas; empirical verification of these ideas in the educational process; activation of educational, research and creative pedagogical activity of the future teacher, including during the implementation of various forms of pedagogical practice [5].

We suggest that creativity, as a source and means of effective self-realization and self-actualization of the individual, should be considered through the creative activity of the individual, which scientists interpret as a systemic phenomenon, a certain set of interconnected elements – creativity, creative abilities, creative activity. V. Kholodenko believes that creative activity is persistent, intense, energetic activity that reveals the essence of creativity, and creativity is an expression of the highest activity. In other words, it is a component of personality that is realized through activity and sets its dynamic limits, therefore it should be considered both as a quality of personality, and as a process, and as a result [9, p. 87], and one cannot disagree with this.

There are several approaches to the interpretation of the concept of «creative activity»: 1) personal (a complex complex characteristic of an individual); 2) activity (integrative category that turns activity into a creative process); 3) personal-activity (activity is a characteristic feature of an individual's activity, which ensures his professional growth and development). The basis of creative activity is the emergence and solution of a creative task, problem situation, and the source is the orientation of the individual towards self-development and self-realization [6].

Based on the individualized approaches to creative activity, the main components of creative activity of an individual are distinguished: cognitive (student activity in mastering knowledge, abilities and skills, activity in creative work, self-development and self-improvement); motivational (formation of motives for creative activity, purposefulness, organization, independence); content (the formation of an active attitude of students to pedagogical activity, the integrity of the content, forms and methods of creative activity); emotional – involves the individual's ability to actively perceive the surrounding reality, the ability to communicate with peers, teachers, acceptance of collective norms of life) and effective – determines the student's desire for creative knowledge of his personality, development of his own creative potential, self-assessment of his creative abilities, etc.

In the scientific literature, when considering the concepts of «professional activity», «professional and pedagogical activity», the interpretation of «professional and creative activity» is quite often found, which is characterized as the ability of an

individual to successfully implement certain functions, carry out activities and solve tasks, which are external to the individual and are caused by social requirements and individual needs. Professionalism is formed and manifested in activity, and therefore represents a complex, complex characteristic, a structure of personal resources that ensure the effective activity of a specialist. We agree that the development of professional and creative activity should have a complex nature, provided that various pedagogical components of the learning process are combined; highlighting the most important tasks for achieving the set goal, etc. [3].

Some scientists closely associate creative activity and creative potential with the individuality of the individual, where the leading category of the problem of the individual style of activity is precisely the category of individuality, which is characterized by internal integrity and relative independence, uniqueness [1, p. 49].

It should be noted that the abilities and inclinations of the individual are revealed, developed and formed in creative and independent activities. The teacher should take into account the personal and social perspective of the development of the creative individuality of future teachers, which is manifested in their creative activity. Creative interaction between the teacher and students is possible if the teacher realizes the students' practical potential. In order for the student to realize his potential, feel successful, turn into a subject of his own development and unique individuality, the teacher should form in future teachers of choreography the ability to act in a non-standard, unfamiliar situation.

It is productive in the scientific position of L. Androschuk that the researcher offered to consider the creative potential and individuality of the specialist choreographer. According to the researcher, the classification of individual styles of choreography teacher activity includes the following components: emotional-creative style, creative-individual style, creative-intellectual style, creative-improvisational style. The distribution of styles is generalized and conditional, since creative individuality is expressed to the greatest extent not in common, but in distinctive features of an individual style of activity [1, p. 51].

Some scientists, analyzing the creative individuality of the future teacher, emphasize the development of the creative potential of future teachers in the process of professional training, which they understand as a complex of specially designed factors influencing the circumstances of the educational process, which ensure a purposeful pedagogical influence on the formation and actualization of the creative potential of the individual in the process of professional preparation.

The invaluable importance of art as a factor and means of development of the creative individuality of the subjects of the pedagogical process is due to its ability to ensure harmonious unity and conflict-free socialization and individualization. In addition, having its own opportunities to influence the development of special abilities and creative qualities of the future teacher, each of the varieties of art forms a certain type of his individuality [6].

E. Saleichuk claims that when ensuring the success of the process of developing the creative individuality of the future teacher, it is necessary to take into account a number of external circumstances and internal aspects of the educational process, as

well as internal, subjective features of the personality of the student of higher education, which include: the formation of the future teacher's motivation for creative activity by means of training technologies (manifestation of the internal, subjective features of the personality of the student of higher education, since it is motivation that is the driving factor that ensures the transition of creative abilities from potential to actual form, awareness of learning goals; understanding of the theoretical and practical significance of acquired knowledge); emotionality of teaching and perception of the content of scientific information; accumulation of volume and novelty of information; professional orientation; support of students' interest in educational activities; creation of a positive psychological climate in the study group [7].

Another important factor in the formation of creative potential, as scientists note, is the creation of a creative educational environment in which a person lives, which would most fully encourage future teachers to reveal creative abilities. After all, the environment of a higher education institution plays a leading role in the process of forming students' creative abilities. Therefore, even in the presence of a stable motivation to create creativity, a student will not be able to realize it without an appropriate environment that would encourage him to do so.

At the same time, a creative educational environment involves the active interaction of participants in the educational process for the purpose of creative self-expression and self-actualization; psychological support and stimulation of the process of creative realization, assistance in the student's sense of usefulness, self-worth; the presence of models of creative behavior, they can be teachers of a higher education institution, invited practicing teachers or other outstanding personalities in the field of student training; free expression of creativity for the purpose of self-realization of the student in the process of classroom and extracurricular work; stimulation of creative pedagogical research using the latest methods and means of organizing the educational process; high level of individualization, uncertainty, problematic, freedom, saturation with tasks of a creative nature, etc. [4].

For us, the opinion regarding the training of a creative teacher who is able to take into account the modern trends of general secondary education is valuable. Creative potential, expression of creativity implies flexibility and originality in decision-making. The future teacher must be ready not only for the process of working in an educational institution, but also for the difficulties and requirements that will arise in the process of professional activity. It is the creative potential, his creative individuality, that is the quality that helps to quickly respond to changes and eliminate contradictions.

Conclusions. When conducting research, we started from the assumption that art, due to its ability to contain worldview orientations and act as a factor in the formation of an artistic picture of the world, should be considered as the basis for the development of the creative individuality of the future teacher. It is a collective and, at the same time, individual channel of influence on the consciousness and behavior of education seekers with the aim of assimilating professionally necessary knowledge, practical creative pedagogical skills and abilities; formation of individual creative abilities and

qualities, own style of professional and pedagogical activity, development of motives and focus on creativity in this activity.

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MODERN PEDAGOGICAL TECHNOLOGIES AND THEIR APPLICATION IN THE WORK OF TEACHERS OF A VOCATIONAL (VOCATIONAL-TECHNICAL) EDUCATION INSTITUTION

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Abstract. *The article theoretically substantiates and experimentally verified modern pedagogical technologies and their application in the work of teachers of professional (vocational and technical) education institutions. The main goal of an article is to perform an analysis of modern pedagogical technologies and their application in the work of teachers of the institution vocational and technical education. To achieve the goal, theoretical analysis of scientific works, synthesis, comparison, and generalization of approaches to the definition of theoretical aspects of modern pedagogical technologies and their application in the work of teachers of professional (vocational-technical) education institutions were used. It has been established that many learning technologies have been developed today, which prompts theoretical generalization, analysis, classification and selection of optimal methods of their use. The process of using traditional and introducing new (innovative) learning technologies proceeds spontaneously. In the procedure of their selection and implementation in the educational process, there are contradictions between: new goals of education and old ways of presenting and learning knowledge; growing volumes of information that need to be transferred to education seekers and the limited amount of study time; the urgent need for pedagogical innovations in the educational process and the insufficient development of the methodology of using new pedagogical technologies in education. The presence of these contradictions determines the need to study the effectiveness of using innovative pedagogical technologies. As a result of our research, it has been proven that the focus of attention of the pedagogical community is on vocational education institutions, which are designed to provide the labor market with qualified workers who are able to successfully work with the most modern production technologies. For this purpose, the regulatory and legal framework is dynamically updated: legal regulation of the functioning of the vocational education system, all its levels and subsystems, the activities of educational institutions of various types and forms of ownership, and the organization of various forms of education is ensured.*

Keywords: *modernization of the place of education; pedagogical technologies; education, training; educational process; pedagogical mastery; competence; foundations of professional education.*

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Introduction. The modern development of technology and production is impossible without highly qualified workers trained by vocational education. Updating the content of training in educational institutions forms the basis of strategic tasks defined by the State National Program "Education" ("Ukraine of the XXI century"). This necessitates the implementation of the Concept of Vocational Education, the Laws of Ukraine "On Education", "On Vocational and Technical Education", the National Doctrine of Education Development in Ukraine, etc. The current stage of development of vocational and technical educational institutions is connected with the need to solve the problem of increasing the intellectual level of cognitive and creative potential of students. Finding means for the development of cognitive and creative abilities, increasing the effectiveness of education is a common problem for many countries.

Currently, a large number of learning technologies have been developed, which prompts theoretical generalization, analysis, classification and selection of optimal ones. The process of using traditional and introducing new (innovative) learning technologies proceeds spontaneously. In the procedure of their selection and implementation in the educational process, there are contradictions between: new goals of education and old ways of presenting and assimilating knowledge; the growing amount of information that needs to be conveyed to students and the limited amount of study time; the urgent need for pedagogical innovations in the educational process and insufficient development of the methodology of using new pedagogical technologies in education. The presence of these contradictions determines the need to study the effectiveness of using innovative pedagogical technologies.

Currently, the pedagogical public is in the center of attention: vocational education institutions are designed to provide the labor market with qualified workers who are able to work successfully with the most modern production technologies. For this purpose, the regulatory and legal framework is dynamically updated: legal regulation of the functioning of the vocational education system, all its levels and subsystems, the activities of educational institutions of various types and forms of ownership, and the organization of various forms of education is ensured. By the way, work on the draft of the new Law of Ukraine "On Vocational Training" has begun.

This Law will regulate public relations aimed at ensuring equal access rights to professional education for citizens, taking into account the needs of the labor market for qualified workers and middle-level specialists in the context of Ukraine's integration into the international economic and educational space.

A number of resolutions of the Cabinet of Ministers of Ukraine regarding the modernization of the training of qualified workers were adopted, in particular: "On making changes to the Procedure for providing jobs for students, trainees of vocational training institutions for industrial training and industrial practice" (June 26, 2013 No. 503); "On Amendments to the Regulations on Vocational and Technical Educational Institutions" (No. 505 dated June 26, 2013); "On Amendments to the Regulations on Graduate Vocational and Technical Education" (June 26, 2013, No. 456).

Taking into account the realities of modernity, the degree of professional and technical education, opportunities for learning in various forms and types of professional training, new Standard Rules for admission to vocational and technical

educational institutions were approved and implemented (order of the Ministry of Education and Science of Ukraine dated May 14, 2013 No. 499, registered at the Ministry of Justice of Ukraine on May 29, 2013 under No. 823/23355). Let's briefly dwell on the aspects of the functioning of this educational field [3, p. 175].

Literature review. The issue of the functioning of the education system in Ukraine was highlighted in their works by: I. Kaleniuk, O. Makarova, V. Novikov. A number of works are devoted to the study of the competitiveness of graduates of vocational education institutions, in particular, by O. Grishnova, M. Krymova, V. Onikienko, M. Semikina, O. Tsymbala, as well as such foreign authors as S. Sotnikova, E. Maslov, S. Glazyrin and others Research by scientists provides an opportunity to systematize the development of the professional education system and analyze the processes of this period, in particular, identify a large number of problems in the educational system. At the same time, the issue of a detailed analysis of the problems and prospects for the development of professional technical education in Ukraine has not been investigated in detail and needs certain clarifications.

Aims. Perform an analysis of modern pedagogical technologies and their application in the work of teachers of the institution vocational and technical education.

Methodology. To achieve the goal, theoretical analysis of scientific works, synthesis, comparison and generalization of approaches to the definition of theoretical aspects of modern pedagogical technologies and their application in the work of teachers of professional (vocational-technical) education institutions were used.

Results. We define vocational and technical education as a component of the education system of Ukraine, which is a complex of pedagogical and organizational-management measures aimed at ensuring that citizens acquire knowledge, abilities and skills in their chosen field of professional activity, develop competence and professionalism, and educate general and professional culture.

It is important that the training of workers is carried out mainly at the expense of the state budget. Note that the placement of the state order is carried out on a competitive basis with the conclusion of a state contract with the executor of the order.

The quality of vocational education directly depends on the pedagogical skill of the teacher or master of industrial training, on their ability to implement a model of such pedagogical interaction that will help the graduate to work productively from the first months of work in the specialty. Updating the content of vocational education is directly related to the standardization of this educational field. It should be noted that the development of state standards of vocational and technical education solves a number of urgent tasks, in particular: the implementation of a unified state policy in the field of vocational and technical education; the formation of a unified educational space in Ukraine; ensuring equivalence of vocational education and recognition of qualifications and documents on vocational education in all regions and sectors of the economy; elimination of differences in the requirements for the training of qualified workers and junior specialists who are competitive on the labor market and in the terminology used in vocational education; creation of a regulatory framework for the functioning of qualification levels of vocational education in accordance with the National Framework of Qualifications [9, p. 123].

There are also problems restraining the development of vocational and technical education in Ukraine, inhibiting its dynamic entry into the European educational space. Yes, today there is practically no interaction between central and regional executive bodies, enterprises, institutions, organizations, and educational institutions in the formation of a state order for the training of workers. An equally important problem of vocational education, in particular with regard to the creation of effective conditions for the implementation of modern pedagogical technologies, is extremely insufficient material and technical support.

In addition, there is an urgent need to modernize the content and improve the quality of vocational education, which would meet the needs of employers. It is about the development of modern state standards of professional and technical education, which should focus on the results of training, on the purposeful formation of the professional competence of graduates, and the versatile development of personal qualities.

The relevance of this important issue is reinforced by the fact that no new professional standards have yet been developed, which should be the basis of the state standards of vocational education. These problems cannot be solved without the implementation of legal norms for the activities of all participants in the educational process. It is about the new edition of the Law of Ukraine "On Education", about the adoption of the Law of Ukraine "On Vocational Education" and other legal documents.

The development of educational processes in modern society, the vast experience of pedagogical innovations of author schools and innovative teachers, the results of psychological and pedagogical research constantly require generalization and systematization [4, p. 65, 12-15].

One of the means of solving this problem is the technological approach, the application of the concept of "technology" to the sphere of education, to pedagogical processes [4, p. 65].

The term "pedagogical technology" literally means the teaching of pedagogical art, mastery.

Pedagogical (educational) technology is a system of functioning of all components of the pedagogical process, which is built on scientific education, programmed in time and space and leads to appropriate results.

The guide in any technology is a detailed definition of the final result and its precise achievement. And the prerequisites for the application of the term "technology" in relation to processes in the industrial or social sphere are their programming, delineation of the final properties of the intended product, the means of its creation, purposeful modeling of the conditions for their implementation, as well as the real functioning of these processes.

Main modern pedagogical technologies:

1. Informational and developmental, which involve the presentation of theoretical information by the teacher during a lecture or seminar session; organization of students' independent work on learning new knowledge from theoretical sources, instructions, computer teaching aids.

2. Activities aimed at training a professional capable of competently solving production tasks. These technologies provide for the analysis of production situations, the solution of situational production tasks, business games, modeling of professional activity in the educational process, the organization of professionally directed research and research work, etc.

3. Developmental, aimed at the professional development of a future specialist who is able to work creatively, independently determine methods and means of solving problematic production situations, etc. These technologies include problem-based learning, problem-based lectures, seminars, educational discussions, laboratory-practical work with elements of research, activities, and games.

4. Personally oriented, the purpose of which is the formation of an active, creative personality of the future specialist, capable of independently building and adjusting his educational and cognitive activities. These technologies include classroom (minor) and out-of-class independent activity of students, work according to an individual plan, research work, project method.

5. Technology of critical thinking. Critical thinking is the type of thinking that helps to be critical of any statements, not to take anything on faith without evidence, but at the same time to be open to new ideas and methods. Critical thinking is a necessary condition for freedom of choice, quality of forecast, responsibility for one's own decisions.

6. Design technology. The purpose of the technology is to stimulate students' interest in certain problems, which involves the possession of a certain amount of knowledge and, through project activities, which involve solving these problems, the ability to practically apply the acquired knowledge.

7. Game technologies. Play, along with work and study, is one of the main types of human activity, a strange phenomenon of our existence. By definition, a game is a type of activity in the conditions of situations aimed at the reproduction and assimilation of social experience, in which self-governance by behavior is formed and improved.

8. Technology of modular training the essence of modular training is that the student achieves specific goals of educational and cognitive activity completely independently (or with a certain amount of help). Learning is based on the formation of the thinking mechanism, and not on the exploitation of memory [7].

The following main components can be distinguished in any pedagogical technology:

– conceptual, which reflects the "ideology" of designing and implementing pedagogical technology;

– substantive and procedural, which reflects the goal (general and specific goals); content of educational material, methods and forms of education, upbringing, development of students; methods and forms of teacher's pedagogical activity; activity of the teacher in managing the educational process;

– a professional component that reflects the dependence of the success of the functioning and reproduction of the designed pedagogical technology on the level of

the teacher's pedagogical skills. Pedagogical technology must meet the main methodological requirements (technological criteria), namely:

– conceptuality (each pedagogical technology must be based on a corresponding scientific concept, covering philosophical, psychological, didactic and socio-pedagogical justification of the achievement of educational goals);

– systematicity (pedagogical technology must have all the signs of a system: logic of the process, interconnection of all its parts, integrity);

– controllability, which implies the possibility of diagnostic goal setting, planning, designing the learning process, step-by-step diagnostics, varying means and methods in order to correct results;

– efficiency (modern pedagogical technologies exist in competitive conditions and must be effective in terms of results and optimal costs, guarantee the achievement of the planned standard of education);

– reproducibility, which implies the possibility of using (repetition, reproduction) pedagogical technology in other educational institutions of the same type, by other subjects [6, p. 200].

Sources and components of new pedagogical technologies: social transformation and new pedagogical thinking; social, pedagogical, psychological sciences; modern advanced pedagogical experience; historical Ukrainian and foreign experience (acquired by previous generations); folk pedagogy.

Modern pedagogical technologies and their application in the work of teachers of professional (vocational and technical) education institutions refer to innovative methods and technologies of learning, which are increasingly being introduced into the educational process in vocational and technical educational institutions. These technologies are designed to enhance the learning experience, improve student engagement, and better prepare students for the demands of today's workforce.

Based on the results of the conducted research, the main modern pedagogical technologies that can be used by teachers of professional (vocational and technical) education institutions were systematized (Table 1).

The application of modern pedagogical technologies in vocational education not only enhances educational outcomes but also ensures that students are adept at using technological tools, making them better prepared for modern work environments. Teachers play a pivotal role in this transformation, acting as facilitators who integrate technology into their teaching practices to enrich the learning experience and outcomes for their students.

Thus, the learning technology involves the management of the didactic process, which includes the organization of the student's activities and control over these activities. These processes continuously interact: the result of control affects the content of management actions, that is, it involves further organization of activities in the interests of achieving goals determined on the basis of educational standards.

Table 1. The main modern pedagogical technologies that can be used by teachers of professional (vocational and technical) education institutions

Tools	Classification	Description
Integration of Digital Tools	Learning Management Systems (LMS)	Platforms like Moodle, Blackboard, and Canvas allow teachers to create, manage, and distribute educational content digitally, facilitating a more organized and accessible learning environment
	Simulation and Virtual Reality (VR)	These technologies provide students with the opportunity to engage in realistic job simulations, enhancing their practical skills without the constraints of physical and material resources
Collaborative Learning Technologies	Cloud-based Collaboration Tools	Tools like Google Workspace and Microsoft Teams enable students to work together on projects and assignments, fostering teamwork skills crucial for the workplace
	Interactive Whiteboards and Smart Classrooms	These improve the interactivity of classroom sessions, allowing for dynamic presentations, real-time collaboration, and immediate feedback
Adaptive Learning Technologies	Artificial Intelligence (AI)	AI can tailor educational experiences to individual learning paces and styles, providing personalized tasks and feedback that address specific educational needs
	Big Data and Analytics	These can help teachers track progress and adapt teaching strategies based on detailed data about student engagement and achievement
Mobile Learning	Smartphones and Tablet Apps	Mobile devices can be used to access educational materials and complete assignments, making learning more flexible and accessible from anywhere at any time
	Augmented Reality (AR) Apps	AR adds a layer of interactive, visual information to the real world, enhancing practical learning experiences like mechanical repairs or architecture
Flipped Classroom Models	Video Lectures and Online Content	Teachers can provide lectures in video format to be watched outside class, allowing classroom time to be used for discussion, practical applications, and individualized tutoring
Professional Development for Teachers	Continuous Learning	Institutions must provide ongoing training for teachers to keep them updated on the latest educational technologies and methodologies
	Workshops and Certification	Regular workshops and additional qualifications in modern pedagogical technologies ensure that teachers are proficient in both using these tools and integrating them into their teaching
Assessment Technologies	E-assessments and Feedback Tools	Digital assessments can provide immediate feedback to students, allow for a wider range of testing formats, and make it easier to track progress over time

Source: systematized by the author

So, we can conclude that technology is an objective process of education evolution. Any modern pedagogical technology is a synthesis of the achievements of pedagogical science and practice, a combination of traditional elements of past experience and what was born of social progress, humanization and democratization of society. Its source and components: social transformations and new pedagogical thinking; pedagogical, psychological and social sciences; advanced pedagogical experience; Ukrainian and foreign experience of the past; ethnopedagogy. No technology is universal, so each of them requires the development of its own technological approach to its use in specific situations. The structure and content of innovative pedagogical technologies are designed taking into account the fact that the effectiveness of training in a professional educational institution is determined by the level of qualifications of teachers and their value orientations [1].

Taking into account the specifics of professional and practical training and the proposals of customers of labor personnel, the educational institution in certain cases can combine the terms of passing industrial practice from the grades belonging to the first attestation level of vocational and technical educational institutions (in accordance with the resolution of the Cabinet of Ministers of Ukraine dated September 11, 2007 r. No. 1117 "On Approval of the State List of Professions for the Training of Skilled Workers in Vocational and Technical Educational Institutions").

Technological professional-theoretical and professional-practical training is carried out during the entire period of study, starting from the first year, in parallel with other types of training and study of subjects of the general education cycle. From 25 to 45 hours are allocated to subjects freely chosen by students of a vocational and technical educational institution once per full course, based on the duration of the study period. Elective subjects are determined by the educational institution within the limits of the maximum permissible educational load, taking into account the interests and needs of students, the level of educational and methodological and personnel support, as well as taking into account the profile of the professions for which training is carried out in the vocational and technical educational institution. The vocational and technical educational institution independently determines the procedure for the implementation of the typical basic structure by dividing the study time between semesters [8, p. 232].

According to the proposals of the customers of labor personnel, in accordance with changes in equipment, technologies, labor organization in production and in the service sector, the educational institution develops a variable component of the content of professional and technical education. In accordance with paragraph 2 of the "Regulations on Degree Vocational and Technical Education", approved by the Resolution of the Cabinet of Ministers of Ukraine dated June 3, 1999 No. 956, the vocational and technical educational institution determines the list of additional educational subjects and introduces them to the work curricula. In addition, additional educational topics can be introduced to the work training programs.

Discussion. A modern skilled worker must be comprehensively developed, technically educated, cultured; have high professional skills. It is worth agreeing that the use of technologies ensures the quality of knowledge, the effectiveness of the organization of the pedagogical process, contributes to the improvement of

independent work of students, the transformation of acquired knowledge into qualifying skills and abilities, and the formation of professional competence of future qualified workers.

Systematic involvement of students in educational and professional activities by means of information and communication technologies is used in the Chernihiv vocational training center. They include:

– computer simulators used for preliminary practice of skills in handling dangerous substances or devices;

– automated educational systems, which are based on multimedia technologies and are currently one of the most effective means of learning, because the combined use of computer graphics, animation, live video, sound, and other media components provides a unique opportunity to make the subject being studied as visual as possible, and therefore understandable and accessible;

– educational films that provide an opportunity to reproduce the situations of the future profession in the form of real special filming using three-dimensional computer graphics;

– multimedia presentations, which are one of the most functional and effective tools during lectures, seminars, scientific conferences, etc.;

– electronic manuals that enable students to acquire modern knowledge, in particular, in self-education activities. Unfortunately, today there is an urgent need for textbooks and training manuals on professional topics, and therefore modern electronic manuals successfully complement the existing system of training tools [2].

Therefore, the following should be included among the priority directions of the development of educational and professional activities of future qualified workers by means of information and communication technologies in professional education: creation of new computer classes; formation of advanced training and professional training programs; pedagogical, administrative and engineering-technical personnel in the field of information technologies; updating and development of new electronic educational materials; creation of an electronic library of educational materials and ensuring free access of students to the educational resources placed in it; provision of pedagogical workers with new multimedia and informational means; reorganization of the service department and organization of its effective activity [10, p. 41].

Instead, in order to develop the intellectual potential of future qualified workers, pedagogical workers use, in addition to information and communication technologies, tools established in pedagogical practice.

Summarizing the above, we note that in the modern practice of training qualified workers, personal development pedagogical technologies are widely used. For this, pedagogical workers use a complex of tools, techniques and methods of educational work aimed at the comprehensive development of the personality of students, despite the fact that their actions are not always systematic in nature.

A modern teacher must do many things: know how to use multimedia teaching aids, be able to find educational materials in telecommunication networks, know how to present the content of educational subjects with the help of multimedia technologies. The position of the management of the educational institution plays an important role

in this process. If the manager himself does not feel the need for these technologies, takes a passive position of non-interference, then a very large percentage of ped workers will not be involved in this process. But mastering a computer does not mean being ready to use it in the educational process [11, p. 9].

For this, it is necessary: to have an idea of the possibilities of practical implementation of training in specific conditions; use of multimedia technologies; to know the method of application of information and computer technologies. projects that can be considered: creation of a didactic manual using PowerPoint, creation of a thematic catalog of Internet resources, creation of electronic educational and methodological complexes using the software product Microsoft Office Front Page, creation of electronic tests using the mytest x and "testorium" programs, project method and Microsoft Publisher bulletins, development of extracurricular activities using Internet resources. that is, it is necessary to show what is possible with the help of information and computer technologies, what elements of the lesson they can replace, what lessons can be constructed with their help. as long as the teacher or master does not know how to use all this, it is not proven that he is ready to fully apply information and computer technologies. this also takes time, you need "non-inert" teachers who will spend their time, try, who must be stimulated and noticed by the management [5].

It is worth emphasizing that the teacher is ready to fully use information and computer technologies if he: knows how to use technical means of information and computer technologies; knows multimedia and hypertext technologies, understands the advantages of hypertext and hypermedia, didactic possibilities of the Internet (as well as its disadvantages); can use educational electronic publications (textbooks, reference books, knowledge control programs) - understands didactic features of modern communication technologies: forums, blogs, chats; owns the method of applying all this in a specific educational element.

The use of computer information technologies is of great importance. First, the use of presentations can provide clarity, which contributes to a comprehensive perception and better memorization of the material. The second advantage of multimedia presentations is the speed and convenience of reproduction of all the latest production technologies, modern equipment, tools and materials through photos, graphics, drawings and so on. In this way, students better perceive and remember the presented information, thanks to the use of information and communication technologies. As a result, we achieve the main goal of training - a comprehensively developed personality, a specialist who is able to develop and improve his skills in the conditions of the modern labor market and be a sought-after qualified specialist. The implementation of innovative technologies through information and computer technologies in the work practice of the school is of crucial importance in improving the quality of students' acquisition of professional knowledge.

Conclusions. Today, pedagogical science offers a complex of means of pedagogical technologies and shows ways of their practical application. Pedagogical technologies of computer informatization of education, technologies of intensive, personally-oriented, personally-active and anticipatory training, etc., are being popularized today.

"Pedagogical technology" is a systematic method of creation, application and determination of the entire process of teaching and assimilation of knowledge, taking into account technical and human resources and their interaction, which considers the optimization of forms of education as its task.

Pedagogical technology is a complex, integrative process that includes people, ideas, means and ways of organizing activities to analyze problems and plan, provide, evaluate and manage solutions to problems related to all aspects of knowledge acquisition.

The teacher's awareness of the peculiarities of pedagogical technologies ensures the effective use of modern technologies of education and training in the educational process. One of the promising technologies today is "contextual learning", which requires you to build connections between a specific meaning and its use. The teacher and/or master of industrial training in such a model is an excellent organizer: he must organize the educational and cognitive activities of students in accordance with the situation, understand everyone, and contribute to the creation of the most optimal trajectory of the professional development of each student. Assumptions and tasks are proposed taking into account the future specialty of students, it is oriented in the choice of specific material and the handicap of its presentation, which develops its design, constructive and organizational components of professional pedagogical competence. Of particular importance in innovative education are project-organized technologies for training robots in a team, which contribute to the development of project, organizational and communicative competencies in all participants of the educational process.

Therefore, innovative educational technologies, according to our hypothesis, transform the teacher, the master of industrial training into an organizer, consultant and assistant who creates the necessary conditions for the active cognitive activity of students.

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CHAPTER 3
THEORY AND METHODS OF VOCATIONAL EDUCATION

DEVELOPMENT OF ECOLOGICAL CULTURE IN FUTURE TEACHERS OF BIOLOGY AND ECOLOGY

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Abstract. *This paper delves into the crucial role of ecological education in developing the ecological culture among future biology and ecology teachers. Given the pressing challenges of the ecological crisis, this study emphasizes the need for an educational paradigm that not only imparts environmental knowledge but also fosters a deep-seated value system and responsible behaviors towards the environment. The research identifies the core components of ecological culture, which include environmental knowledge, skills, values, and the ability to predict and mitigate the adverse impacts of human activities on nature. The methodology employs a blend of traditional and innovative educational techniques, incorporating discussions, observations, surveys, and the integration of environmental content across the curriculum. The study highlights the structured formation of ecological culture through a five-stage process, ranging from initial orientation to reflective evaluation. Each stage is designed to enhance students' engagement with environmental issues, cultivate a professional and personal commitment to environmental stewardship, and develop competencies that align with the normative documents of higher pedagogical education. The findings underscore the significance of integrating ecological education within the framework of higher education, demonstrating that a systematic approach can effectively cultivate future educators who are well-equipped to promote and embody ecological culture. This integration not only prepares educators to handle environmental challenges professionally but also encourages the adoption of sustainable practices in their personal lives and teaching careers. The paper concludes that establishing a robust ecological culture in educational settings is pivotal for fostering a generation of educators who are proactive in addressing and solving environmental issues.*

Keywords: *ecological education; ecological culture; biology and ecology teacher; components of ecological culture.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 18

Introduction. The current ecological crisis, representing a powerful challenge to society, confirms the fact that a person on the path to scientific and technological progress, has only the experience of environmental activities, which did not contribute to its successful adaptation and is characterized by environmental instability. The leading role in this process belongs to the education system, given its proactive character. Recognition of environmental problems as global determines the need for an integrated direction of education on the formation of ecological culture, as one of the highest values. Ecological culture is a complex pedagogical phenomenon, which has a multicomponent structure. Among the most used components of the future teacher training are: content, motivation, operational and activity.

The formation of the ecological culture of the future teacher of the foundation of health contributes to:

– mastering the work experience of professionals in this business; familiarizing with the flow of environmental information in the form of analysis, synthesis, evaluation,
– forecasting of the environmental consequences of human life and drawing up recommendations for solving environmental problems;
– development of general cultural and human competencies provided for by the requirements of normative documents of higher pedagogical education,
– paying attention to the environmental aspects of the content of vocational education of the teacher of health.

A coherent combination in the educational process of specific organizational and pedagogical forms, methods and means provides conditions for the effective formation of ecological knowledge, views, beliefs on the problem of interaction between man and nature, the formation of value orientations of conscious, active and, most importantly, responsible attitude to the problems of the environment and their solution. Thus, the conditions for effective formation of the ecological culture of future teachers in the educational process are provided.

The socio-cultural situation of the twenty-first century sets a benchmark for the education system aimed at harmonizing relations in the "man-society-nature" system, capable of withstanding the worsening environmental situation.

The current ecological crisis, representing a powerful challenge to society, confirms the fact that a person on the way to scientific and technological progress has only the experience of ecological activity that did not contribute to its successful adaptation and is characterized by ecological instability. The leading role in this process belongs to the education system, given its advanced nature [5-6].

Environmental education is becoming the core of modern education and serves as a key to restructuring its modern systems and society as a whole.

Recognition of environmental problems as global determines the need for a comprehensive focus of education on the formation of environmental culture as one of the highest values.

Literature review. The founders of the development of ecological culture of the individual were V. Sukhomlynskyi, I. Suravehina, O. Zakhlebnyi, I. Zverev, who substantiated its theoretical foundations and developed conceptual provisions.

V. Bondarenko, T. Hladiuk, E. Hirusov, I. Zverev, O. Korol, L. Lukianova and others devoted their research to certain aspects of the formation of future teachers' ecological culture.

An analysis of the works of many researchers has shown that almost all scientists point to the main components of environmental culture: a system of environmental knowledge; a system of skills and abilities for the rational use, enrichment and protection of nature; environmental work, a system of environmental values [3, 9-18].

B. Likhachev understands ecological culture as a new formation in a personality that is born and develops under the influence of the motivational, intellectual and emotional spheres of life and materializes in the style of relations with the social and natural environment.

Considering the issue of ecological culture of the individual, I. Zverev and I. Suravehina believe that it is based on an understanding of the laws of living systems and respect for life, and its main indicator is social and individual environmental responsibility for events in nature and human life.

M. Rogozina sees ecological culture as "a new way of connecting people with nature, reconciling them with it on the basis of a deeper knowledge of it."

C. Sovgira determines that the basis of ecological culture is ecological knowledge, which, according to the level of generalization, is divided into local, thematic, subject and philosophical.

Ecological culture is a complex pedagogical phenomenon with a multicomponent structure.

The researchers note the leading role of the teacher in the development of the ecological culture of the individual, which is manifested in a responsible, caring attitude to the environment, as well as in environmentally oriented reflective, evaluative and practical activities in life situations.

Having analyzed the concept of ecological culture in the works of various scholars, we define it as an integrative personality trait that contains relevant ideals and values, norms of behavior, and environmental responsibility. We can conclude that all definitions of environmental culture do not exclude but complement each other.

However, in order for future biology and ecology teachers to fulfill their mission, they themselves must be carriers of ecological culture, individuals of a safe type of behavior characterized by the inability to harm themselves, other people and the environment.

Aims. In this regard, the formation of ecological culture in the future biology and ecology teacher is a main goal of an article that requires a detailed consideration of this process.

Methodology. To test the research hypothesis, various methods were used: conversation, observation, survey, questionnaire, methods of mathematical statistics for quantitative and qualitative analysis of experimental data, determination of the reliability of the results. The methodological basis for revealing the essence of the state of environmental education and upbringing of future biology teachers at the present stage of society's development is based on various approaches and principles.

Results. However, in order for future biology and ecology teachers to fulfill their mission, they themselves must be carriers of ecological culture, individuals of a safe type of behavior characterized by the inability to harm themselves, other people and the environment.

In this regard, the formation of ecological culture in the future biology and ecology teacher is an urgent problem that requires a detailed consideration of this process.

In pedagogy, the ecological culture of a personality is understood as a measure and method of realization and development of the essential forces of a person, ecological thinking in the process of spiritual and material development of nature and maintaining it as a value.

At the level of the educational process, the formation of students' ecological culture is achieved by:

1) filling the educational process with environmental content;

2) combining classroom organizational forms and innovative, including interactive methods of forming students' environmental culture;

3) introducing specific forms and means into extracurricular activities.

The structure of ecological culture includes the following components:

- a system of scientific knowledge about the interaction in the "nature-society-human" system, aimed at understanding the processes and results of interaction - human, society and nature;

- intellectual and practical skills related to studying and assessing the state of the environment, predicting the consequences of human intervention in natural processes, and observing the norms of behavior and activity;

- emotional and value attitude to nature, environment, health, environmental activities to preserve and improve the environment and health [5, 13-18].

In his research, S. A. Lipin identifies three main stages of environmental culture formation:

a) unconscious imitative behavior (at this stage, activities are equated with imitation or with activities based on the principle "It is necessary", the most important skills and behavioral stereotypes are laid down);

b) conscious behavior, when behavior is mostly determined by the knowledge gained in the learning process (at this stage, behavior is corrected, stereotypes of behavior in standard situations are formed);

c) stereotyped behavior (this stage is characterized by the fact that a person acts in accordance with the stereotypes of his/her behavior and established habits of behavior) [2].

The analysis of the theory and practice of forming the ecological culture of future teachers of biology and ecology has shown that the formation of ecological culture in the conditions of higher education requires an organized system, the effectiveness of which is ensured by the availability of an appropriate conceptual and methodological basis, namely

- creation of a unified approach to the formation of ecological culture in the educational space of higher education in the course of various educational activities of students;

- environmental education should be based on a systematic principle;

- the process of formation should be based on a hierarchical system of philosophical categories and laws of cognition;

- students should have a system of environmental value orientations, which is ensured by the implementation of a set of axiological principles (democracy, humanistic orientation, tolerance, self-determination) in the system of purposeful development of the relationship between the inner world of students and the external environment [1].

In our study, we identified the following components of future biology and ecology teachers' ecological culture:

- the motivational component of ecological culture is represented by the system of its motivating forces, needs, aspirations, intentions and life preferences. The basis of the motivational component is professional orientation, personal attitude to the acquisition and implementation of their knowledge, skills and abilities, which is also expressed in the inclination, interest in the profession, desire to succeed;

- the value and worldview component of the ecological culture of specialists is formed by a set of social, psychological, pedagogical, ecological values created by mankind and included in the pedagogical process at the present stage of education development;

- the content and activity component includes philosophical, psychological knowledge, as well as skills and abilities in the organization of environmental activities;

- emotional and volitional component of ecological culture implies the presence of emotional sensitivity of the individual to nature, experience of emotional and volitional attitude to nature, volitional tension in solving socio-ecological problems at the personal level, achieving optimization of relations between man and nature;

- the reflexive component of environmental culture includes a number of students' abilities: self-assessment and self-control of various types of experience (environmental, socio-cultural and diagnostic); transformation of the system of environmental and social knowledge in a certain socio-natural environment; orientation to the quality and level of socio-ecological development of specialists in various fields of activity and prompt response and changes in this process [7].

The analysis of the research allowed us to define the principles on the basis of which the process of environmental training of future teachers is carried out:

- the principle of integrity of the system of training a specialist in a higher education institution, which involves combining the goals and means of training into a single system;

- the principle of selection and adequacy of the information received;

- the principle of interdisciplinary connections and integration of disciplines;

- the principle of individualization, taking into account personal qualities;

- the principle of subjective development and self-development;

- the principle of personalization of pedagogical interaction;
- the principle of reflective management of the process of general and professional development;
- the principle of inclusion in innovative activities, closely related to the principle of unity of the subjective and personal approach;
- the principle of stimulating the processes of success and improvement;
- the principle of subjectification of natural objects;
- the principle of forming opinions, which consists in the formation of a system of ecological ideas of the individual;
- the principle of reliance on methods of contextual and problem-dialogic communication [8].

In the process of forming the environmental culture of future biology and ecology teachers, we distinguish 5 stages:

Stage I is an orientation and familiarization stage. The stage involves the introduction of environmental components into general education disciplines; familiarization with the goals, objectives, content of future professional activity, its place and role in solving environmental problems.

The second stage is motivational. This is the stage of predominantly forming value attitudes towards nature and humans. The general task of this stage is to develop the student's environmental and value orientations.

Stage III - practice-oriented. The objectives of this stage are: to acquire knowledge about the relationship and complementary trends of ecologization and humanization in education and civilization development; to develop the concept of a personality-oriented style of professional activity based on the formation of professional value orientations and knowledge about the mechanisms of personality development.

Stage IV - self-organization - involves comprehension of existing knowledge and experience; use of the acquired knowledge, skills, abilities in practical activities, aimed at creating own models of professional activity with the inclusion of the environmental component; professional formation and self-realization.

Stage V - reflexive - is the stage of the subject's assessment of the productivity of his/her development as a result of professional activity, in solving environmental problems; establishing the reasons for the recorded state of development; assessing personal value, the significance of the problems solved, and the environmental activities carried out. This stage is highlighted as a separate one conditionally, as it permeates all the above stages.

The formation of the ecological culture of the future teacher of biology and ecology is facilitated by:

- mastering the experience of professionals in this field, familiarization with the flow of environmental information in the form of analysis, generalization, evaluation, prediction of the environmental consequences of human activity and making recommendations for solving environmental problems;
- development of general cultural and human competencies stipulated by the requirements of normative documents of higher pedagogical education, paying

attention to the environmental aspects of the content of professional education of teachers of biology and ecology [4];

- development of students' creative activity in the process of solving environmental problems using the whole range of technological techniques.

Conclusions. Thus, the coordinated combination of specific organizational and pedagogical forms, methods and tools in the educational process provides conditions for the effective formation of environmental knowledge, views, beliefs on the problem of human-nature interaction, the formation of value orientations of conscious, active and, most importantly, responsible attitude to environmental problems and their solution. Thus, the conditions for the effective formation of the ecological culture of future teachers of biology and ecology in the educational process are provided.

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CONTENT OF PROFESSIONAL COMPETENCE OF FOREIGN LANGUAGE LECTURER

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Abstract. *The article deals with the content of professional competence of foreign language lecturer. The aim of the article is to comprehensively delineate and analyze the essential professional competencies required by foreign language lecturers. Scientific works devoted to the study of the competences of foreign language teachers became the basis of the research methodology. The main methods of the conducted research were the methods of analysis, synthesis, comparative analysis, systematization, and generalization. It seeks to offer a structured framework that encapsulates the skills, knowledge, and attributes necessary to effectively teach a foreign language in diverse educational settings. It is generalised that the professional competence of foreign language lecturer is a unity of theoretical and practical readiness of teachers to carry out their professional activities. The current state of theory and practice of professional pedagogical training of foreign language lecturer is analysed. The conceptual foundations of the formation and development of foreign language lecturer's professional competence are substantiated regarding the prospects and strategies of pedagogical science development. The analysis of peculiarities and values of pedagogical activity, taking into account the need to transform and improve the modern pedagogical system, allowed us to conclude that it is expedient to organise the educational process in such a way that involves the formation of professional competence of foreign language lecturer on the basis of a system of internal motives and values, professional knowledge and psychological and pedagogical skills, as well as readiness for creative pedagogical work.*

Keywords: *professional competence; foreign language lecturer; professional activity; professional training; foreign language.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 1; tabl.: 0; bibl.: 6

Introduction. Competence is understood as a person's personal capabilities, his qualifications - knowledge, experience, ability to independently solve problems due to the presence of certain knowledge and skills. And competence is the ability to act on the basis of acquired knowledge.

In modern pedagogical science, there are two concepts: competence and competence. Competence is understood as a person's personal capabilities, his qualifications - knowledge, experience, ability to independently solve problems due to the presence of certain knowledge and skills. And competence is the ability to act on the basis of acquired knowledge.

So, at present, a specialist who possesses encyclopedic knowledge can rather be called competent, but a person who knows how to apply knowledge in real life situations. The personal qualities of a specialist that help resolve conflicts and come to an agreement are valued.

Literature review. In particular, N. Mykytenko in the work "Theory and Technology of Formation of Foreign Language Professional Competence of Future Specialists in Natural Sciences" noted that the structuring of the content of foreign language learning in a professional direction should be based on the identification of basic types of discourses (learning the language in the context of its use) taking into account the need to form students have knowledge of deep grammatical structures, understanding of potential relations of lexical units, knowledge of lexical and syntactic rules, on the basis of which synonymic transformations of deep syntactic structures of statements are built, ability to apply basic types of lexical functions and formulate thoughts in a foreign language with the involvement of internal speech, which makes it possible to implement in the process of formation of foreign language professional competence of future specialists in natural sciences, the mechanism of assimilation of elements of the content of education in the direction from the development of language skills and knowledge to the development of complex speech skills [1].

In the work of O. Bigich the concept of "methodical competence of a primary school foreign language teacher" is specified as a set of his methodological knowledge, skills and abilities and subjective and personal qualities, which functions as the ability to design, adapt, organize, motivate, research and control educational, cognitive, educational and developing aspects of foreign language education of junior high school students in classroom and extracurricular work on a foreign language, as well as communicating with students, made it possible to determine the main goals and objectives of the methodical education of the future foreign language teacher of primary school as a component of his professional education system [2].

According to O. Kmit, the process of forming the methodological competence of a primary school foreign language teacher involves three levels – the level of literacy, the level of craft and the level of mastery, each of which corresponds to its own system of components of methodical competence: a system of methodical knowledge, methodical skills and methodical skills [3].

The following aspects of pedagogical competence are revealed in the works of these researchers: management aspect: how the teacher analyzes, plans, organizes, controls, regulates the educational process of relationships with students;

psychological aspect: how the teacher's personality affects the student; how the teacher takes into account the individual inclinations of students; pedagogical aspect: with the help of which forms and methods the teacher conducts the education of students.

Many scientists emphasize that competence cannot be taught. A competent specialist can become a result of independent purposeful activity, finding and testing different models of behavior in those subject areas that most correspond to his style, pursuits, aesthetic taste and moral orientations. Competence appears as a complex synthesis of cognitive, subject-practical and personal experience.

Thus, the competence of a teacher is a synthesis of professionalism (special, methodical, psychological and pedagogical training), creativity (creativity of relationships, the learning process itself, optimal use of tools, techniques, teaching methods) and art (acting and public speaking). And today it becomes obvious that it is impossible to form a competent professional from a simple amount of knowledge.

Not one of the listed methods will be effective if the teacher himself is not aware of the need to improve his own professional competence. Hence the need for motivation and creation of favorable conditions for pedagogical growth.

In particular, a foreign language teacher must be able to apply practical knowledge of his subject, and even knowledge of pedagogy, child psychology, and didactics. Therefore, he must be able to interact with other specialists: a psychologist, a social pedagogue, etc.

That is, the teacher must have knowledge, skills and abilities in his subject, be able to cooperate, be able to solve various life problems, be mobile in social conditions.

Accordingly, the main indicators of the professional competence of a foreign language teacher are the ability to develop students' communicative and interpersonal communication, the components of which are linguistic, thematic, sociocultural, educational and cognitive competence. By participating in dialogue, students develop their ability to communicate and understand the importance of learning a foreign language in the world. They develop tolerance for other views, become more tolerant and communicative.

By participating in dialogue, students develop their ability to communicate and understand the importance of learning a foreign language in the world. They develop tolerance for other views, become more tolerant and communicative.

Today, the motivations for learning foreign languages have changed. People, by and large, are not interested in either the theory or the history of the language. Knowledge of a foreign language is required exclusively functionally - for communication. In connection with current trends, the main task of foreign language teachers is seen in the maximum development of students' communication skills.

A foreign language teacher should become a specialist in intercultural communication. It will be expedient to create an atmosphere of as real communication as possible in classes and to actively use a foreign language in live, natural conditions, for example, to involve native speakers in foreign language classes, to invite foreign professors to give lectures in a foreign language, to work as volunteers at international events. In the process of work, use new methods of teaching a foreign language along with new educational materials, which must necessarily reflect intercultural differences

and which must be concluded on the basis of comparison with the native language and culture.

The analysis of scientific literature on the chosen topic, the experience of practical work, allowed us to conclude that it is possible to use a foreign language freely only in those cases when we forget about the rules. It is worth thinking about or remembering them, you immediately turn into a clumsy person who, instead of taking a step, painfully remembers everything that was told to him. To some extent, using a foreign language is similar to walking through a narrow passage - while you enjoy the process, you go, as soon as you think about balance - you immediately fall.

Therefore, it is not a foreign language that should be studied, but the world of a foreign language, that is, the culture, lifestyle, mentality and national character of people who speak this language. Obviously, knowing the meaning of individual words and the rules of grammar is not enough to use language as a means of communication. It can be assumed that the educational process should go in two directions at the same time: mastering a foreign language as a linguistic phenomenon and mastering new subjects and phenomena.

Each foreign language lesson in a non-language higher education institution should represent the intersection of cultures, as each foreign word reflects a foreign world and foreign culture.

In his research. O. Halabuzar notes that the professional training of future foreign language teachers involves the use of interactive learning technologies, which involves the interaction of students both with fellow students, the teacher, and cooperative activities in the classroom (based on the material of the developed Internet resource); modular technologies, which provide for individualization of training, individual pace of advancement according to the program; promotes strengthening of positive motivation; information and communication technologies, which provide students with the necessary level of knowledge, the ability to analyze, compare, generalize, process material, find the necessary information, connect it with the research questions; project technologies, provided for the organization of the learning process, according to which students acquire knowledge and skills in the course of planning and performing practical tasks - projects that gradually become more difficult and can be built both on the principles of competition and cooperation.

In other words, a foreign language teacher must know his subject, which he teaches, and how he must build the pedagogical process in order to achieve positive results in achieving the goal of foreign language learning - the development of the characteristics of a multicultural personality of the learner. A foreign language teacher should be creative in his profession, using his pedagogical experience in accordance with the individual characteristics of students and the specific conditions of learning a foreign language (in the conditions of a rural school, a metropolis, distance learning, in the process of inclusive foreign language education, etc.).

Thus, the professional competence of a foreign language teacher, according to I. Sologor, V. Kostenko, O. Khalabuzar being an integral property of the individual, is manifested in a set of such competencies as: professional (didactic, psychological, methodical), linguistic (philological), communicative, informational, sociocultural,

project, reflective. The presence of a complex of these competencies ensures the effectiveness of the professional activity of a foreign language teacher and meets the needs of today [4- 8].

Therefore, the indicator of the formation of this competence is the teacher's professional skill, which consists of a set of professional knowledge and the ability to apply this knowledge in practice and the ability to transfer knowledge to new learning conditions, as well as a positive attitude towards one's professional activity.

Summarizing all of the above, we can conclude that the professional competence of a foreign language teacher is a unity of the following components, such as key, basic and special competence. By key, we mean those competencies that are necessary for any professional activity. Basic competencies reflect the specifics of a certain professional activity. Special competence, on the one hand, reflects the specifics of a specific subject or non-subject field of professional activity, on the other hand, it is considered as the implementation of key and basic competencies in the field of study, a specific field of professional activity, namely communicative competence (professionally oriented foreign language proficiency); linguistic competence (which involves knowledge of basic theoretical propositions about language, its connection with the thinking, culture of the people, the ratio of linguistic and extralinguistic factors in the development and functioning of language); linguistic competence (knowledge of the country's culture, its history and modern development problems, as well as life, everyday life, games, popular books, songs, films and the ability to use this knowledge when selecting the content of education); general pedagogical competence (knowledge of the age-specific characteristics of students' development, patterns of their physical and mental development).

Therefore, the foundations of the professional competence of a foreign language teacher are laid down in higher education and combne the basic, basic, key and special competencies of a specialist, which determine his successful adaptation and high-quality performance of activities in accordance with the professional pedagogical purpose. An important place among them is occupied by the key competencies of a foreign language teacher, which in their essence constitute a sufficient basis for successful adaptation and productive activity in the teacher's professional environment. The key nature of competencies is also due to their ability to provide mastery of new knowledge, skills and experience accumulation within the framework of professional activity.

Professionally competent can be considered a teacher who carries out pedagogical activity, pedagogical communication at a sufficiently high level, achieves consistently high results in teaching and educating students.

Pedagogical competence of a teacher can be understood as the unity of his theoretical and practical readiness to carry out his professional activity.

The main ways of developing a teacher's professional competence: work in methodical associations, creative groups; research, experimental activity; innovative activity, development of new pedagogical technologies; various forms of pedagogical support; active participation in pedagogical competitions, master classes, forums and festivals; generalization of own pedagogical experience.

Aims. The aim of the article is to determine the essence, the component composition of the professional competence of a teacher of foreign languages.

It seeks to offer a structured framework that encapsulates the skills, knowledge, and attributes necessary to effectively teach a foreign language in diverse educational settings.

Objectives of the Article:

- Identify and define the core competencies necessary for a foreign language lecturer, including linguistic proficiency, pedagogical skills, and cultural knowledge.
- Examine various effective teaching methodologies and strategies employed in foreign language education, highlighting the advantages and challenges associated with each.
- Discuss the role of technology in modern language teaching, focusing on how digital tools and resources can be integrated into the curriculum to enhance learning outcomes.
- Analyze different assessment and evaluation techniques that can be used to measure language proficiency and student progress, emphasizing the importance of constructive feedback.
- Outline the importance of continuous professional development for foreign language lecturers and recommend avenues for such development, including workshops, seminars, and further academic studies.
- Delve into the ethical considerations in language teaching, including issues of fairness, diversity, and inclusion, and propose guidelines for ethical professional conduct.
- Provide case studies or examples of successful implementation of these competencies in real-world educational settings, illustrating how foreign language lecturers can apply these competencies effectively.

By achieving these objectives, the article intends to serve as a valuable resource for current and aspiring foreign language lecturers, educational administrators, and policymakers involved in language education.

Methodology. Scientific works devoted to the study of the competences of foreign language teachers became the basis of the research methodology. The main methods of the conducted research were the methods of analysis, synthesis, comparative analysis, systematization and generalization.

Results. The conducted research does not cover all aspects of the mentioned problem. Development of the theoretical and methodological foundations of the formation of key competencies of a foreign language teacher by means of organizational and activity game technology; increasing the role of practice in the formation of key competencies of a foreign language teacher; the development of interaction between higher education institutions and schools in the formation of key competencies of a foreign language teacher may be the subject of further scientific research.

The main professional competences of a foreign language lecturer can be categorized into several key areas (Figure 1):

Linguistic Proficiency: Expertise in the target language is fundamental. A foreign language lecturer must have a high level of fluency and accuracy in both the oral and written forms of the language they teach.

Pedagogical Skills: Effective teaching methods are crucial. This includes the ability to design and implement curriculum and lesson plans that cater to a range of learning styles and levels. It also involves employing innovative teaching techniques, such as interactive and multimedia approaches, to enhance learning engagement and retention.

Cultural Knowledge: A deep understanding of the cultural context of the language is essential. This includes knowledge of the history, traditions, social norms, and values associated with the language. A lecturer should be able to integrate this cultural awareness into their teaching to provide students with a comprehensive language learning experience.

Assessment and Evaluation: Competence in assessing student progress through formal tests and informal evaluations is important. This involves the ability to design assessment tools that accurately measure language proficiency and provide constructive feedback to students.

Adaptability and Flexibility: The ability to adapt teaching methods and materials to meet the diverse needs of students is crucial. This includes modifying approaches for different proficiency levels and learning disabilities.

Technological Proficiency: Proficiency in using educational technology tools, such as language learning software, digital media, and online collaborative platforms, to facilitate and enhance the learning experience.

Research and Development: Engagement in ongoing research related to language teaching methodologies, language acquisition, and applied linguistics. This helps to stay updated with the latest educational trends and advances in the field.

Interpersonal Skills: Strong communication and interpersonal skills to foster a positive learning environment. This includes empathy, patience, and the ability to motivate and inspire students.

Professional Development: Commitment to continuous professional development and learning. This involves staying updated with the latest teaching techniques, attending workshops, seminars, and conferences, and possibly engaging in further academic qualifications.

Ethical and Professional Conduct: Adherence to ethical standards in education, including fairness, confidentiality, and respect for diversity among students.

These competences ensure that a foreign language lecturer is not only proficient in the language but also effective in teaching it to students of different backgrounds and learning needs.

Discussion. The evolving landscape of foreign language education highlights the expansive and nuanced competences that lecturers must embody to effectively navigate the demands of contemporary classrooms. The professional competence of foreign language lecturers is not merely a collection of isolated skills but a dynamic integration of knowledge, pedagogical strategies, cultural sensitivity, technological adeptness, and

interpersonal acumen. This integration is critical to fostering an environment conducive to learning and understanding across cultural divides.

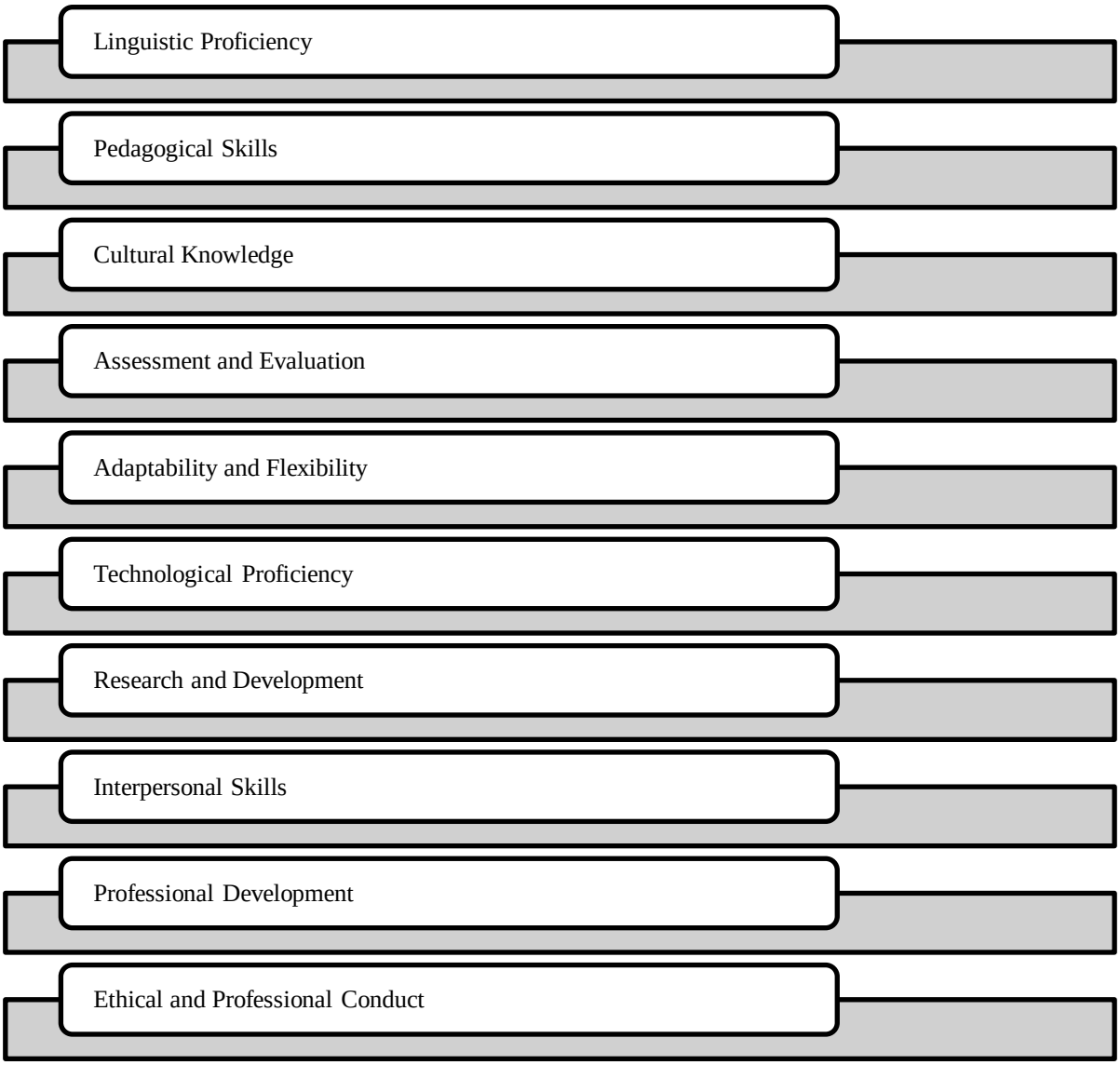


Figure 1. The main professional competences of a foreign language lecturer
Source: developmented by author

Integration of Competencies. The professional competencies discussed indicate a crucial overlap between deep linguistic knowledge and the practical application of this knowledge in diverse educational contexts. Lecturers are required not only to master the language and its grammatical intricacies but also to understand and convey its cultural underpinnings. This dual requirement enhances the learning experience, making it richer and more meaningful for students, who need to see the language as a live, evolving means of communication and cultural expression rather than a static set of rules.

Pedagogical Adaptation. In the realm of pedagogy, foreign language lecturers must remain adept at employing a variety of teaching methods to suit different learning styles and technological proficiencies of students. The shift towards digital education tools and platforms, accelerated by global trends towards online learning, requires lecturers to be proficient in new technological modalities while also being capable of creating engaging, interactive learning experiences that transcend traditional classroom boundaries.

Cultural Sensitivity and Communication. Cultural competence remains a pivotal element of a lecturer's professional skill set. In an increasingly globalized world, understanding and respecting cultural differences is as important as linguistic fluency. Lecturers must navigate these cultural nuances and incorporate them into their teaching to prepare students for real-world interactions within diverse environments. This aspect of competence extends beyond the classroom, influencing how students perceive and interact with the world.

Continuous Professional Development. The necessity for ongoing professional development is emphasized by the rapid evolution of educational technologies and methodologies. Lecturers must continually update their skills and knowledge to stay relevant and effective. This pursuit of knowledge is not just about staying informed but about actively engaging with new ideas, experimenting with new teaching tools, and reflecting on the effectiveness of various approaches.

Ethical and Professional Standards. Maintaining high ethical standards in teaching practices ensures that all students are treated fairly and respectfully, fostering an inclusive and supportive learning environment. This ethical responsibility underscores the role of lecturers in shaping not only the intellectual but also the social and moral landscapes of their students.

Future Challenges and Innovations. As the field continues to evolve, the challenges facing foreign language lecturers will likely intensify and diversify. These challenges will necessitate not only adherence to established competencies but also the ability to adapt to and anticipate changes in the educational landscape. Innovations in language teaching, such as immersive technologies and increasingly sophisticated digital platforms, offer exciting opportunities to enhance language acquisition but also require new competencies.

The discussion of the professional competence of foreign language lecturers highlights a complex interplay between various skills and knowledge areas. To be effective, lecturers must integrate these competencies into a cohesive approach that is responsive to the needs of their students and the demands of a rapidly changing educational environment. The effectiveness of a foreign language lecturer is therefore measured not only by the linguistic proficiency of their students but also by their ability to foster comprehensive understanding, cultural awareness, and ethical engagement. This holistic approach to language education is essential for preparing students to operate successfully in a multicultural, multilingual world.

Conclusions. The exploration of the professional competence of foreign language lecturers has highlighted the complex and multifaceted nature of their roles in educational settings. The competence of a foreign language lecturer extends far beyond

mere linguistic proficiency, encompassing a broad spectrum of pedagogical, cultural, technological, and interpersonal skills. This comprehensive set of competencies is crucial for effectively teaching and engaging students in a language learning process that is not only about language acquisition but also cultural understanding and communicative competence.

Holistic Approach to Language Teaching: It is evident that foreign language teaching demands a holistic approach that integrates linguistic skills with cultural insights, pedagogical strategies, and technological tools. Lecturers must possess the ability to convey the subtleties of a language's cultural context, which enriches the learning experience and fosters greater understanding among students.

Pedagogical Innovation and Adaptability: Effective teaching involves constant adaptation and innovation. Lecturers must be capable of designing and tailoring curricula that respond to the diverse learning needs of their students, incorporating various teaching methodologies that range from traditional approaches to interactive and multimedia strategies.

Continuous Professional Development: The need for ongoing professional development is critical in keeping lecturers abreast of new pedagogical trends, technological advancements, and evolving linguistic research. Engagement in continuous learning and professional growth is essential for maintaining teaching effectiveness and enthusiasm.

Ethical and Professional Standards: Upholding high ethical and professional standards is paramount in fostering an environment of trust, respect, and fairness. This includes addressing the diverse needs of students, ensuring inclusivity, and maintaining confidentiality and integrity in teaching practices.

Interdisciplinary Collaboration: The competence of a foreign language lecturer is also reflected in their ability to collaborate with professionals from other disciplines, such as psychologists and social educators, to enhance the educational experience. This interdisciplinary approach supports the development of well-rounded students who are not only linguistically proficient but also socially and culturally aware.

Communicative and Interpersonal Competence: Beyond the transmission of knowledge, lecturers must excel in communicative and interpersonal skills to motivate and inspire their students. The ability to engage students in meaningful dialogues where they can apply their language skills in realistic contexts is a testament to a lecturer's effectiveness.

In conclusion, the professional competence of a foreign language lecturer is a dynamic and evolving set of capabilities that encompasses more than just expertise in a language. It involves a commitment to student learning, pedagogical excellence, cultural empathy, and professional integrity. By nurturing these competences, lecturers can significantly enhance their effectiveness and contribute profoundly to the educational and personal development of their students. This holistic approach not only meets but also anticipates the needs of the modern educational landscape, preparing students to become adept and responsive global citizens.

Author contributions. The authors contributed equally.

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NEW APPROACHES TO THE TEACHING OF THEORETICAL DISCIPLINES OF THE "FOREIGN LANGUAGES" CYCLE IN THE CONTEXT OF INFORMATIZATION OF THE EDUCATIONAL PROCESS

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Abstract. *The article studies peculiarities of organization of teaching of theoretical linguistic disciplines in the context of informatization of education. It emphasizes the importance of using internet technologies in the system of higher education, reveals main theoretical groundings of their implementation into the educational process and training teachers of English as a foreign language. The author analyses didactic parameters of using web-resources in the process of teaching linguistic theoretical academic subjects, taking as an example Theoretical grammar of the English language. The article gives an overview and brief analysis of some on-line linguistic databases, resources, free language theory courses which are widely available. The author demonstrates various possibilities of using specialized on-line resources for teaching the theory of the English language and organizing research work of undergraduate and graduate students. Reform of higher education in Ukraine is caused the needs of today society due to the building of information society and integration in the global intellectual space dimension. Modification of the requirements of educational process in higher education, its quality and semantic parties should ensure the quality of training to world standards. That is one of the main vectors and targets of the improvement of higher education in Ukraine should create a system of quality assurance and professional development aimed at forming professional independence and acquire new knowledge and skills in the conditions of intensive informational society. In this context particularly urgent search for new and upgrade existing forms of educational process appears. Thus, approaches to teaching theoretical subjects in a foreign language must be updated in view of the need for a informative professional competence. The systematic use of the Internet for relevant practical, research, creative tasks will improve professional skills improvement, skills will form the search, selection and analysis of scientific material. Further research prospects seen in a detailed study of the experience of using online technology in teaching linguistic disciplines at leading universities abroad.*

Keywords: *theoretical course; foreign language; linguistics; informatization of education; Internet; self-learning; e-learning; students' research skills.*

JEL Classification: I 23, I 29

Formulas: 0; fig.: 0; tabl.: 0; bibl.: 12

Introduction. The reform of higher education in Ukraine is conditioned by today's needs, taking into account the processes of informatization of society and the integration of the intellectual space in the global dimension. Modification of the requirements for the organization of the educational process in higher education, its quality and content side should ensure compliance of the quality of specialist training with international standards. That is, one of the main vectors and tasks of improving higher education in Ukraine should be the creation of a system for ensuring the quality of education and professional development, aimed at the formation of a specialist capable of independently acquiring new knowledge and skills in conditions of intensive informatization of society. In this context, the search for new and modernization of existing forms of organization of the educational process is particularly relevant.

Literature review. Issues of development and reform of higher education, improvement of the process of training foreign language teachers were the subject of scientific research by a number of Ukrainian scientists (V. Bazurina, O. Bigich, N. Bidyuk, I. Biletska, O. Holotyuk, S. Hryniuk, V. Zhukovsky, L. S. Wilson and others). Research on the effectiveness of the introduction of information and communication and Internet technologies into the educational process of a higher school is actively developing (V. Bykov, M. Zhaldak, Yu. Zhuk, I. Ivanyuk, V. Lapinskyi, S. Lytvynova, L. Lyakhotska, A. Manako, O. Sokolyuk, N. Soroko, O. Shiman, etc.). We have a number of works devoted to the use of Internet resources in foreign language teacher training (I. Gritchenko, P. Grabovy, S. Itz, O. Kysynska, etc.).

Such a situation testifies to the relevance of the investigated problem and at the same time speaks of the need for a separate study of the features of the systematic purposeful practical use of Internet resources in the process of teaching theoretical disciplines during the training of a foreign language teacher, which has not yet been the subject of a separate scientific search.

Aims. Based on the relevance of the given topic and its importance for the theory and practice of professional training of teachers of foreign languages, we aim to analyze the theoretical foundations of the use of information and communication technologies in the educational process, to consider the didactic features of using online resources during the training of linguistic theoretical disciplines, to demonstrate the possibilities the use of modern online resources on the theory of the English language in the educational process and in the organization of student scientific activity.

Methodology. Analysis, synthesis and modeling methods were used to study the state of research. The results of our research was carried out with the help of empirical methods: pedagogical observation, questionnaires, interviews, testing, the method of experimental evaluations. Mathematical statistics methods were used to process the research results.

Results. A feature of theoretical courses is a greater level of abstraction and the difficulty of learning the material. At the same time, it is impossible to imagine the process of training a foreign language specialist in higher education without linguistic theoretical courses. As V. Ortynsky notes, "scientific theories play a leading, determining role in the organization of education in a higher educational institution" [3, p. 178].

The above especially emphasizes the importance of updating approaches to teaching theoretical disciplines in the process of foreign language teacher training. The use of information technologies in the process of training a specialist is determined by global trends, and information competence, in turn, becomes mandatory in the educational and qualification requirements for a specialist. This is related to the global informatization of society, which affects all aspects of life, in particular, education. As the scientists note, "the dominant trend in the development of modern civilization is its transition to an information society, in which the objects and results of the work of the majority of the population will be information resources and knowledge, which accordingly requires thorough training of all members of society to use information and communication technologies in their professional activity" [2, p. 5, 7-12].

Thus, in the educational context, access to information, as well as the formation of skills to obtain it, are extremely important.

Of course, the foreign language teacher training program includes as a mandatory component a number of disciplines aimed at developing students' information and communication skills. However, even if students successfully study a specialized course, the formation of information competence is possible only if the acquired knowledge is applied practically and used in view of the student's future professional activity.

Quite often, we can observe a situation when general university disciplines, such as "Student's Information Culture" or "Fundamentals of Scientific Research", are taught without taking into account the specifics of the students' future major, using examples that are far from practical activities and focusing on completely irrelevant aspects. This approach, in turn, negatively affects the cognitive interest of students who do not understand the applied application of the information offered.

In this context, it would be useful to study the foreign experience of implementing cross-disciplinary special courses, for example, "Computer linguistics", "Programming for linguists", etc. As a result, students of leading foreign universities are already independently conducting online questionnaires for conducting research, using specialized programs. It is obvious that the skills of finding necessary, adequate and relevant information from a highly qualified specialist should be brought to the level of automaticity. At the same time, it is clear that achieving such a level of professional information competence is impossible without systematic practical activities.

Discussion. Let's consider possible ways of modifying the traditional course "Theoretical English Grammar" with regard to information technologies. It is clear that, given that this discipline is taught at the bachelor's level, its main task is first of all to master the basic theoretical material and to develop the skills to use it in practice (for example, to analyze grammatical forms).

However, in view of the reform of higher education, the reduction of the number of classroom hours, the independent work of students becomes even more important. Information resources of the Internet network contain text, video and audio materials on various topics and in various languages. Thus, the problem does not seem to be the search for information, but the selection of quality content that corresponds to both the

psychological and pedagogical principles of learning, as well as reliable and relevant scientific provisions from the relevant discipline.

The analysis of available Ukrainian manuals and textbooks on theoretical disciplines indicates that the authors, in our opinion, pay too little attention to the information provision of educational subjects using Internet technologies. So, for example, I. Kharitonov's textbook on theoretical grammar of the English language is aimed, according to the author, at "increasing the independent work of students, developing their abilities and skills of independent critical analysis of theoretical literature on grammar, creative independence and independence of judgment" [5, with. 197].

Without at all diminishing the didactic value of the given manual, we note that in the list of literature for seminar classes we do not find any Internet resources at all, and the years of publication of the proposed scientific sources vary from 1967 to 1993. Strange as it may sound, but in many domestic textbooks and manuals from the theoretical grammar of the English language [1; 4; 5], unfortunately, we do not find any references to contemporary authoritative foreign publications, say, from Oxford University or the publicly available works of David Crystal or Noam Chomsky.

It is clear that the need to obtain access to high-quality scientific content, which does not always seem possible in the realities of Ukraine, becomes of primary importance. This is related not only to limited access to prepaid scientific, informational, bibliographic web resources, but also to the permanence of such access. Temporary subscriptions to online libraries, short-term access to information resources actually negate their didactic value, since truly high-quality teaching of a discipline is necessarily preceded by many hours and weeks of preparatory work, and the approval of the course and teaching-methodical materials is also extremely important.

At the same time, the already developed course should be improved and modified mainly in connection with the identification of new trends in the relevant scientific field and updating of psychological-pedagogical and methodical approaches to teaching the specified discipline. Of course, the involvement of Internet resources and online libraries is possible under the condition that the teacher-developer is sure that students will be able to access the materials provided by the course in the future.

Thus, we consider permanent access to online library resources (for example, Wiley Online Library or Springer) to be a mandatory element for the information provision of an educational discipline. The program of the academic discipline must necessarily provide for the work of students with authentic scientific and scientific-methodical works of leading scientists in the field of linguistics. For example, it will be useful for future foreign language teachers to study interdisciplinary research that analyzes the importance of theoretical linguistics for teaching English at school [6].

Traditionally, in many universities, a similar task has existed for many years under the name "Readings" and involved studying and annotating textbooks from theoretical courses of a foreign language. Of course, this task can be implemented in the presence of electronic copies and electronic books in the educational and methodological complex of the discipline, however, in our opinion, it is better that students have access to Internet resources and, thus, also develop the skills of working

with a scientific online library . Unfortunately, in Ukraine, access to such libraries is only in the local network of educational institutions or scientific libraries, while in all countries of the European Union, a student can remotely use the online library of his university and prepaid resources only by entering his ID number and password.

The use of online course systems in various disciplines seems to be promising. Let's consider some of them, from the point of view of the possibility of application in the process of independent work of students. Yes, the Future Learn platform (https://www.futurelearn.com/) offers free online courses in various disciplines, including linguistics. For example, in September 2015, the platform offered an 8-week Corpus Linguistics course. Among the advantages of the platform, we can mention full interactivity, use of video lectures, ergonomics and multifunctionality of the platform in general.

The disadvantage of this system is the limited access to courses after their completion, which makes it more suitable for use in university scientific circles than as a systematic component of educational activities. A number of free theoretical online linguistics courses can be found using open specialized platforms, for example, MyFreeCourseOnline (http://www.myfreecoursesonline.com/linguistics-courses), among others, contains a list of free open courses offered by the Massachusetts Institute of Technology (http://ocw.mit.edu/courses/linguistics-and-philosophy), which is among the top ten universities in the world.

The platform provides free access to educational and methodological complexes of courses taught by leading linguists. Among the shortcomings, we can mention the lack of video lectures and the lack of interactivity of the courses, which, however, does not reduce the didactic value of such material.

The online resource The Virtual Linguistics Campus of the Philipp University of Marburg (http://linguistics.online.uni-marburg.de) has significant didactic value. Some of the materials are in restricted access, but the resource offers a number of video lectures of varying complexity, including theoretical grammar, which are posted on the publicly available YouTube video hosting. In addition to the already mentioned resources, the use of specialized professional platforms by students, for example, http://linguistlist.org/, seems promising. The site is intended for specialists in the field of linguistics, but it can be used not only by teachers and researchers, but also by students. The portal contains a bibliographic database of articles, monographs, textbooks and manuals on various fields of linguistics, links to current software for conducting linguistic research, newsletters of current conferences, etc.

The proposed list can be extended. As you can see, the available Internet resources offer a wide selection of educational, scientific and research tools in the field of linguistics, which can and should be used in the process of training foreign language teachers.

Conclusions. Thus, approaches to the teaching of theoretical disciplines in a foreign language should be updated in view of the need for the formation of informative professional competence. Systematic use of the Internet for the performance of relevant practical, research, and creative tasks will improve professional self-improvement skills, and will enable the formation of skills in searching, selecting, and analyzing

scientific material. We see further research prospects in a detailed study of the experience of using online technologies in the process of teaching linguistic disciplines in leading universities abroad.

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THE PECULIARITIES OF INCREASING STUDENTS' MOTIVATION FOR LEARNING ENGLISH BY MEANS OF INFORMATION AND COMMUNICATION TECHNOLOGIES

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Abstract. *Motivating students for learning a foreign language can be challenging, but educators can help to foster students' motivation by employing a series of strategies, such as creating a positive and supportive learning environment and building a positive relationship with the students, using a variety of teaching methods, providing regular feedback and recognition for their efforts, using authentic materials, technology, setting achievable goals, and providing opportunities for student choice and autonomy by encouraging learning outside the classroom. The purpose of our research is to determine the ways how information and communication technologies can increase the level of students' motivation for learning English as a foreign language. Analysis, synthesis and modelling methods were used to study the state of research. The results of our research were carried out with the help of empirical methods: pedagogical observation, questionnaires, interviews, testing, the method of experimental evaluations. Employing technology in education is becoming a global trend and the majority of students use it in education in general but also in the process of language acquisition. Most scholars view the use of technology as being supportive for the learning environment and as a crucial element in providing a high-quality education, especially for the new generations of students who were born in the digital era and thus can not function without technology. Technology offers students quick access to relevant information, not to mention that it expands their universe of learning. It also allows students to get in contact with a wealth of authentic resources, which can inspire language learners. The paper begins with highlighting the importance of motivation in language acquisition, then it presents the main reasons why we should connect motivation with technology, and finally it reviews some benefits of using technology to enhance language learning.*

Keywords: *motivation, information and communication technologies, technological competence, language acquisition, high-quality education, technology, values, language learning.*

JEL Classification: I 23, I 29

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Introduction. Nowadays technology includes computers, mobile phones, tablets, interactive applications and games, virtual lectures, videos, and smart boards, among other cutting-edge teaching aids. Technology has advanced quickly, and this has had a tremendous impact on English language instruction that has undergone significant changes both in teaching as well as in learning a foreign language. One of the most important changes is the fact that it allowes language learners to practice their language skills in a natural setting. Many scholars agree that technology has a good influence on the process of learning English, even though the use of computers and the Internet in language learning has been much debated.

In the modern world information and communication technologies develop incredibly quickly, consequently ordinary people have difficulty following them. In the recent years, for example, the amount of mobile devices has changed drastically with the wide use of smartphones based on Android system and Apple products with iOS system such as iPad and iPhone, and the number of people that own these kinds of devices is increasing at a fast rate especially among young generation [1]. In Ukraine the situation with the use of smartphones and tablets is the same as elsewhere in the world.

Technology is something that allows teachers to be more creative in their classes and it helps the students to create and engage with the topics seen in class. The use of technology is something essential in people's life and has a huge impact when it comes to education, because it provides a lot of resources where teachers can take advantages to teach new languages, apply different types of practices, and search for enrichment information that professors can use on their classes. Information and communication technologies (ICT) are very useful to increase intrinsic and extrinsic motivation that learners have when it comes to the speaking skill because teachers can use it to help students learn using videos, and practices where they can use repetition so, in this way, they can improve their pronunciation, and feel more comfortable when speaking in class. When it comes to teach a new language, technology plays an important role on the motivation of young students specially because they are more attach to technology that any other generation, due to the fact that most of them grew up with it, and this is not bad; on the contrary, if this is implemented correctly technology can be an excellent ally to the teachers when it comes to provide them with awesome teaching resources and creative ways to increase their students' motivation when learning.

Literature review. ICT are now a central means to be socially, economically, culturally and politically involved in 21st century society [2]. They are integral to the global flows of knowledge, people and services that characterize the knowledge economy. Teaching and learning are now as much to do with access and participation as they are to do with the acquisition of skills and knowing that. Internationally, governments have endorsed the need for students to be ICT and information literate [3]. The contention is that students will need to be able to access, integrate and evaluate information, construct new knowledge and communicate with others if they are to take their place as active citizens in an increasingly complex and information rich world. Moreover, evident is the view that ICT can enhance student learning, especially English as a foreign language (EFL), through a positive impact on student motivation

and engagement. Consequently, ICT has the potential to change both how and what students learn. For now, however, the impact of ICT technologies on education has lagged behind what had been expected.

ICT as a medium for teaching and learning is becoming more and more acknowledged. The possibility to use information and communication technologies at any time and in any place makes them a valuable asset in English language learning as they can be used by students either in the classroom or outside of it. Using them in the class of English can make the learning process easy and interesting, involving all the students into activities and provoking their motivation and effort. On the other hand, using it outside the classroom can still enhance students' motivation by means of autonomous self-conscious learning.

Aims. The purpose of our research is to determine the ways how information and communication technologies can increase the level of students' motivation for learning English as a foreign language.

Methodology. Analysis, synthesis and modelling methods were used to study the state of research. The results of our research were carried out with the help of empirical methods: pedagogical observation, questionnaires, interviews, testing, the method of experimental evaluations.

There are many teachers who do not use technology widely when teaching English, this provokes that some students do not feel the motivation to keep learning the language. Many of them may get bored in classes because they are not engaged with the activities and due to this they might get bad scores. So how can the use of information and communication technologies such as Canvas, Voki and Kahoot! help the students' motivation when learning a new language?

Results. Information and communications technology (ICT) is often used as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of them together with computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information

Wernet, Oligens, and Delicatch claim that technological integration in the classroom appears to be crucial for higher and professional education [4]. Since motivation generally appears to be a significant indicator of success in language acquisition, using technology in language learning has a great deal of motivational advantages among which we mention an increased individuality and autonomy, more options for communication, identity development, intercultural content, alternative methods of evaluation and the creation of motivating tasks [5]. Additionally, employing technology enables content for instruction to be modified to fit the learners' requirements and needs. Furthermore, it can offer immediate feedback and even allow the combination of materials (audio, video, text, photos, etc.).

Through the use of technology, students have the chance to direct their own learning and have unrestricted access to knowledge that is outside of the authority of the educator. Technology-based English language education improves collaborative language learning and enables students to communicate effectively [6]. ICT facilitates

the learning process and provides teachers with appropriate instructional resources, bringing language learning opportunities to the student's environment. It also helps students become autonomous learners and provides unquestionable benefits. Furthermore, students are fond of technology, and when they have the option to study via technology, their motivation rises, which improves information retention. Thus, these are the main reasons to connect technology with motivation.

Consequently, the relationship between ICT and motivation in the English language learning should be thoroughly examined and the following hypothesis to be proved "The use of information and communication technologies in the EFL classroom can lead to a greater level of students' motivation for learning English".

The development of the hypothesis definitely leads to finding answers to the following dichotomy: Do information and communication technologies influence students' motivation? Or does motivation to learn predetermine the use of ICT in the classroom? Or does the relationship work in both directions? Ome of the glimpses of the problem under research can be found in the relevant literature.

Paudel [7] claims that the advent of information and communication technologies and their easy accessibility globally and locally has become mainstream in present education system throughout the world. The Internet and its use through several devices like personal computers, smartphones and other devices have become commonplace both for teachers and students. Computer integrated ICT now are no more static, standalone but have become personal devices that play a decisive role on the way we get knowledge, the process we teach and learn, and the way we do. Information and communication technologies are currently being used in education to assist students to learn more effectively by providing teachers with access to a wide range of new pedagogy and their use in the field of language education has been a priority throughout the world during the last decade. ICT have made the process and style of language teaching and learning ever changing.

Cakici [8] mentions that ICT are prerequisite for equipping language learners with necessary technological skills. The application of ICT requires certain language skills and strategies. Introducing ICT into language classroom has great implications for curriculum reform, classroom teaching and student learning. It is believed that the increase of information and communication technologies has dramatically reinforced and created powerful learning atmosphere. The implementation of ICT into real language context is more critical today than ever before since its growing power and capabilities are triggering a change in language learning environment.

Hamidah and fellow researchers [9] state the significant role of motivation in learning. Two types of motivation can be distinguished: intrinsic and extrinsic. Learners are said to be intrinsically motivated in learning if they are learning for their own sake rather than because of external pressure or reward for learning. Intrinsic motivation is closely related to the perception of being able to choose and of being somehow in control of one's actions. Extrinsic motivation refers to learning situations where the reason for doing a task is something other than learners' own interest in the task itself.

Purmama with colleagues [10] use a different approach and distinguish two other types of motivation: integrative and instrumental. Integrative motivated is the condition when the learners want to learn the target language so that they can better understand and get to know the people who speak the language and mix up in their culture. Integrative motivation describes learners who want to integrate themselves into the culture of the second language group and become involved in social interchange in that group.

Ryan and Deci [11] define motivation as the perceived payoff for the student's investment of time, energy and effort. Intrinsic motivation is very powerful in triggering active deep learning while extrinsic motivation without intrinsic motivation is likely to lead to passive surface learning.

Moreover, the relationship between motivation and autonomy should be mentioned. Dickinson [12] concludes that "learning success and enhanced motivation is conditional on learners taking responsibility for their own learning, being able to control their own learning and perceiving that their learning successes or failures are to be attributed to their own efforts and strategies rather than to factors outside their control". In short, Dickinson's position is that motivation is a product of taking responsibility for learning outcomes and that intrinsic motivation has a stronger link with autonomy. While accepting a close link between intrinsic motivation and autonomy, Spratt, Humphreys and Chan [13] question the common assumption that autonomy leads to motivation, and suggest that motivation may lead to autonomy or to be a precondition for it.

There has been great debates in the past few decades on the pedagogical worth of ICT in the classroom, and nowadays there is so much emphasis on on-line learning. And information and communication technologies have become an immense helper in virtually all areas of teaching and learning. Expanding access to language programmes and improving the quality of teaching and learning are other prospects of ICT in language. Providing access to up-to-date materials and offering teachers and learners an avalanche of materials in different modes can be also included to the prospects of ICT. But the view that the Internet and other forms of information and communication technologies are of immense benefit to the education system is incontrovertible. In the field of language education, we have identified the following as major constraints to the use of ICTs in language education in Ukraine under present conditions: 1. Electricity and Internet facilities are either unaccessible or unreliable. 2. ICTs are not available for everyone and often locked in storage closets because only few teachers know how to operate and incorporate them into their instructional programmes. 3. ICT trained teachers often quit teaching for more profitable jobs because teaching is not well-paid in Ukarine. 4. Poor maintenance of the existing ICT gadgets (where provided) is a debilitating factor against the use of ICT in language education. It is improper to duplicate the textual material simply to the screen so that the teacher's position is ignored in order to ensure the function of multimedia in practical teaching.

Motivation is one of the main fuels of the learning process, because it keeps the learner giving the extra mile and caring for its own knowledge. Learning problems or

difficulties can be found in the development and realization of all communication skills and speaking is not an exception. The fear of being wrong when speaking could be what is holding most learners off from actually succeeding on mastering this skill. This fear is normal, but the lack of motivation might be what manages to keep this fear alive, and denying learners from their main goal which is mastering the language. Nonetheless, ICT is a new door that may help young learners to increase their motivation and boost up their confidence and provide them with impulse that they need to give the extra mile when learning the new language.

Concerning the development of ICT, there is a hope that in the nearest future, the use of it in the English language teaching will be further developed. Emerging technologies make language teaching and learning process pertinent and practical to approach learning in ways that have been advocated by scientists, theorists and educational practitioners, that's why the use of information and communication technology can not be underestimated in language teaching and learning process. Moreover, it is imperative for modern day teachers and learners to keep abreast of the modern trend at improving teaching and learning of English with the help of ICTs. They have revolutionized society globally, including how language instruction is delivered [14-16]. ICT can fully improve students' ideation and practical language skills, which is helpful and useful to ensure and fulfill an effective result of teaching and learning. A great deal of success however comes from preparing students to interact and learn in the Internet age. One of the main goals of multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in the language learning, so context creation of English language teaching should be based on the openness and accessibility of the teaching materials and information. Therefore, if ICTs are integrated into the teaching and learning of the English language, it will go a long way in making ICT a more rewarding partner in the teaching-learning process.

Consequently, teachers should improve their technological competence so that to increase students' motivation in the learning process of the English language. Technology is very important in every aspect when it comes to the learning process; students are surrounded by technology every day in their daily routines, so it is important to implement it in the classes and especially when it comes to learning a foreign language. Some institutions do not count with the amount of technological resources, so teachers need to learn how to use the ones that they have to teach students and help them feel motivated for their classes. There are a lot of information and communication tools that teachers can use to capture the student's attention and it is important to learn how to use them because now students demand more dynamic classes to learn in. Teachers need to innovate their teaching strategies, they need to open their minds and learn that they need to implement ICT in their classes when they have the possibilities to do it, because students need to learn with the best way possible. Some teachers do not know how to use technology so it is essential to teach them to do it and use the different kinds of ICTs correctlyin order to meet the students' needs and help them reach their educational goals.

Discussion .The main questions for discussion of the obtained results are given in the table 1.

Table 1. Main questions for discussion of features of increasing students' motivation to learn english by means of information and communication technologies

The direction of research		Description
Understanding the Findings	Effectiveness of ICT Tools	The study clearly illustrates that the use of information and communication technologies (ICT) can significantly enhance students' motivation to learn English. This is possibly due to the interactive and engaging nature of digital tools which may include language learning apps, virtual classrooms, and multimedia resources. The findings align with existing literature that suggests ICT can make learning more accessible and enjoyable, thereby increasing student engagement.
	Student Preferences	The research may have uncovered specific preferences among students for certain types of ICT tools over others. For example, younger learners might prefer gamified learning platforms, while older students might find video-based content or real-time interaction with peers via collaborative platforms more motivating. Understanding these preferences is crucial for tailoring English language instruction effectively
Limitations of the Study	Sample Size and Diversity	One potential limitation could be the sample size or the diversity of the sample. If the study was conducted within a single educational institution or among a specific age group, the results might not be generalizable to other settings or age groups. Discussing these limitations is important to contextualize the findings
	Technology Access and Proficiency	The varying levels of access to technology among students can influence the outcomes of using ICT for learning. Students with limited access to reliable internet or digital devices may not experience the same motivational boost. Similarly, the study might not have fully considered the role of digital literacy in utilizing these tools effectively
Implications for Practice	Curriculum Design	Educators and curriculum developers can use these insights to integrate more ICT tools in language learning curriculums that cater to diverse learning preferences and needs. This could involve more blended learning environments where traditional teaching methods are supported by technological enhancements
	Teacher Training	There is a clear implication for the need for ongoing teacher training on the effective use of ICT in teaching English. Teachers must not only be equipped with the necessary digital tools but also with the pedagogical strategies to use these tools effectively to motivate students
Future Research	Longitudinal Studies	Future studies could explore the long-term effects of ICT on language learning motivation over several years. This could help in understanding how sustained use of technology impacts motivation and learning outcomes
	Comparative Studies	Research could also compare the effectiveness of different types of ICT tools and their impact on various demographic groups. This would help in identifying the most effective tools for diverse learner populations
	Integration with Traditional Methods	Investigating how ICT can be seamlessly integrated with traditional teaching methods to create a hybrid model of instruction could also be beneficial. This might address some of the limitations associated with exclusive use of technology in language learning

Sources: developed by authors

By discussing these aspects, the article would provide a comprehensive view of the potential and challenges of using ICT to boost motivation among English language learners.

Conclusions. The study has provided significant insights into the evolving role of ICT in education, specifically in enhancing motivation among learners of English as a foreign language. The integration of ICT tools—ranging from mobile applications to virtual classrooms—has demonstrated a profound impact on both the accessibility and engagement levels of students, supporting the argument that technology can indeed transform the educational experience.

The key conclusions drawn from the study:

- *Enhanced Learning Engagement:* The utilization of ICT in English language teaching has been shown to significantly boost students' motivation. This is largely attributed to the interactive and engaging nature of technology-based tools that cater to a variety of learning preferences and needs.
- *Diverse Student Preferences*: The research has highlighted that different age groups and types of learners show distinct preferences for various ICT tools. Younger students are more inclined towards gamified learning experiences, while older students value the depth offered by video content and real-time collaborative platforms. Tailoring ICT integration to fit these preferences is crucial for maximizing motivation and educational outcomes.
- *Impact of Technology Accessibility*: Access to technology is a critical factor that influences the effectiveness of ICT in education. Disparities in access to reliable internet connections and digital devices can create uneven opportunities for learning, suggesting a need for infrastructural improvements to ensure equitable educational experiences.
- *Need for Teacher Training*: To fully harness the potential of ICT in education, there is a pressing need for comprehensive teacher training programs. Educators must not only be proficient in using these technologies but also adept at integrating them pedagogically to enhance motivation and learning.
- *Potential for Wider Application*: While the findings are promising, the study's scope regarding diverse educational settings and demographic groups is limited. Future research should aim to explore these aspects more thoroughly to validate the generalizability of the results.

Implications for Future Research and Practice:

- *Longitudinal and Comparative Studies:* Further research is required to assess the long-term impacts of ICT on language learning motivation and to compare the efficacy of various ICT tools across different demographic and cultural contexts.
- *Integration with Traditional Teaching Methods:* Exploring the integration of ICT with traditional teaching methodologies could provide insights into developing a more holistic approach to language education that leverages the best of both worlds.
- *Policy and Curriculum Development:* The insights gained from this study should inform policy decisions and curriculum developments aimed at integrating ICT in language learning frameworks systematically and effectively.

In conclusion, the integration of Information and Communication Technologies in language learning is not just a supplementary enhancement but a transformative approach that can significantly elevate the motivation and overall learning outcomes of students. As such, it is imperative for educational stakeholders to invest in and focus

on the strategic implementation of ICT to nurture more engaging, responsive, and effective educational environments.

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