INTELLECTUALIZATION OF PROJECT-BASED LEARNING: THE ARTIFICIAL INTELLIGENCE TECHNOLOGIES' POTENTIAL IN MODERN EDUCATION

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Abstract. The dynamic development of digital technologies and their active implementation in higher education has given rise to new areas of pedagogical research. These studies focus on issues such as the practical application of generative artificial intelligence, the digital transformation of the educational environment, the development of digital competence among teachers and students, and the improvement of active learning models. Therefore, *the subject* of this research is based on pedagogical conditions, learning potential, and the integration of artificial intelligence technologies into project-oriented study for applicants to higher education. The *goal* is to develop the theoretical substantiation and development of the author's model of project-oriented learning within the framework of the discipline "Ukrainian Studies". This subject is intended for first-year students at the Kyiv National Economic University named after Vadym Hetman, using the capabilities of generative artificial intelligence. *The methodological basis* of the section is grounded in a combination of communicative-discursive, linguo-culturological, and project-activity approaches. It also partially incorporates the methods of pedagogical modelling and project-based learning, as well as the case method, in the development of a practical model for an educational project. The modern theoretical approaches to the use of project-based learning and generative artificial intelligence in higher education are analysed. The conceptual foundations of the author's project-oriented learning model within the framework of Ukrainian Studies are substantiated. Consequently, language material is proposed as a central methodological resource, rather than an auxiliary illustration to theoretical provisions. Consequently, a full cycle of student activity is constructed

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around it, encompassing everything from problem formulation and text analysis to interpretation, product creation, presentation of results, and reflection. *The theoretical significance* of the proposed model consists in substantiating the potential of using a linguistic and cultural text as a universal didactic environment for the formation of research competencies of students of non-philological specialities. The pedagogical potential of generative artificial intelligence at the various stages of implementing an educational project is evaluated. In the author's model, generative artificial intelligence is not considered an instrument for automating educational activities, but rather a tool for guided research. It fosters critical thinking, digital literacy, academic integrity, and communicative competence. *The practical value* of the developed model consists in its adaptation to the conditions of teaching Ukrainian Studies to students of various educational programs of the first year of the University of Economics. A practical example of how to implement the author's model using Ukrainian folk songs as cultural texts has been developed. The proposed approach helps to develop a set of universal competencies that are necessary for any modern specialist, regardless of their area of expertise. The presented model can be considered a promising direction for modernising the teaching of Ukrainian Studies in the context of the digital transformation of higher education and modern global trends. Further development involves expanding the range of educational topics covered, conducting empirical tests in different educational contexts, and providing more detailed methodological recommendations for using generative artificial intelligence in humanitarian education.

INTRODUCTION

The information environment and the nature of educational activities in higher education institutions have changed significantly due to the digitalisation of society. A few years ago, the main challenge was considered to be expanding access to information resources. However, the rapid development of generative artificial intelligence has brought about much more complex issues. Modern students can quickly create texts, select arguments, summarise scientific information, translate documents and model research projects using intelligent digital systems. Under such conditions, the very nature of learning changes. It is no longer just about accumulating

information; it has become a basic necessity. It is also essential to develop the ability to critically evaluate information, integrate knowledge from various fields, use digital tools responsibly, and take responsibility for the results of your own academic activities. Generative LLMs have already become the main tool for studying this subject. They open up new opportunities for organising the educational process. At the same time, however, issues of academic integrity, the reliability of information, the development of critical thinking, and the responsible use of digital technologies have become even more important. Under these conditions, higher education institutions are faced with the task of integrating modern digital tools into the educational process and *developing pedagogical models*. This requires the appropriate use of these tools to ensure active cognitive engagement among students and contribute to the development of research, communication, and digital competencies. These processes are particularly relevant in the field of humanities education. Unlike disciplines that focus mainly on algorithmic problem-solving, the humanities work with cultural meanings, the linguistic representation of reality, historical memory, social practices, and national values. Therefore, the modern renewal of Ukrainian Studies is due not only to the internal logic of the development of humanities education, but also to profound global environmental changes. Within this global environment, the Ukrainian language is becoming an increasingly important marker of linguistic and cultural identity, as well as a factor in self-identification and a resource for national sustainability. Traditional models of Ukrainian Studies are insufficient in conditions of war, mass forced migration, multilingual educational spaces, and new areas of Ukrainian settlement [1]. That is why modern Ukrainian Studies requires methodological solutions in which *language material* is the basis for project-based learning, cross-cultural reflection, soft skills formation, and responsible use of GenAI tools. This approach addresses the challenges currently associated with the digital transformation of education and the development of new learning models. Furthermore, this approach addresses the evolving educational requirements of applicants in Ukraine and those studying in multiple cultural, linguistic, and communicative spaces simultaneously.

In this context, the integrated academic discipline of Ukrainian Studies occupies a unique position within the educational landscape of a non-core university. Its content draws on linguistic, historical, cultural, literary, and

social elements to create an interdisciplinary space for developing civic, communicative, and cultural competencies. At the same time, it is the complex nature of the discipline that opens up wide opportunities for the use of project-oriented learning. This involves active cognitive activity of students, independent construction of knowledge, collaboration in a team, performing research tasks, and creating their own intellectual product, as this was discussed in more detail in the previous study [2]. For students at the Kyiv National Economic University, this discipline provides an environment in which to develop universal competencies. These competencies are necessary for future professional activities and include the ability to work with different types of information, justify one's position reasonably, conduct independent research, and critically evaluate sources. It also requires effective teamwork and the use of modern digital technologies to solve educational and professional tasks.

The purpose of this research stage is to provide a theoretical basis for, and develop, the author's model of project-oriented study in the subject of Ukrainian Studies for first-year students at the Kyiv National Economic University. This involves using the capabilities of GenAI to determine the pedagogical conditions for its effective implementation. The scientific novelty lies in the proposal that language material in Ukrainian Studies should be considered not as an additional illustration of theoretical provisions, but as a central methodological resource. A full cycle of student activity is built around this, from problem statement and text analysis to interpretation, product creation, presentation of results, and reflection. Unlike existing approaches, this model does not consider GenAI to be a means of automating educational activities. Rather, it is viewed as a tool for pedagogically guided research that fosters critical thinking, digital literacy, academic integrity, and communicative competence. The section is based on a combination of the communicative-discursive, linguoculturological, and project-activity approaches. The communicative-discursive approach makes it possible to examine linguistic material in relation to the speaker, the listener, the pragmatic intent, and the sociocultural context; the linguoculturema and ethnolinguistic approaches enable us to interpret linguistic units as vehicles of collective national experience; the project-based and activity-based approach enables us to organise learning as a sequence of actions aimed at achieving a specific outcome. Combining the

project methodology with the capabilities of GenAI opens up new prospects for organizing the educational process, but requires additional scientific understanding and methodological justification.

1. Digital Modernization of Traditional and Innovative Methodological Tools

The beginning of the third decade of the twenty-first century has been marked by fundamental changes in how knowledge is created, shared, and utilised. The digitalisation of education in recent decades has primarily been associated with expanding access to electronic resources, distance learning platforms, and interactive communication methods. The emergence of GenAI represents a qualitatively new stage in the development of the educational environment. Generative models can not only reproduce information, but also create texts, perform analytical generalisation, and model various solutions to problems. They can support the writing of scientific papers and creative tasks, as well as the creation of educational materials. Consequently, the logic behind organising educational activities, the role of the teacher, and the way students interact with educational content all change significantly. The importance of being able to critically evaluate, test, and integrate knowledge from different industries, and use digital tools responsibly, is growing, rather than simply remembering information. This is precisely why contemporary educational thought is paying increasing attention not only to digital skills, but also to the responsible use of technology. The development of academic integrity and the preservation of the teacher's leading role as the organiser of a learning environment. Learners learn to express their own views in a reasoned manner and to recognise the interconnection between language, culture, history, and social development. We are talking about rethinking the learning model itself, so that digital technologies support research activities rather than replacing them.

Project-oriented learning is a pedagogical approach that integrates theoretical knowledge with practical student activities. These technologies are designed to develop a range of professional and universal competencies. Unlike traditional approaches to organising the educational process, which focus on the reproduction of knowledge, the project-based learning approach involves educational applicants actively participating in the

independent search for information. This includes creating a problem statement, planning activities, analysing results, and presenting their own product. Modern pedagogical science considers this approach to be one of the most effective ways of developing critical thinking and research skills, as well as communication and teamwork abilities. Analysis of recent foreign and national research shows that problems with project-oriented education at university level have developed in several interrelated areas in recent years. One of them is related to the rethinking of the pedagogical potential of project-based learning as a tool for forming competencies of the XXI century. The positive impact of project activities on the development of critical thinking, communicative competence, student independence, and interdisciplinary integration is evaluated in works [3; 4; 5; 6; 7]. The idea of constructive coordination and reverse engineering, as set out in reference [4], is one of the most popular fundamental concepts for such a reinterpretation.

In the modern context, the importance of project-based study has increased significantly, due to the higher education system's transition to a competence-based model for study specialists. The competence approach focuses not only on assimilating a certain amount of knowledge, but also on the ability to apply that knowledge in new situations. It involves developing skills such as making informed decisions, working with information, conducting interdisciplinary analyses, and interacting effectively in a professional environment. This is why project-based learning is increasingly recognised as a natural combination of the cognitive, activity-based and value-based components of education.

Project-based study has additional pedagogical significance for humanities disciplines. It facilitates the transition from simply reproducing ready-made information to interpreting cultural phenomena, developing skills in reasoned discussion, working with different types of sources, making comparative analysis, and forming one’s own research perspective. This is especially important in the modern information space, when students interact daily with large amounts of digital content that require verification of authenticity, critical understanding, and correct use.

One of the biggest pedagogical problems of our time is changing the relationship between the availability of information and the student's ability to create knowledge independently. For a long time, the main task

of education was to ensure access to information resources and develop the essential skills in their use. Today, a lack of information has given way to an information overload. The student gets almost unlimited access to texts, scientific publications, multimedia resources, and generative models that can form an answer to almost any question in a matter of seconds. In such circumstances, the significance of these higher-level cognitive abilities in countering cognitive surrender to the 'omnipotent' neural network increases considerably. These abilities include critical thinking, evaluating the reliability of sources, constructing arguments, synthesising diverse information and reflecting on one's intellectual processes.

Despite significant research having been conducted into project-based learning, the digital transformation of education and the use of GenAI, these areas are generally considered separately. The project methodology is often described as a universal pedagogical technology. The use of artificial intelligence is primarily analysed in the context of digital literacy or academic integrity. However, the methodology for studying Ukrainian Studies focuses primarily on selecting educational material and developing individual competencies. Consequently, the issue of integrating these components into a comprehensive model for organising educational activities remains understudied.

An analysis of the current scientific literature suggests that researchers are increasingly interested in using GenAI in higher education. In foreign scientific discourse, the issues of the pedagogical capabilities of generative AI, the transformation of the teacher's role, the formation of AI literature, and ensuring academic integrity in the context of the digitalization of education are actively being developed. In recent years, thorough foreign research [8; 9; 10; 11; 12; 13] has emphasised the influence of GenAI on the educational process, highlighting the absence of sufficient competencies in applicants when it comes to working with such tools, despite the updating of GenAI tools. On the other hand, there is a need for clear and proper adaptation of GenAI policy at all levels, from higher education institutions to the state. In the national research practice on this issue, generalized approaches to using GenAI to personalize learning as an auxiliary tool in the development of innovative processes in the management of educational ecosystems are proposed. Special attention is paid to how the technologies can be integrated into the study of diverse specialists, and the possible risks

of using GenAI in education are analysed. The need to improve the digital literacy of higher education teachers is emphasised. [14; 15; 16; 17; 18].

The above-mentioned problems are not only the focus of attention for scientists, but also for many relevant international institutions. That is why more and more international documents devoted to the development of education focus not so much on digital skills as on the responsible use of digital technologies. For example, UNESCO has developed its recommendations based on four main elements: respect for human dignity, promotion of peaceful societies, ensuring inclusivity and diversity, and support for the environment and ecosystems [19; 20; 21]. The EU Council Framework Convention on Artificial Intelligence defines the goal of education as compliance with democracy, human rights, and the rule of law [22], but takes into account the national context. Ukraine, being a member of the Council of Europe's Artificial Intelligence Committee, took an active part in the development of this document. It joined the convention together with the United Kingdom, the United States, Japan, Canada, and other technologically developed states. A white paper on regulation has been prepared at the national level on GenAI in Ukraine [23], in which a separate section is devoted to the responsible implementation and use of artificial intelligence technologies in higher education institutions. The convention outlines the primary pedagogical approaches to the use of GenAI in higher education institutions. These include compliance with educational goals and pedagogical practices, the promotion of digital literacy, ensuring inclusivity and accessibility, teacher autonomy, addressing ethical and confidentiality challenges, and continuous assessment and improvement based on feedback. In the context of this study, we focus on the possibility of integrating trends in personalization of the educational process, the development of team skills and critical thinking skills [24, p.15-16]. According to the main provisions of these documents, higher education institutions are recommended to develop their own regulations. An example of such implementation can be approved in Kyiv National Economic University named after Vadym Hetman, on June 30, 2026, “The Policy of Using Artificial Intelligence at the Kyiv National Economic University Named After Vadym Hetman”, where “the fundamental principle of applying GenAI at the University is the principle of human responsibility and control. In this policy, GenAI is considered an auxiliary tool for supporting educational, scientific, organizational, and

managerial activities, while final decisions, assessments, [5] conclusions, and results of activities remain within the sphere of human responsibility" [25, p.4-5].

In this context, it is particularly important to use pedagogical technologies that encourage active knowledge construction, long-term student interaction with educational material, interdisciplinary research, and reflection on the results of their activities. One such technology is project-oriented learning, which has been confirmed as effective by numerous studies in the field of higher education. Unlike traditional teaching models, project activities involve solving real or simulated problems step by step. During these activities, participants work together to integrate knowledge from different disciplines, generating significant practical results. In this context, the use of GenAI has a different meaning: rather than creating a final product in place of the student, it supports efforts at various stages of the research process, such as searching for information, analysing sources, modelling alternative solutions, editing language, and preparing presentations and reports.

So, despite the rapid growth in the number of studies, we can point out the following features. First, most of the works are devoted to general issues of using GenAI in higher education, without taking into account the specifics of individual academic disciplines. Secondly, project-oriented learning and GenAI are generally considered to be two distinct areas of research, with only a few potential intersections. Third, humanities disciplines, in particular Ukrainian Studies studios, are represented in international academic discourse much less than natural or technical fields of knowledge. This suggests that there is a research niche involving the development of subject-specific models that integrate project-based learning, language materials, and generative artificial intelligence. Thus, the current state of scientific research shows that certain aspects of Project Learning and the use of generative artificial intelligence in higher education have been thoroughly studied. At the same time, however, there is still no holistic, subject-oriented model in which language material is considered a system-forming component of project activity. GenAI is integrated into the research process and performs more than just auxiliary functions. It is the attempt to address this methodological gap that defines the concept of our further research.

2. Artificial Intelligence as a Driver of Project-Oriented Learning in the Ukrainian Studies Educational Space

Modern research on project-oriented learning convincingly demonstrates its effectiveness in the formation of competencies of the XXI century, but at the same time shows a significant heterogeneity of approaches to determining the initial basis of an educational project. In most models, the starting point is a problem of practical or social significance, a professional task, a research question, or an interdisciplinary problem. This approach is particularly appropriate for natural, technical, or economic specialities, where the subject of the research is primarily concerned with finding solutions to specific professional problems. A humanities education is of a different nature. Its main focus is not the tangible outcome of an activity, but rather a system of cultural meanings, linguistic practices, historical narratives, and approaches to interpreting reality. This is why transferring Project-Based Learning models developed for STEM education to the humanities does not always have the desired pedagogical effect. In such cases, the project approach often turns into a form of organizing study without significantly changing the nature of students' cognitive activity. In recent years, this issue has become a key focus of research in the field of digital humanities. This research emphasises that digital technologies should not dictate the logic of the educational process. In fact, it is the humanitarian content that should dictate how digital tools are used, how information is interpreted, and how learning outcomes are evaluated. This approach shifts the focus gradually from technology to the study content as the basis for pedagogical design.

Ukrainian Studies has a special place among modern humanities disciplines due to its integrative nature. The subject field combines linguistic, historical, cultural, literary, ethnological and socio-communicative aspects. This makes it ideal for organising interdisciplinary educational projects. However, analysis of modern methodological research shows that Ukrainian Studies' potential as a medium for project-based learning is only being realised to a limited extent. What does it look like in practice? The student reads, interprets, characterizes speech phenomena, performs the tasks proposed by the teacher, and demonstrates the level of mastery of the course material. Even in the case of using project technology, the text is often only a source of information or illustrative material. Much less often, the subject of special analysis is the mechanism of transformation

of language material into the basis of students' research activities. It is the language material that performs the function of an intellectual environment where a research problem is formed, information is searched, cultural meanings are interpreted, and its own educational product is created. This approach also substantially changes the teacher's role in the educational process. While the traditional model mainly sees the teacher as a source of knowledge and a controller of its correct assimilation, modern project study focuses on its role as an intermediary, consultant, expert, and moderator of educational interaction. Similarly, the role of the student is transformed. Rather than being a passive consumer of information, the student becomes an independent researcher. This means that they are responsible for independently formulating the problem, planning the stages of the project, using various sources of information, and cooperating with other project participants. Consequently, students are responsible for the academic integrity of their work.

What *new* GenAI does add to this mechanism? On the one hand, generative models offer a variety of ways to personalise the learning process, support independent study, develop information-searching skills, and organise project-based activities. On the other hand, the unsystematic use of such tools leads to students implementing learning tasks in a formal way. Moreover, they often lose motivation for independent analysis, and the level of their critical thinking decreases. They also often violate the principles of academic integrity. This is why the effectiveness of this approach is determined not only by the system's technological capabilities, but also by the pedagogical design of the educational process and the teacher's professional competence. In this context, it is advisable to consider GenAI as a tool to support, rather than replace, traditional teaching methods. Rather than being used as a substitute for the student's independent work, it should be used as a tool to support educational and research activities. The use of GenAI is only pedagogically justified when the results proposed by the LLMs are the subject of further analysis, verification, and comparison with scientific sources, and when the material provided is understood critically. This model of work corresponds to the modern understanding of digital literacy. This requirement implies not only the ability to use digital services, but also the ability to evaluate information quality, understand the limitations of digital technology, and use it responsibly in all professional

activities. Generative artificial intelligence should not be considered a separate pedagogical phenomenon in modern project-oriented learning. Their combination creates prerequisites for building a new model for organizing the educational process as a whole and a specific academic discipline, where digital technologies are subordinated to the didactic goal. The project activities become an environment for the development of research, communication, and digital competencies of students. Such integration rather forms the theoretical basis of the author's model proposed in this study.

We do not consider language material to be the final object of analysis; rather, we use it as a basis for creating an integrated educational project. It can be a multi-style text, language facts, folklore sources, or modern language practice that can form a problem field of research. It can determine the logic of information search, stimulate interdisciplinary connections, and ensure the integration of humanitarian knowledge with modern digital technologies. Thus, the language material performs a system-forming function, combining all stages of project activity into a single methodological system. The proposed approach enables us to redefine the relationship between the three fundamental elements of modern humanitarian education: study content, pedagogical technology, and digital tools. While traditional models were determined by technology, the author's concept is based on the original content of the discipline. It establishes the research problem and determines the nature of the project activity, as well as the necessary digital tools for its implementation. Therefore, GenAI is not integrated into the educational process as a whole, but is rather included in the process of preparing a specific research project within a particular academic discipline. This approach enables you to reconsider and grasp the learning outcome. In the traditional system, the final product is evaluated first by the following factors: this includes assessing the correctness of the answers, the quality of the written work, and the level at which educational material has been reproduced. However, project-oriented learning integrated with GenAI requires an assessment of the entire cognitive activity cycle. It is important to be able to formulate a problem, work with various sources of information, critically evaluate the responses of digital systems, draw your own conclusions, collaborate in a team, and carry out self-assessment. It is also critical to adhere to the principles of academic integrity. Therefore,

the evaluation covers not only the outcome, but also the process of creating knowledge. Furthermore, the conceptual idea of the proposed model is the thesis that language material is the core of an educational project in Ukrainian Studies. Thus, project activity provides a mechanism for constructing knowledge, while GenAI supports individual stages of the research process, and evaluation allows you to comprehensively evaluate both the final result and the intellectual path to achieve it. Unlike traditional models, in which these components function relatively autonomously, the proposed model assumes constant interaction between these functions. This makes it the most effective model for learning modern humanities disciplines.

3. Author's Model of an Educational Project in Ukrainian Studies

The presented model was developed taking into account the specifics of teaching Ukrainian Studies to first-year students at the Kyiv National Economic University. Its conceptual basis includes provisions relating to competence, activity, culture, and projects. According to these provisions, learning is understood to be the active construction of knowledge resulting from the independent cognitive activity of students. In this model, GenAI plays an auxiliary role: it supports the entire research process, but does not replace the intellectual activity of the educational applicant.

The fundamental difference in the proposed model is the change in the pedagogical role of GenAI. While it is mainly used as a tool for creating texts or quickly obtaining information in most practices, within the author's concept, its functions are much broader. Therefore, GenAI is used for the following tasks: asking research questions; clarifying the problem field; searching for possible areas of analysis; comparing different interpretations; modelling alternative solutions; and organising reflection. Therefore, GenAI as a digital tool becomes an integral part of the learning environment rather than an independent source of ready-made answers.

The model is based on the principle of organising project activities step by step, covering all aspects of the project. Each stage involves clearly defining the educational goal, the types of student activity, the role of the teacher, and the opportunities for using generative artificial intelligence as an integral tool. This structure ensures the educational process is

pedagogically manageable and minimises the risks associated with the formal use of digital services.

The first stage involves setting the problem and defining the project's subject. At this stage, particular attention is paid to how students' motivation is formed during the learning process, building on their previous experience and identifying research issues. GenAI *can be used* to generate possible topics, formulate problematic questions, create preliminary hypotheses, or model various aspects of future research. At the same time, the students make their final choice of topic following a collective discussion and consultation with the teacher.

The second stage is related to the search, selection, and critical analysis of all available sources. It is at this stage that students' information culture is formed or improved. Since the results obtained with the aid of GenAI are necessarily compared with scientific publications, regulatory documents, electronic libraries, and other authoritative sources, they can be considered reliable. This approach helps to develop skills such as verifying the accuracy of information, evaluating the quality of sources, and adhering to the principles of academic integrity.

The third stage covers the direct implementation of the project activities. Students analyse the collected material, work with texts, prepare presentation materials ranging from posters to presentations, and create digital products. They then discuss the results in small workgroups. GenAI *can be used* as an advisory tool for structuring material, clarifying individual concepts, modelling possible options for presenting results, or preparing discussion issues. At the same time, all materials are subject to mandatory verification and scientific editing by the author of the research.

The final stage provides for the presentation of project results, their collective discussion and reflection. Special attention is paid not only to evaluating the final product, but also to analysing research activities: the effectiveness of team interaction, the quality of using sources, the validity of conclusions, *feasibility of using GenAI* at different stages of research work. This approach allows us to see further assessment as part of the educational process. This helps students develop their ability to introspect and strengthen their skills.

This model provides for changing the roles of all participants in the educational process, as discussed above. Therefore, GenAI is integrated

into the educational process as a digital tool intended to support research activities. Its use is determined by pedagogical feasibility rather than technological capabilities.

So, the author's proposed model considers project-oriented learning to be a pedagogical environment in which GenAI acts as an intellectual partner to the student, without replacing their independent research activity. Organising the educational process in this way ensures that the humanitarian content of the discipline is combined with the development of digital literacy, research skills, effective communication skills, and the responsible use of modern information technologies.

3A. Pedagogical Conditions for Implementing an Educational Project Using GenAI

The effectiveness of any pedagogical model is determined not only by its conceptual construction, but also by the conditions of practical implementation. This is particularly pertinent in the context of GenAI, as its integration into the educational process necessitates robust methodological support. As previous experience has proven, using GenAI in higher education does not necessarily improve the quality of study. A positive pedagogical effect is only achieved when digital technologies are integrated into the structure of educational activities in a way that is organic, subject to certain didactic goals, and used to develop students' independent cognitive activity. The author's proposed model is based on the assumption that GenAI is a tool that supports research activities, rather than a tool that automatically performs various educational tasks. Consequently, the key prerequisite for implementing this approach is shifting the focus of the educational process from evaluating the outcome to evaluating the learning process itself. In this model, the quality of the prepared project is important, as is the logic of its implementation, the validity of the sources used, and the reasonableness of the conclusions drawn. It also includes students' ability to critically evaluate information and explain their decisions.

The first condition is a problem-oriented study task. The project should not only involve the mechanical reproduction of known information, but also the solution of a research problem with several possible interpretations that requires the use of different sources. Therefore, the task's open nature creates the conditions for meaningful use of GenAI. The pedagogical value

of project activities is significantly reduced if the answer can be found in one source or obtained by a simple search.

The second important condition is an organization of work with information sources. Although GenAI can significantly accelerate the process of searching for information, the answers received during this search should not be considered definitive or completely reliable. Therefore, students should learn how to verify their results and then compare them with scientific publications, regulatory documents, electronic academic resources, and primary sources. This approach helps students to develop an information culture, critical reading skills, and a responsible attitude towards using digital technologies.

Therefore, establishing a culture of academic integrity is of particular importance. GenAI should not be used to replace any of the independent learning activities of students. On the contrary, an awareness of the opportunities and limitations of digital technologies should be one of the outcomes of the research work. It is advisable for students to record at what stages of the project GenAI was used, what queries were formulated, what results were obtained, and how they were tested. This practice increases transparency throughout the research process, thereby promoting the development of skills in the responsible use of digital resources.

The following condition is a change in the role of the teacher. In project-oriented learning, the teacher is no longer the sole source of information; rather, the teacher organises the learning environment, coordinates students' activities, advises on the selection of sources, helps to formulate research questions, and directs reflection. The teacher shall also define the limits of the appropriate use of GenAI, ensure compliance with the principles of academic integrity, and facilitate constructive discussion of the results obtained.

Another condition is the organization of team interaction. Within the framework of the work on a study project, students should distribute their roles among participants, hold joint discussions of intermediate results, provide mutual evaluation, and make collective decisions. In this context, GenAI can be used as a support tool for group work, but the final decisions must be made by the students themselves. This approach develops the skills of cooperation, responsibility for the overall result, the ability to defend one's own position in a reasoned manner, and taking into account

the opinions of other participants. The selection of educational material is equally important. To implement project activities, it is advisable to use artistic texts, historical documents, folk art, journalistic materials, and other sources that allow for different approaches to interpretation. Such material creates favourable conditions for the development of research thinking, since it does not have unambiguous answers and requires a comprehensive analysis. That is why the proposed model uses the Ukrainian folk song as the basis of a practical case. This is considered not only as a folklore work, but as a multi-layered cultural text that combines historical, linguistic, ethno-cultural, and value components.

Special attention should be paid to the evaluation system. In traditional practice, the final product is primarily evaluated. However, during project study, it is important to take into account the entire work process. It is advisable to evaluate students' ability to formulate research questions, make critical analysis of sources, argue conclusions, work effectively in a team, adhere to the principles of academic integrity, and reflect on their own activities. This approach corresponds to the competence model of education, since it rather orients students to develop universal skills that are important not only in their studies, but also in future professional activities.

Thus, the implementation of the proposed model requires a comprehensive provision of pedagogical conditions, among which the defining ones are the problematic nature of educational tasks, critical work with information sources, pedagogically balanced use of GenAI, compliance with academic integrity. The active role of the teacher as a facilitator of the educational process and the organization of reflexive activities of students. Only under such conditions does GenAI become not a means of simplifying learning, but a tool for intellectual development. Moreover, it enhances the potential of project-oriented learning and contributes to the formation of competencies necessary for a modern specialist.

4. Practical Implementation of the Author's Model: Educational Project “Ukrainian Folk Song as the Nation's Cultural Code”

The model's fundamental feature is a change in the logic of building a study project. In traditional practice, the teacher usually formulates the topic, determines the list of tasks, selects educational material, and

suggests an algorithm for completing the work. Whereas, in the proposed project approach, the source base becomes *language material,* which itself "generates" a problematic field of research. This can be a folklore text, an excerpt from a work of art, a historical document, a modern media text, a public speech, or other communicative phenomenon that contains the potential for multidimensional analysis. Interaction with such material encourages the emergence of research questions, which are gradually transformed into the topic of an educational project. Thus, the central unit of pedagogical design is not the educational task, but the research question. *Thus, the research question,* formulated by students, is based on the analysis of language material. It is the content quality of this issue that determines the further logic of work, the selection of sources, the nature of interaction with digital tools, and the expected result. This approach is consistent with current trends in inquiry-based learning, in which learning is organized around research and search of data, rather than reproducing ready-made knowledge.

4A. Methodology for Designing an Educational Project Based on Language Material

The proposed model of project-oriented learning requires appropriate methodological support, since its effectiveness is determined not only by the use of modern digital technologies, but primarily by the logic of pedagogical design. According to modern research in the field of project learning, the effectiveness of an educational project depends on the consistency between educational goals, the content of the discipline, the types of activities of students, assessment methods, and digital resources used. This is why GenAI integration cannot be achieved simply by including individual digital services in existing study courses. It requires rethinking the entire structure of the educational project.

In the proposed methodology, pedagogical design is considered as a consistent creation of an educational environment in which all elements of learning obey a single research logic. The source component is not a digital tool or even an educational topic, but speech material that contains the potential for a problem situation to arise. It is its content, cultural and communicative characteristics that determine the direction of future research.

This approach is fundamentally different from the traditional methodology, in which the educational text mainly serves as an illustration of theoretical provisions. Within the framework of the author's model, language material is a source of research questions, which are gradually transformed into the structure of an educational project. This means that, rather than beginning with the selection of tasks, pedagogical design starts with identifying those aspects of the text that can stimulate students' scientific interest and encourage more in-depth interdisciplinary research.

The principle of problematization of speech material is one of the main principles of the proposed methodology. The essence of the approach is that the teacher does not present students with a ready-made problem, but creates conditions that allow them to identify it independently. For instance, rather than beginning with the traditional definition of a folk song's genre or linguistic characteristics, the analysis may start with a discussion of cultural concepts, historical realities, language symbols or social functions. This approach has the potential to generate more precise and accurate research questions. Then the text ceases to be only the subject of analysis and becomes the source of a scientific problem.

The second principle is an integrative approach**.** As Ukrainian Studies combines knowledge from various humanities disciplines, the educational project should facilitate interaction between linguistic, literary, historical, cultural, and communicative components integrated into one research project. This approach allows students to consider the language phenomenon not in isolation, but in a broad socio-cultural context. In this case, GenAI can be used to compare different interpretations, search for additional historical information, model alternative explanations, or prepare materials for discussion. At the same time, the final generalization should be based on academic sources and students' own analysis.

Equally important is the principle of research autonomy. If implemented, it enables students to gradually take responsibility for choosing search directions, selecting sources, formulating hypotheses, and justifying conclusions. In this process, GenAI is an information assistant, which does not make it's own research decisions instead of the student. This approach entirely corresponds to modern ideas about the development of academic autonomy. Therefore, the formation of lifelong learning skills (*lifelong*

learning), which is one of the fundamental results of modern higher education, is ensured.

The next principle is academic integrity and transparency in the use of GenAI. Modern language models can significantly speed up individual stages of work on a project, but their use should be pedagogically regulated. Students should clearly understand at what stages of work it is *acceptable* to apply GenAI. They are recommended to *record* any interactions with such digital systems, and shall be aware of how *to check the* accuracy of the information they receive, and they should know the criteria how to *distinguish* author's text from an automatically generated one. Thus, openness and transparency in all aspects of the educational process help to foster responsible digital behaviour and prevent the superficial use of GenAI to complete academic assignments.

The principle of reflexivity is of particular importance, as it ensures awareness of one's own research activities. After completing each stage of the project, it is advisable to organize a short discussion or written reflection. During this discussion, students analyse the effectiveness of the methods used, evaluate the role of GenAI, identify difficulties encountered in the work, and outline possible ways to improve the project. Using this approach means that reflection is no longer the final element of learning, but an integral part of developing research competence.

These generalized principles do not function in isolation. They form an interconnected system in which each component supports the others. The formulation of the language material problem determines the nature of the research project. The integrative approach provides an interdisciplinary analysis. Research autonomy enables students to take an active role. Academic integrity governs the use of digital technologies. Reflexivity promotes conscious learning. These approaches interact to ensure the implementation of the author's project-oriented study model in the 'Ukrainian Studies' course, creating conditions that allow GenAI to be used effectively as a support tool rather than a substitute for research activities.

4B. Phases of Implementation of the Study Project

The effectiveness of project-oriented learning is determined not so much by the set of methods used, but by the internal logic of organizing students'

cognitive activities. This is why modern pedagogical literature pays more and more attention to the design of holistic educational processes rather than the description of individual forms of work. Each stage has its own didactic goal, providing a gradual transition from the formulation of a problem to the creation of new knowledge. The proposed model is implemented as a sequence of interrelated phases, each of which performs a specific function in the organization of students' research activities.

Phase 1. Initiation of research: problem of speech material. Any educational project begins with the choice of language material that has not only educational, but also research value. The task of the teacher at this stage is not to formulate a ready-made project topic, but to create conditions under which students independently identify aspects of the text that need to be explained. Students change the vector from finding the right answer to asking their own questions as the basis for further research.

Cautions about using GenAI. It is at this stage that it is advisable to use GenAI carefully. It can help to identify possible areas of analysis, suggest alternative formulations of research questions, or draw attention to interdisciplinary aspects of language material. At the same time, the final choice of the problem remains the result of a collective discussion between students and the teacher.

Phase 2. Research design. After identifying the problem, the research design stage begins in order to build the logic of future work. It is the stage where the participants learn how to plan their own research activities: determine which scientific sources need to be involved, which digital resources can be used, which linguistic phenomena are subject to analysis, which aspects of analysis require historical, cultural or sociolinguistic understanding.

Cautions about GenAI. Although GenAI can be used to pre-structure information, it is important, from a pedagogical perspective, that students assess the relevance of the proposed answers independently, compare them with scientific publications and justify their choice of sources. Therefore, the digital tool is used to support the planning of research processes.

Phase 3. Interpretation and critical analysis. Direct analytical work with language material is the basic phase of this project. The main idea of the author's model, linguistic analysis in the historical, cultural and communicative context, is implemented here. Students will compare

different sources and analyse the language features of texts in various styles. They will also trace the origins of cultural symbols.

Cautions about GenAI. The LLMs' answers become the subject of analysis: they need to be checked and compared with academic sources to identify any potential socio-cultural inaccuracies or gaps.

Phase 4. Creating an educational product. The next phase is the generalisation of the study's results and their presentation as an educational product. The project's educational goal determines the format and may include a multimedia presentation, thematic web resource, podcast, video essay, interactive map, analytical report or other type of academic work. It is important that the final product does not simply compile the information found mechanically. It should present the results of independent analysis and contain reasoned conclusions that reflect the interdisciplinary nature of the study. It should also demonstrate the students' ability to integrate the results of working with various sources.

Cautions about GenAI. At this stage, GenAI can be used to improve text structure, edit language, prepare individual presentation elements, or visualize data. However, we should emphasise that all content decisions should be the result of the students' efforts to present the author's work.

Phase 5. Reflection and evaluation. The final phase of the educational project is reflection, which enables students to understand both the findings obtained and how they were achieved. At this stage, you will develop the ability to analyse your own research activities, evaluate the efficiency of the methods used in the study, and identify the strengths and weaknesses of your project and others. We view evaluation as an ongoing process that accompanies every stage of activity within the project. The final evaluation should consider not only the quality of the end product, but also students' research activity and their ability to work in a team. It should also include aspects such as academic integrity, the ability to draw reasonable conclusions, the ability to interact critically with GenAI, and the level of reflexive culture.

Of course, the proposed phase sequence cannot be treated as a rigid algorithm. This is just a model of methodology that can be adapted to suit the content of a specific academic discipline, the level at which students are studying, and the nature of the language material. Its main advantage is preserving the logical integrity of the language project activity.

This activity starts with the formulation of a research question and culminates in the creation of your own educational product, incorporating a critical understanding of the experience gained. In our opinion, this approach to study ensures a harmonious combination of the academic traditions of humanities education and the modern capabilities of GenAI. This approach does not diminish the central role of students in cognitive activity.

4C. Designing Learning Activities for Students

The practical implementation of the proposed model was developed with the specific requirements of teaching the subject of Ukrainian Studies to first-year students at the Kyiv National Economic University. For applicants in this category, Ukrainian Studies is not a professional discipline, but it plays an important ideological role in education. One of its main tasks is to develop the ability to analyse social phenomena in the historical and cultural context, work critically with information, defend their position in a reasoned manner, and effectively interact in a team. This is important for future diverse specialists.

The proposed model is not restricted to using one type of language-learning material. The research focuses on various linguistic and cultural phenomena, depending on the educational objective, the subject matter, and the students' level of study. These phenomena represent the Ukrainian national worldview and have significant cognitive potential. These materials include Ukrainian folk songs, Dumas, legends, proverbs and sayings, phraseological units, artistic texts, memoir literature, journalism, media texts, advertising discourse, social media materials, public speeches. They also reflect other language practices that reflect the cultural, historical, social and communicative processes of modern Ukrainian society. A common feature of these materials is their interdisciplinary nature. As they can be analysed as linguistic, historical, cultural, and social phenomena simultaneously, knowledge from various humanities disciplines can be integrated.

For the proposed practical case, the choice of demonstration material was a Ukrainian folk song. This choice is due to several factors. Firstly, the folk song is one of the most emblematic aspects of Ukrainian intangible cultural heritage. It organically combines linguistic features, historical memory, ethno-cultural traditions, and national symbols. Secondly, the lyrics are accessible to first-year students of non-philological subjects

and do not require any specialist linguistic study. Thirdly, the multi-layered nature of the content enables us to formulate research questions of varying complexity, thereby gradually involving students in scientific research. The pedagogical goal of the project is not to form narrow-subject knowledge about Ukrainian folklore. It is also important that Ukrainian folk songs are used to develop the set of competencies necessary for a modern specialist, regardless of their area of expertise. For Kyiv National Economic University students, working with song lyrics fosters critical thinking, information-searching skills, academic communication, teamwork, project planning, digital literacy, and the responsible use of GenAI. During the implementation of the educational project, students work with a wide range of sources, including song texts, academic publications, dictionaries, historical documents, digital archives, multimedia resources, and generative LLMs. Each source has its own role in the research process. Comparing information from different sources is the basis for developing critical analysis skills. It is the organisation of these educational activities that enables a change in the traditional perception of Ukrainian Studies as a discipline primarily concerned with the acquisition of factual knowledge. Within the framework of the author's model, it emerges as an intellectual space for research interaction, where language and cultural material serve as tools for developing analytical thinking, academic culture, and digital competence. For first-year students at the Kyiv National Economic University, this creates an opportunity to develop a deeper understanding of Ukrainian cultural traditions and to acquire the universal tools necessary for working with information in their future professional activities.

The project involves working in small groups of four or five people. This format allows individuals to take responsibility for their own work while also facilitating collective discussion of results, thereby creating conditions for developing cooperative skills. Group formation takes voluntary choice into account. However, teachers may recommend a multi-level team composition to bring together students with different levels of study, digital literacy, and communication experience. This encourages mutual learning and the delegation of tasks based on participants' strengths. It also fosters joint decision-making and academic communication skills. At the initial stage, each group receives a selection of folk songs of various

themes – historical, Chumak, Cossack, family-household, calendar-ritual, or recruitment. Students independently decide which of the suggested texts will form the basis of their research, justifying their choice.

As defined in the above steps, we begin by formulating a research problem. Students determine for themselves which aspects of the text are of the greatest interest. Some groups may focus on the symbolic language of a folk song, while others may focus on reflecting historical events, national characteristics, reimagining traditional themes, or how the song functions in the modern information landscape. Even at this stage, future economists are developing an important skill – the ability to transform information into a research problem.

The next step is to develop a research plan. The teams determine the most appropriate sources and digital resources. They use a collection of texts of Ukrainian folk songs, as well as academic publications, electronic libraries, scientific articles, digital archives, museum collections, audio recordings from folklore expeditions, and multimedia resources.

Cautions about using GenAI. Before starting work on the project, the teacher should explain that the language-learning model cannot be relied upon as a source of knowledge and is not a substitute for academic publications. Its purpose is to help you generate ideas, refine concepts, compare different interpretations, and organise material. For example, when studying a historical song, students can use a generative LLMs to ask questions about its historical context, the symbolic meaning of its imagery, and modern scientific interpretations. The received responses are not used directly in the project. On the contrary, they become the subject of critical analysis. Students should verify the facts presented using academic sources, compare different explanations, and highlight any inaccuracies or overly generalised statements.

Further, the distribution of functions within the group is provided. Participants will usually be asked to identify a project coordinator, who will be responsible for working with scientific sources; an analyst, who will perform a comparative analysis of materials; a digital design specialist, who will design the results; and a speaker, who will present the results of the study. While this distribution is not fixed, it helps to avoid duplication of work and increase the responsibility of each participant for a separate stage of the research process.

Cautions about using GenAI. A very relevant option for GenAI cooperation is the distribution of AI roles within the student team. To ensure effectiveness, participants should consider possible AI roles. For example, GenAI could generate code to count the number of artistic tools, end-to-end words and symbols, and conceptual images in song texts of different genres or the same genre. For a copywriter, GenAI could act as a stylistic critic who checks texts created during teamwork for compliance with modern literary language style and regulatory requirements. For a presenter, GenAI could act as a speechwriter who turns ready-made speech material into slides and video content. In other words, team members familiarise themselves with the principles of creating high-quality queries (i.e., prompt engineering), as the accuracy of the query largely determines the quality of the response received.

I. Molik, professor of management at Wharton University, specialist in entrepreneurship and innovation, proposed four rules for safe work with GenAI [26]. If we consider the activities that students in the team will carry out during the project preparation stage, we can create the following approximate scenario:

Always invite GenAI to the table – at the first meeting, the team opens the LLM model and uploads the lyrics of the selected songs there. GenAI organises language material according to criteria such as genre, historical period, and region of distribution. This saves the team hours of time that would otherwise be spent on routine work, allowing them to focus on more creative tasks.

Be a man in the loop – so team members can share the generated list among themselves for verification. They can therefore identify possible inaccuracies by checking academic collections and works of fiction.

Treat GenAI as a team member, but specify their role – for example, a student editor writes a prompt: *"Act like a professional folklorist. Check the selected song units for regional distribution. / Act as a writer. Choose song lyrics of the appropriate genre for your novel about the history of Ukraine for 20–30 years, determine their function (to characterize the hero, cross-cutting motif of the work, etc."*

Accept that this is the worst GenAI you've ever seen – the team rejects certain results of GenAI's work, taking into account human uniqueness,

defines the components of the created product, which it implements only through personal representation.

In order to accustom students to the requirements of academic integrity, a mandatory component of each educational project should be a declaration on the use of AI tools in the project report. This is based on the provisions of the University's policy on the use of GenAI. In the declaration text, you must specify a specific tool (the full name of the model and its developer, *e.g., OpenAI ChatGPT)*, as well as its purpose and approximate scope of use (those tasks that GenAI performed). Also, there must be confirmation of copyright responsibility from the team that all generated content was verified by a person, and GenAI is not a co-author of the work.

Interacting with artificial intelligence is becoming a means of developing information literacy and critical thinking skills. It is also important to emphasise the organisational and cognitive functions of group work and discussion. By comparing their own conclusions with the responses of the LLMs and the results of other groups, teams learn to defend their position in a reasoned manner. They also learn to conduct academic discussions, perceive alternative views correctly, and reach common solutions. Such skills are no less important for future specialists than mastering the subject content of the discipline.

So, the practical implementation of the project demonstrates that Ukrainian Studies at the University of Economics is turning into an intellectual environment for the formation of research culture, language and information literacy, and team interaction skills. It also demonstrates responsible use of modern digital technologies. In our opinion, this ensures the relevance of the proposed methodological model in the context of the digital transformation of modern higher education.

5. Pedagogical Discussion

The proposed project-oriented learning model brings the discussion about the place of GenAI in humanitarian education to life. The presented approach is based on the idea that digital technologies should not be considered a standalone educational resource or a replacement for a student's independent learning activities. Their pedagogical value is primarily determined by how they are integrated into the educational process. In this context, GenAI serves as a research support tool. It helps formulate questions, structure

material, and offer alternative analytical approaches. However, it does not replace the critical understanding of sources or the interpretation of results. In our opinion, such a pedagogical position is fundamental to the effective use of GenAI technologies in teaching the humanities.

The presented model does not claim to be versatile; on the contrary, its feature is adaptability. Although it is designed to teach Ukrainian Studies to students of the Kyiv National Economic University, its conceptual provisions can be used in teaching other humanities disciplines. The project activities involve working with various types of sources, analysing cultural and social phenomena, and developing critical thinking and academic writing skills. At the same time, the specific content of the projects, the methods of using GenAI and the evaluation criteria should be determined in accordance with the educational programme, academic discipline and level of study.

At the same time, implementing the proposed model requires considering a number of organisational and methodological conditions. Firstly, this relates to the teacher's level of digital competence. They must not only be familiar with modern AI tools, but also be able to integrate them into the educational process in line with the didactic goal. It is equally important to ensure that students are ready for independent research activities. The open format of project work may be difficult for first-year students who are just adapting to studying at a higher education institution due to their insufficient experience of academic research, critical analysis of sources, and teamwork. This is why pedagogical support is particularly important at the initial stages of project implementation. This will involve breaking tasks down into simple steps, providing methodological advice, and constantly reflecting on the process and results of educational activities. The effectiveness of GenAI use is not determined by the level of technological support, but by the quality of the educational project's pedagogical design. In the absence of clearly defined research objectives and a system of pedagogical support, digital tools do not improve learning outcomes. In fact, they may lead to a superficial understanding of the material.

There are also certain restrictions associated with the use of GenAI. It is well-known that LLMs can produce incomplete or inaccurate responses, fail to correctly reproduce historical or cultural contexts, and provide information that is not properly scientifically confirmed. This makes it necessary to

systematically verify results obtained from academic sources, develop the ability to critically evaluate digital content, and adhere to the principles of academic integrity. In these circumstances, GenAI is not an alternative to scientific research, but a tool that can be used to enhance students' research activities without replacing them. Therefore, the pedagogical effectiveness of GenAI depends not on the technology's capabilities, but on teachers' ability to integrate it into research study processes. In these circumstances, digital tools are not an alternative to academic work, but rather a means of fostering critical thinking and a culture of research among students.

CONCLUSIONS

The study indicated that the current transformation of higher education, driven by the active development of digital technologies and generative AI (GenAI), highlights the need to reconsider traditional teaching methods in humanities subjects. The use of generative LLMs cannot be considered a simple addition to existing methods. Their integration requires changing the logic of organizing the educational process, focusing on the development of students' research activity, critical thinking, academic integrity, and digital competence.

This section presents the author's model for project-based study in the discipline of Ukrainian Studies. This model is based on the integration of linguistic and cultural material, educational project technology, and GenAI capabilities. Its purpose is not to provide ready-made answers, but rather to encourage students to formulate their own research questions and hypotheses, compare different interpretations and critically analyse information, and develop their own reflexive culture.

Theoretical significance: The proposed model substantiates the potential of using linguistic and cultural texts as a universal didactic environment for developing students' research competencies, even if they are not studying philology. It is fundamentally important that the object of project activity can be a variety of cultural texts – such as folk songs, works of art, journalism, media texts, historical documents, phraseological material, or other language phenomena. This can become the basis of interdisciplinary research. In the case study presented, a Ukrainian folk song is used as illustrative material that clearly demonstrates the potential for implementing the author’s methodology, but does not limit its scope of application.

The model's practical value lies in its adaptability to teaching Ukrainian Studies to first-year students on various degree education programmes at the Kyiv National Economic University. The proposed approach contributes to the development of a set of universal skills that are necessary for modern specialists, regardless of their area of expertise. In particular, it fosters the ability to work with different types of information sources, critically evaluate the results of GenAI's work, present research results in a reasoned manner, and collaborate effectively in a team. It is also necessary to adhere to the principles of academic integrity. Thus, Ukrainian Studies fulfils a cultural and educational function as well as a skills-based function, ensuring the development of competencies that will be in demand in future professional activities.

The results of the study suggest that the effectiveness of GenAI use is primarily determined by the quality of the pedagogical design rather than the technological capabilities of the digital tools used. Without clearly defined learning objectives and a system of pedagogical support and academic assessment criteria, using LLMs may lead to a decline in students' research activity. Conversely, the integration of GenAI into the framework of project-based learning creates the conditions for the development of critical thinking, the responsible use of digital technologies and the fostering of a culture of academic research. The proposed model has the potential to be adapted to other humanities disciplines where teaching efforts involve the analysis of cultural texts, historical sources or socio-cultural phenomena. At the same time, its practical implementation requires taking into account the specifics of the educational program, the level of digital competence of students and teachers. It also requires considering the specifics of organizing the educational process in a particular higher education institution. This indicates the need for flexible use of the model in accordance with the specific pedagogical context.

Further research could involve testing the effectiveness of the proposed model in educational processes at higher education institutions of various specialisations, developing assessment criteria for project-based activities utilising GenAI, and adapting the methodology for blended and distance learning. It could also include studying the impact of generative LLMs on academic integrity, information literacy, and critical thinking among students. One possible area of focus could be broadening the range of

linguistic and cultural materials used for educational projects and exploring the potential of applying the proposed model to other humanities subjects.

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