



IMPROVING THE EDUCATIONAL PROCESS THROUGH ONLINE RESOURCES TO DEVELOP STUDENTS' RESEARCH SKILLS

MEJORA DEL PROCESO EDUCATIVO MEDIANTE RECURSOS DE INTERNET PARA EL DESARROLLO DE LAS HABILIDADES DE INVESTIGACIÓN DE LOS ESTUDIANTES

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ABSTRACT

Internet resources occupy an important place in the modern educational sector, especially in the context of higher education. In view of the global digital transformation of society, the use of these technologies makes it possible to significantly increase the effectiveness of education and strengthen student motivation by facilitating the accessible explanation of complex processes and fostering critical and analytical thinking. The relevance of this study is determined by the need to introduce into higher education such teaching approaches as can significantly improve the research activity of universities. The purpose of this article is to examine the use of Internet resources in teaching for the development of students' research skills. The main findings indicate that Internet resources have a substantial impact on the development of future specialists' research competence. They promote deeper engagement with educational materials, increase students' interest, and make it possible to adapt learning to their

research needs. The use of advanced tools in the educational process helps students understand the depth of research activity, study complex objects, and integrate digital elements into learning. However, there are also certain challenges, including the need for considerable time to prepare teachers and students, reduced control over the depth of students' mastery of educational material, and greater difficulty in maintaining classroom discipline.

Keywords:

Modern Education, Research Skills, Internet Resources, Active Learning, Project-Based Learning.

RESUMEN

Los recursos de internet ocupan un lugar importante en el sector educativo moderno, especialmente en la educación superior. Ante la transformación digital global de la sociedad, el uso de estas tecnologías permite aumentar significativamente la eficacia de la enseñanza y fortalecer



la motivación del alumnado, facilitando la explicación accesible de procesos complejos y fomentando el pensamiento crítico y analítico. La relevancia de este estudio radica en la necesidad de introducir en la educación superior enfoques pedagógicos que mejoren significativamente la actividad investigadora de las universidades. El objetivo de este artículo es examinar el uso de los recursos de internet en la enseñanza para el desarrollo de las habilidades investigadoras del alumnado. Los principales hallazgos indican que los recursos de internet tienen un impacto sustancial en el desarrollo de la competencia investigadora de los futuros especialistas. Promueven una mayor interacción con los materiales educativos, aumentan el interés del alumnado y permiten adaptar el aprendizaje a sus necesidades investigadoras. El uso de herramientas avanzadas en el proceso educativo ayuda al alumnado a comprender la profundidad de la investigación, estudiar objetos complejos e integrar elementos digitales en el aprendizaje. Sin embargo, también existen ciertos desafíos, como la necesidad de dedicar un tiempo considerable a la preparación de docentes y estudiantes, la menor supervisión del dominio del material educativo por parte del alumnado y la mayor dificultad para mantener la disciplina en el aula.

Palabras clave:

Educación Moderna, Habilidades de Investigación, Recursos de Internet, Aprendizaje Activo, Aprendizaje Basado en Proyectos.

INTRODUCTION

At present, the world is undergoing profound economic, technological, and sociocultural transformations that are reshaping virtually all spheres of human activity, including education. The transition toward a knowledge-based and digitally driven society has significantly increased the demands placed on both professional and personal competencies. In contemporary contexts, the emphasis is no longer limited to the accumulation of knowledge, but rather to the ability to critically analyze information, adapt to rapidly changing conditions, and generate innovative solutions to complex and non-standard problems. This shift reflects a broader paradigm change in education, where learning is understood as an active, dynamic, and lifelong process. Consequently, higher education institutions are increasingly expected to prepare graduates who are not only knowledgeable but also capable of independent inquiry, critical reflection, and continuous professional development. In this regard, improving the quality of education through the development of students' analytical

and research skills has become one of the central priorities of modern higher education systems (Gazizova et al., 2025).

Within this evolving educational landscape, Internet resources have emerged as a key driver of transformation, fundamentally altering the ways in which knowledge is accessed, constructed, and shared. The rapid expansion of digital technologies has enabled unprecedented access to vast amounts of information, allowing students to engage with diverse sources of knowledge beyond the limitations of traditional educational settings. Moreover, Internet resources facilitate the implementation of innovative pedagogical approaches, such as collaborative learning, problem-based learning, and inquiry-based instruction, which emphasize active student participation and engagement. These digital environments provide opportunities for communication, interaction, and cooperation, enabling learners to participate in virtual communities where knowledge is co-constructed through dialogue and shared experiences.

In this context, the development of effective online education depends not only on the availability of digital resources but also on the transformation of teaching competencies. As highlighted by Soria & Espinosa (2026), higher education teachers must develop a set of specific digital and pedagogical competencies that allow them to design, manage, and evaluate virtual learning environments effectively. These competencies include the ability to integrate technological tools into pedagogical practice, facilitate interaction in online settings, and promote autonomous and collaborative learning among students. The authors emphasize that the teacher's role evolves toward that of a mediator and facilitator who guides students in navigating digital information, fostering critical engagement, and supporting the construction of meaningful knowledge in virtual contexts.

At the same time, the broader process of digital transformation in higher education introduces both opportunities and challenges. That digitalization has redefined the educational ecosystem by expanding access to knowledge, increasing flexibility in learning processes, and promoting innovation in teaching methodologies. However, this transformation also requires institutions to address challenges such as the digital divide, the need for continuous professional development, and the adaptation of curricula to new technological realities. In particular, the author highlights that the effective use of digital resources depends on the ability to create pedagogically sound learning environments that combine technological innovation with the development of critical thinking and research skills.

Taken together, these perspectives reinforce the idea that Internet resources are not merely tools for information access but integral components of a broader pedagogical transformation. Their effective integration into higher education requires the alignment of technological infrastructure, teacher competencies, and student-centered methodologies, ultimately contributing to the creation of dynamic learning environments that foster active participation, knowledge co-construction, and the development of higher-order cognitive skills.

From the perspective of sociocognitive development theory, the integration of Internet resources into the educational process contributes to the creation of cognitively rich and socially interactive learning environments. Exposure to multiple perspectives and forms of knowledge promotes cognitive diversity, while communication networks support the development of social interaction and collaborative problem-solving skills. As noted by Dolinina et al. (2025), Internet-based environments enhance students' creative and intellectual capacities by fostering innovative activity, within which research activity plays a central role. In this sense, Internet resources not only facilitate access to information but also create the conditions necessary for the development of higher-order cognitive skills, including critical thinking, creativity, and research competence.

The increasing importance of research skills in higher education is closely linked to the demands of the modern labor market, which requires professionals capable of analyzing complex information, making informed decisions, and generating new knowledge. Research skills enable students to engage in systematic inquiry, evaluate information critically, and apply theoretical knowledge to practical problems. These competencies are essential for navigating the challenges of a rapidly changing and information-rich world. At the same time, the development of research skills supports the formation of autonomous learners who are capable of directing their own learning processes and adapting to new situations. In this context, the role of Internet resources becomes particularly significant, as they provide tools and platforms that support independent exploration, data analysis, and collaborative research activities.

The integration of Internet resources into the educational process also entails a transformation of the traditional roles of teachers and students. The teacher is no longer viewed solely as a transmitter of knowledge but rather as a facilitator, mentor, and organizer of the learning process. This new role involves guiding students in their cognitive and research activities, supporting their analytical thinking, and fostering meaningful interaction within the learning environment. Students, in turn, are expected to take

a more active role in their learning, engaging in inquiry-based activities, collaborating with peers, and reflecting on their own learning processes. Modern higher education must focus not only on providing students with professional qualifications but also on fostering supportive learning environments that promote academic engagement, autonomy, and adaptability. In this regard, Liu (2024) highlights that the quality of teacher-student relationships significantly influences students' academic engagement through factors such as perceived social support and academic pressure, which are essential for the development of independent and resilient learners capable of addressing complex and evolving challenges.

A review of the scholarly literature reveals that research skills are conceptualized as a multifaceted construct that encompasses a wide range of intellectual and practical abilities. These include the capacity to formulate research questions, collect and analyze data, evaluate information critically, and communicate findings effectively. Although definitions vary across studies, there is a general consensus that research skills involve both cognitive and behavioral components, as well as a high degree of independence and self-regulation. Researchers commonly identify key skills such as critical evaluation, information synthesis, decision-making, problem-solving, data collection, data analysis, and communication. These skills are essential for effective research activity and are increasingly recognized as core competencies in higher education.

Furthermore, research skills can be classified into different categories depending on their role within the educational process. Targeted research skills are those that are explicitly taught as part of a curriculum, while perceived research skills refer to those that students or teachers believe have been developed during the learning process. Assessed research skills, on the other hand, are those that have been objectively evaluated using specific criteria and assessment tools. This classification highlights the complexity of research skill development and underscores the need for systematic and intentional approaches to their formation.

The growing body of research underscores the significant role of Internet resources in fostering these competencies. Chernova et al. (2026) emphasize that research skills are developed throughout the learning process through the application of various methods and techniques, including digital tools. Dronova et al. (2026) highlight the necessity of integrating Internet resources into education in response to the ongoing digitalization of higher education systems. Similarly, Musa et al. (2025) note that Internet resources encourage students to explore and analyze new information, thereby promoting active and engaged learning. Dolinina et al. (2025) further argue that digital

technologies support a shift from traditional teaching approaches toward more value-oriented and student-centered models of education.

Empirical studies provide additional evidence of the effectiveness of Internet resources in enhancing learning outcomes. Sattari & De Hoyos (2026) highlight that the integration of artificial intelligence in scientific research and education enhances knowledge production processes while also raising important ethical and responsibility-related considerations, particularly regarding the use of digital technologies in learning environments; while Burganova et al. (2025) highlight the role of digital competence in increasing student engagement and developing critical thinking skills, which are fundamental to research competence (Akvazba & Bogdanova, 2024). Khammatova et al. (2021) further emphasize that digital technologies enhance the understanding and assimilation of information by increasing students' awareness and motivation to engage in further learning. These findings suggest that Internet resources play a crucial role in supporting both cognitive development and the acquisition of research skills.

At the same time, traditional teaching approaches have been increasingly criticized for their limitations. Researchers point to issues such as the weakening of students' independent cognitive activity and the reliance on repetitive instructional methods that fail to stimulate critical engagement (Luo, 2023). In this regard, Rahman & Hossain (2025) emphasize that the adoption of digital technologies plays a crucial role in driving socio-economic development, particularly through their integration into education systems. They argue that technology adoption not only enhances access to knowledge but also transforms learning environments by fostering innovation, adaptability, and the development of relevant skills for the digital economy. Therefore, the integration of Internet resources into education represents not merely an opportunity for innovation, but a necessary response to the evolving demands of contemporary society and the broader processes of technological and socio-economic transformation. Despite the recognized potential of Internet resources, there remains a significant gap in the literature regarding their specific impact on the development of students' research skills. While numerous studies have examined the general benefits of digital technologies in education, the mechanisms through which these resources contribute to the formation of research competencies are not yet fully understood. In particular, there is a need to explore how different types of Internet resources and pedagogical strategies influence the development of specific research skills and how these processes can be

effectively integrated into educational practice. In light of the above, the aim of this study is to demonstrate the necessity of using Internet resources for the development of students' research skills.

MATERIALS AND METHODS

This study was based on a comprehensive review of relevant scholarly literature, complemented by the application of general scientific methods aimed at ensuring a systematic and in-depth analysis of the research problem. The methodological approach was designed to identify key factors influencing the development of students' research skills in the context of Internet resource use in education.

The method of data systematization was employed to organize and structure the collected information, allowing for the identification of the main dimensions and critical aspects of the problem under investigation. This process facilitated the establishment of conceptual relationships and the synthesis of findings from various academic sources.

In addition, the comparative method was applied to analyze different technologies and approaches related to the use of Internet resources in education. This method enabled a systematic comparison of their effectiveness in fostering students' research skills, highlighting both their strengths and limitations across different educational contexts.

Furthermore, the methods of analysis and synthesis were used to examine the advantages of integrating Internet resources into the learning process, particularly in relation to the development of research competencies. At the same time, these methods allowed for the identification of existing challenges and potential drawbacks associated with the use of digital tools in education, providing a balanced and critical perspective on their implementation.

Let us consider the main approaches to the use of Internet resources in the development of multimedia and communication-based educational technologies that may become decisive in the development of students' research skills.

Technologies involving the use of Internet resources to support research activity and develop students' research skills are associated with the creation of an open informational and scientific educational environment, the content of which is presented through modern forms and means of information delivery. It is therefore appropriate to focus on several specific technologies for the use of Internet resources in supporting research activity and developing students' research skills (Table 1).

Table 1: Technologies for the Use of Internet Resources to Support Research Activity and Develop Students' Research Skills

Technologies	Characteristics
Computer-mediated Internet communication	includes online conferences, bulletin boards, e-mail, mailing lists, online discussion forums, webinar platforms, and similar tools that provide the educational community with opportunities to exchange existing and newly acquired experience during the preparation and implementation of research, overcome the limits of individual experience, and expand the possibilities for the formation of research skills.
Virtual learning	is mainly used as a means of accessing an electronic learning environment from any place and at any time, thereby removing certain physical limitations of the real world. Electronic learning environments offer a wide range of learning modes, including the search for educational resources that are to be integrated into learning activities, as well as educational projects covering information resources, pedagogical approaches, and technological tools.
Computer modeling technologies	make it possible to experiment with and test different solutions to specific research problems and to investigate the behavior of various systems, processes, and phenomena

Computer-mediated Internet communication is a central feature of the cyberspace of young people's research activity, where students meet one another, teachers or tutors, and experts in particular research fields.

The main components of computer-mediated Internet communication in the research process include the following: the subject of activity, namely the student; the object of activity, namely the student's research work; the mediating tools of activity, such as multimedia tools, computer programs, online resources, and servers supporting educational interaction; the community of participants, that is, all those connected through computer-mediated Internet communication and united by a shared research problem, for example students, teachers, research supervisors, experts, and parents; the division of labor, referring to duties associated with roles and functions in organizing research activity; and the rules and norms related to the relevant social roles and responsibilities of individual members of the communication community.

Among the forms of computer-mediated Internet communication, a special role in the development of research skills belongs to online conferences and webinar platforms. An Internet conference is a technology that allows many participants located in different parts of the world to communicate with one another in real time on equal terms, to hear and see one another clearly, to exchange files and opinions, and to make collective decisions. This form of work enables students not only to present the results of their own research, but also to participate in the discussion of pressing issues at a higher qualitative level and to exchange views with leading specialists in the relevant research field.

A webinar is a special format of online communication, limited in time and devoted to a predefined range of issues within a given topic, fully reproducing the atmosphere of a seminar. Conducting a high-quality webinar requires appropriate preliminary preparation, during which the teacher or tutor determines the schedule, formulates objectives, and prepares and sends invitations to participants. To facilitate a better understanding of the topic and discussion questions, the teacher or tutor provides theoretical material, useful links, and a list of references (Nikolaeva et al., 2025).

Thus, computer-mediated Internet communication is used as a mediating tool for access to various information sources and for information exchange. It provides opportunities to request information on any problem, involve different points of view, conduct negotiations, develop research strategies, present and discuss results, and also serves as a means of prompt feedback, tutoring support, and related functions.

The next technology supporting students' research activity includes virtual laboratories, lectures, and discussions. These constitute a new environment for collaborative virtual learning aimed at meeting modern educational needs. The virtual world becomes a meeting place for scholars, specialists, teachers, and students.

As members of a virtual learning community, students establish contacts through computer-mediated Internet communication and use the Internet as a meeting place for learning. The most promising technology for acquiring procedural knowledge in research is represented by virtual laboratories, which offer students rich content for practicing skills related to the investigation of scientific problems. The role of the teacher lies in coordination and pedagogical support, commonly referred to as tutoring.

The pedagogical approaches underlying virtual learning include active student participation in learning and in choosing an individual learning trajectory or scenario, interactivity and learning through interaction, engagement with modern educational developments, student self-control rather than exclusive control by the teacher or tutor, the reduction of the gap between learning and practice, and ease of navigation.

The virtual world itself may serve as a source of research and may also provide conditions for conducting educational and laboratory studies on virtual platforms.

Another technology for the use of Internet resources in supporting research activity and developing students' research skills is computer modeling on the Internet, the main elements of which include:

- a. scenarios of complex tasks or general problems that are gradually and partially disclosed in response to students' actions;
- b. delegation of authority to students for carrying out specific responsibilities in solving the problem under study;
- c. planning of solution pathways;
- d. control over students' decision-making.

Thus, students are able to act according to their own plan, experiment with and test different solutions to problems, and thereby realize that they are subjects of the learning process. Software used for computer modeling on Internet platforms provides users with the opportunity to manage the resources of an environment containing engaging research tasks connected with real practice. It also provides guidance on the use of the necessary tools and virtual instruments for research. Students can manipulate variables, identify relationships, and select and plan events. The simulation of a laboratory experiment is a classic example of computer modeling. Students' use of multimedia environments in the role of researchers to perform complex tasks, as well as their participation in online interaction with other participants in real or educational research, contributes to the acquisition of research skills.

An example is the PhET project in science education. Its founder is Karl Wieman, a professor of physics at the University of Colorado Boulder, who launched the project in 2002 using funds from his Nobel Prize. This resource contains simulations for the interactive dynamic modeling of natural phenomena and processes for use in the educational process on the basis of modern educational concepts of game-based environments in which learners feel like researchers. The PhET project is freely available for offline and online use, as an in-class demonstration, for home laboratory assignments, and for students' research work in an accessible, accurate, and realistic laboratory setting.

At the same time, when using Internet resources in the process of developing research skills, teachers may encounter certain difficulties. For their effective resolution, it is necessary to identify these problems and propose methods for overcoming them (Table 2).

Table 2: Problems Arising from the Use of Internet Resources in the Learning Process.

Problem	Ways to Overcome the Problem
The need for lengthy preparation of the teaching staff	It is necessary to begin with the gradual introduction of Internet resources into the educational process. For this purpose, it is advisable to provide guidelines describing the algorithm of actions, that is, a step-by-step list of actions to be applied in a particular educational situation.
Reduced control over the depth of students' mastery of educational material	When using Internet resources, teachers should carefully consider the materials offered for study. It is necessary to develop the lesson plan in advance and determine the timing of each stage.
Greater difficulty in maintaining classroom discipline	It is necessary to strengthen students' motivation to study the material by selecting the most engaging cases and issues for discussion, announcing the expected learning outcomes of the class, and attracting students' attention in various ways depending on their individual characteristics.

In recent years, the world has been experiencing a global transition from an industrial to a digital society. For this reason, the main objective of educational policy is to foster an educated younger generation capable of adapting quickly to a changing and dynamic environment. The use of Internet resources may be regarded as a foundation for progress, effective acquisition of scholarly knowledge, and the formation of a distinctive educational paradigm in the twenty-first century. Traditional teaching methods and tools are gradually becoming outdated and insufficiently effective, since they are no longer able to meet modern educational requirements. In this regard, researchers emphasize the importance of shaping a new and progressive model of higher education oriented toward the training of specialists capable of functioning effectively in the contemporary digital world. Therefore, innovative higher education presupposes the use of Internet resources in the educational process (Burganova et al., 2025). At the same time, researchers underline that in classes where Internet resources are used, the teacher does not simply provide ready-made knowledge, but rather encourages students to engage in inquiry and research activity (Mirzoyan, 2023). Through the process of searching for and analyzing the necessary information, research skills, as well as analytical and critical thinking, are developed.

When evaluating traditional teaching methods, it should be noted that this approach mainly focuses on the memorization and reproduction of information. In the period of deep digitalization, there is a growing need to develop students' productive thinking, analytical abilities, and communication skills. All of these become essential for practical preparation

for activity in a changing external environment. It is also important to consider the specific features of the Russian educational system, in which innovative technologies continue to coexist with traditional ones. At the same time, the traditional approach to teaching still predominates, which prevents the full satisfaction of the needs arising in the modern educational environment. This means that traditional teaching tools are becoming outdated because of their insufficient effectiveness, whereas the need for innovation is steadily increasing.

Among the prospects for the development of higher education, one may highlight the creation of innovative forms of Internet-based communication and learning through the use of Internet resources, as well as the introduction of digital twins of academic and teaching staff, which may bring educational interaction to a fundamentally new level. In view of this, researchers propose initiating a profound reform aimed at enabling teachers to acquire digital competencies. It is necessary to prepare thoroughly for such a process by identifying all possible advantages of innovative methods and the challenges that hinder their implementation.

As the analysis of the literature has shown, research activity is also of great importance for future specialists, serving as a powerful instrument for understanding the world, capable not only of broadening and deepening human consciousness but also of acting as a driver of progress by creating a foundation for innovation. Researchers note an increase in students' participation in numerous research competitions, projects, and conferences, yet the actual contribution of young scholars to the total volume of university research remains insufficient.

At the same time, one of the factors constraining the development of young people's research activity is the relatively low role assigned to research work. In particular, insufficient attention to the formation of research skills and abilities among young specialists substantially slows innovation processes. Researchers note that students' independent research work still tends to be planned, voluntary, or initiative-based in nature (Shichkin et al., 2024). In this regard, it is necessary to comprehensively support and encourage future specialists' participation in Internet conferences, round tables, and similar activities. Students' readiness to participate in such events reflects the acquisition of information and communication competence, including the ability to use multimedia Internet resources.

Researchers also point out that digital-era society suffers from a shortage of qualified specialists capable of critical thinking, applying analytical abilities in practice, generating original solutions, and being prepared for innovative scholarly activity. Therefore, one of the key objectives of

professional training is the use of Internet resources for the development of students' research skills in order to form their readiness for scientific inquiry.

Teachers should organize the educational process in a way that includes both individual and group activities and promotes the formation of these skills. Most researchers agree on this point, believing that particular emphasis should be placed on the development of a key skill, namely the ability to analyze information. This includes the formulation and testing of hypotheses, as well as more complex processes such as decision-making mechanisms, which are an integral part of research activity.

Thus, contemporary approaches to the development of research skills are largely oriented toward the use of Internet resources, which makes it possible not only to master theoretical materials but also to engage with the modeling of real situations, thereby contributing to the development of students' research skills.

Through the use of Internet resources, a number of tasks can be addressed simultaneously. With the help of virtual learning, students are given the opportunity to practice applied skills, which is an important element of the educational process. This is especially relevant in situations where access to the necessary equipment is limited or where safety risks are present. In turn, computer modeling technologies integrate theoretical knowledge with practical skills by providing users with immediate guidance and access to up-to-date information while working with real objects. This approach makes learning interactive and accessible, which undoubtedly increases students' motivation to master various disciplines.

Project-based activity using Internet resources represents an effective and innovative approach to developing students' research skills in higher education. This method is grounded in the principles of active, student-centered learning, where learners are not merely passive recipients of information but active participants in the construction of knowledge. The approach typically begins with students becoming familiar with the fundamentals of the project method, including the design algorithm, stages of project development, and the general rules governing project-based activity. Once this foundational understanding is established, students proceed to independently design and implement their own projects, making extensive use of Internet resources as tools for information search, data analysis, collaboration, and presentation.

A defining feature of this method is its emphasis on solving real or simulated problems. Each project is required to address a specific issue or research question, which provides direction and purpose to the learning process. This problem-oriented nature of project-based activity

encourages students to engage in meaningful inquiry, fostering not only subject knowledge but also the ability to apply theoretical concepts in practical contexts. Furthermore, research must be an integral part of the project process, meaning that students are expected to employ appropriate research methods, such as data collection, analysis, and interpretation, throughout the development of their work. In this way, project-based learning serves as a bridge between academic knowledge and real-world application.

Another essential aspect of this approach is the central role of student autonomy. The research and project work must be carried out directly by the students themselves, which promotes independence, responsibility, and self-regulation. Learners are required to make decisions, organize their work, and evaluate their progress, thereby developing key metacognitive and research competencies. The teacher's role, in contrast, shifts from that of a traditional instructor to that of a consultant or facilitator. Rather than providing direct instruction, the teacher supports students by offering guidance, feedback, and methodological assistance when needed. This transformation of roles reflects broader trends in modern education, where emphasis is placed on learner autonomy and the development of lifelong learning skills.

Equally important is the requirement that project outcomes possess practical significance. Students are expected to produce results that can be applied in real or professional contexts, which enhances the relevance and value of their work. This practical orientation not only increases students' motivation but also helps them understand the importance of research skills in addressing real-world challenges. By engaging in projects that have tangible outcomes, students develop a deeper appreciation of the role of research in professional and academic settings.

The integration of Internet resources further strengthens the effectiveness of project-based learning. Digital tools provide access to a wide range of information sources, enable collaboration across different locations, and support the use of innovative methods for data analysis and presentation. As a result, students are able to work more efficiently and creatively, while also developing digital literacy skills that are essential in the modern world. The combination of project-based activity and Internet resources thus creates a powerful learning environment that fosters both cognitive and practical skill development.

Overall, the introduction of such innovative approaches to learning has the potential to significantly improve the quality of research activities in higher education. Individual and group work, as well as project- and research-based methodologies, stimulate student engagement,

encourage critical thinking, and contribute to the formation of professional research competence. These approaches promote the integration of knowledge, skills, and attitudes necessary for effective performance in academic and professional contexts.

In this way, the fundamental goal of higher education is achieved: the preparation of competent specialists who are capable of functioning effectively in a high-technology, knowledge-driven world. By fostering research skills, autonomy, and critical thinking, project-based learning supported by Internet resources equips students with the tools necessary to adapt to complex challenges and to contribute meaningfully to their fields of expertise.

CONCLUSIONS

The fundamental transformation of the higher education system in the digital era requires considerable attention to the selection of optimal learning tools, among which Internet resources occupy an important place. In the process of obtaining higher education, increasing attention is being paid to independent learning activity, which involves the use of Internet resources. The key components of this activity are interactivity, productivity, and effectiveness. In the context of higher education, it is important to emphasize that research activity represents a significant aspect of students' academic development.

Accordingly, in the process of obtaining a professional qualification, research skills become exceptionally important for students, as they are formed throughout the entire period of study through various types of activity. The purpose of developing research skills is to foster the ability to think critically, apply analytical skills, and systematize information in ways that contribute to the high-quality conduct of research. The structure of research skills is multifaceted and consists of several key components, among which the most important is the information and communication component, which includes mastery of data collection methods corresponding to formulated hypotheses, as well as the creation of empirical data sets. However, the traditional approach to teaching does not make it possible to master all aspects of contemporary research processes. It is innovative approaches to teaching, particularly the use of Internet resources, that exert an undeniable influence on the development of research skills. In this regard, Internet resources become critically important, as they serve as a powerful instrument for achieving the goal of developing comprehensive research competence.

Further research may be related to identifying methods that contribute to the formation of research skills and to the harmonious combination of value orientations and professional qualities that determine an individual's orientation

toward research activity and the solution of professional tasks.

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