

Наукові інтереси: ріманова геометрія та її узагальнення, методика навчання геометрії у закладах вищої освіти, методика навчання геометрії у закладах загальної середньої освіти.

ЧЕНЬ ЦІНЬЛҮН – учитель природничих наук і математики молодшого рівня середньої школи, Веньчжоу, провінція Чжецзян, Китай.

Наукові інтереси: математика, методика навчання математики у закладах загальної середньої освіти.

INFORMATION ABOUT THE AUTHORS

DRAHANYUK Sergey Volodimirovich – candidate of physical and mathematical sciences, senior lecturer at department of higher mathematics and statistics of the State institution «South Ukrainian National Pedagogical University named after K. D. Ushinsky».

Scientific interests: theory of groups, methods of teaching theory of sets and mathematical logic, algebra and

number theory in higher school, methods of teaching algebra and geometry in secondary school.

SINYUKOVA Olena Mukolaivna – candidate of physical and mathematical sciences, senior lecturer, senior lecturer of department of higher mathematics and statistics of the State institution «South Ukrainian National Pedagogical University named after K. D. Ushinsky».

Scientific interests: Riemannian geometry and its generalizations, methods of teaching geometry in higher school, methods of teaching geometry in secondary school.

CHEN QUIN LONG – Junior high school stage, Science and math teachers, Wenzhou, Zhejiang Province, China.

Scientific interests: mathematics, methods of teaching mathematics at institutions of general secondary education.

Стаття надійшла до редакції 11.01.2025 р.

УДК 372.8.161.2.

DOI: 10.36550/2415-7988-2025-1-217-120-124

ЗАВІТРЕНКО Долорес Жораївна –

кандидат педагогічних наук, доцент,
доцент кафедри педагогіки та спеціальної освіти
Центральноукраїнського державного
університету імені Володимира Винниченка
ORCID: <https://orcid.org/0000-0002-2005-4810>
e-mail: zavitrenkod@gmail.com

БЕРЕЗЕНКО Наталія Олегівна –

викладач кафедри іноземних мов
Донецького державного університету внутрішніх справ
ORCID: <https://orcid.org/0000-0003-3333-8924>
e-mail: nberezenko29@gmail.com

ЖИГОРА Ірина Валеріївна –

кандидат філологічних наук, доцент,
доцент кафедри дошкільної та початкової освіти
Центральноукраїнського державного університету
імені Володимира Винниченка
ORCID: <https://orcid.org/0000-0002-5796-2062>
e-mail: i.zhugora@gmail.com

**ФОРМУВАННЯ КОМУНІКАТИВНОЇ КОМПЕТЕНТНОСТІ СТУДЕНТІВ
У СУЧАСНОМУ ЗАКЛАДІ ВИЩОЇ ОСВІТИ**

У статті проаналізовано проблему формування комунікативної компетентності студентів у просторі вищої освіти. Визначено та обґрунтовано поняття «професійно-комунікативна компетентність студентів». Акцентовано увагу на сучасній взаємодії людини з іншими людьми та світом, яка стала надзвичайно інтенсивною з розширенням технічних можливостей обміну інформацією. Охарактеризовано основні чинники формування професійно-комунікативної компетентності здобувачів у сучасному закладі вищої освіти. Визначено види професійно-комунікативної компетентності та шляхи їх удосконалення за допомогою освітніх технологій і методів. Говорячи про комунікативну компетентність особистості, не слід обмежувати коло дослідження діагностикою знань і вмінь, комунікативних навичок, оскільки спілкування, пов'язане зі спрямованістю особистості, є компонентом мотиваційної сфери, що спонукає до формування світогляду, розвитку інтелекту, вибору ціннісних орієнтацій. Комунікативна компетентність містить такі поліфункціональні компоненти: активність у спілкуванні, емоційну реактивність, швидкість прийняття рішень (темперамент особистості), комунікативну впевненість, стійкість саморегуляції, комунікативну об'єктивність і суб'єктивність.

Аналіз наукових поглядів на формування комунікативної компетентності студентів дозволив визначити її спрямованість та поліфункціональність шляхом виявлення та обґрунтування основних чинників формування та принципів організації в сучасному закладі вищої освіти. Комунікативна компетентність студентів характеризується здатністю толерантно спілкуватися за допомогою вербальних і невербальних засобів мовлення, впливати на співрозмовника, будувати конструктивний діалог, вирішувати конфлікти та налаштовуватися на власну емоційну стабільність у співпраці з освітніми партнерами. Окреслено бар'єри, які ускладнюють процес розвитку успішної комунікативної компетентності студентів.

Ключові слова: комунікативна компетентність, партнерство, практична підготовка, освітні технології, принципи формування мовленнєвих компетентностей.

ZAVITRENKO Dolores Zhoraivna –

Candidate of Pedagogical Sciences, Associate Professor, Associate Professor of the Department of Pedagogy and Special Education of the Volodymyr Vynnychenko Central Ukrainian State University
ORCID: <https://orcid.org/0000-0002-2005-4810>
e-mail: zavitrenkod@gmail.com

BEREZENKO Natalia Olegivna –

teacher of the Department of Foreign Languages of the Donetsk State University of Internal Affairs
ORCID: <https://orcid.org/0000-0003-3333-8924>
e-mail: nberezenko29@gmail.com

ZHYHORA Iryna Valeriivna –

Candidate of Philological Sciences, Associate Professor, Associate Professor of the Department of Methods of Preschool and Primary Education of the Volodymyr Vynnychenko Central Ukrainian State University
ORCID: <https://orcid.org/0000-0002-5796-2062>
e-mail: i.zhugora@gmail.com

FORMATION OF THE COMMUNICATIVE COMPETENCE OF THE STUDENTS IN A MODERN INSTITUTION OF HIGHER EDUCATION

The article analyzes the problem of forming students' communicative competence in the space of higher education. The concept of "professional and communicative competence of students" is defined and substantiated. The emphasis is placed on the modern interaction of a person with other people and with the world, which has become extremely intense with the expansion of technical capabilities of information exchange. The main factors of formation of professional and communicative competence of higher education students are characterized. The types of professional and communicative competence and ways to improve them by means of educational technologies and methods are determined. Speaking about the communicative competence of a personality, one should not limit the research circle only to the diagnosis of knowledge and skills, communication skills. After all, communication is connected with the orientation of the individual, is a component of the motivational sphere, which encourages the formation of a worldview, the development of intelligence, and the choice of value orientations. Communicative competence includes the following multifunctional components: activity in communication, emotional reactivity, speed of decision-making (personality temperament), communicative confidence, stability of self-regulation, communicative objectivity and subjectivity.

The analysis of scientific views on the formation of students' communicative competence made it possible to determine its focus and multifunctionality by identifying and substantiating the main factors of formation and principles of organization in a modern higher education institution. Students' communicative competence is characterized by the ability to communicate tolerantly with verbal and non-verbal means of speech, influence the interlocutor, build a constructive dialogue, resolve conflicts and tune in to their own emotional stability in cooperation with educational partners. The barriers that stand in the way of developing students' successful communicative competence are outlined.

Key words: *communicative competence, partnership, practical training, educational technologies, principles of forming language competencies.*

Statement and justification of the relevance of the problem. The rapid development of science and technology and the technological breakthrough of mankind have caused significant changes in human consciousness and cognition. The manifestation of modern communication needs has led to the emergence of new ways and forms of communication through e-learning. The modern interaction of the individual with other people and with the world has become extremely intense with the expansion of technical capabilities of information exchange.

The reform of higher education in Ukraine is aimed at the comprehensive development of a person, his or her talents, intellectual, creative and physical abilities, the formation of personal values necessary for the realization of professional competencies, and the improvement of their educational level. In the current conditions of ensuring European integration processes of education development in Ukraine, new requirements for personal and professional qualities of students, their level of communication skills are becoming relevant [1].

In a rapidly changing environment, higher education institutions should act as generators of social progress; training centers for a national network of specialists ready to implement innovative changes in production with the involvement of all stakeholders

(university staff, employers, partners), etc. The educational space of higher education institutions should be focused on a broad dialogue (partnership), in which educational systems and technologies interact and enrich each other, establishing the high competitiveness of a specialist in the labor market. The interactive space of higher education under martial law should be proactive, widely implementing strategies of dialogue and psychology of success, partnerships and strengthening interpersonal contacts of educators with colleagues from EU countries.

The purpose of the article is to determine the factors of formation of students' communicative competence in the higher education space based on a holistic scientific analysis of domestic and international experience.

Analysis of recent research and publications. The problem of communicative competence is paid attention to by domestic and foreign scholars, namely: A. Andrienko, O. Arshavska, T. Butenko, A. Moskalenko, R. Milrud, L. Savenkova, O. Sannikova, Y. Fedorenko, and others. In their research, scientists emphasize the need to solve various problems associated with the insufficient level of communicative competence of young people.

The essence of "communicative competence", in our opinion, is viewed through the prism of the

concepts of “knowledge”, “skills”, “abilities”, “experience”, “abilities”, that is, it is a multifaceted and multifunctional phenomenon that is identified with a range of professional issues where a person is knowledgeable. And through communication, the creative potential of the student is realized.

Of course, for an educator, the personality of the interlocutor, his or her motivation and interest in dialogue and consensus, methods of influence during communication, and methods of interaction are important. The communicative competence of students is based on the acquisition and deepening of knowledge of the main disciplines of the educational qualification program of training in higher education, continuous self-education and self-improvement [1]. The formation and development of the communicative competence of higher education students has a positive impact on the professional level of future specialists, their creative self-realization, which is a vector of success in all spheres of public life. The transformations taking place in the modern world are largely caused by the development of communications and means of communication, the influence of the media and global computer networks. Communication stimulates educational innovations and projects, becoming the social basis around which interpersonal relations are carried out, master classes, trainings, and lectures on communication development are held. Without communication, interaction between a person and society, a person and another person is impossible. Taking into account the trends in the development of modern national education and foreign experience in the educational process in higher education institutions, it is worth noting that it is the personality-oriented orientation of the educational process that has absorbed the outstanding achievements of the market democratic way of life.

Personality-oriented teaching technologies imply the existence of individual and equal relations between teachers and students, as well as the involvement of the personal experience of the subjects of communication in this process.

Experience shows that in order to form successful communicative competence of a higher education student, it is important to adhere to the main principles of learning:

- focus on self-education, identification of those elements in communicative competence that need to be improved;
- taking into account free time, educational and methodological base, alternative forms of language teaching, specific conditions of activity for organizing dialogic skills and mastering language norms;
- complexity in problem solving (student's self-determination of certain communication issues);
- humanization and openness (introduction of socio- and culturally appropriate measures; combination of traditions and innovations).

When studying a person's communication skills, one should not limit the research scope to the diagnosis of knowledge and skills, communication skills. After all, communication is associated with the orientation of the individual, is a component of the motivational and need sphere, which encourages the formation of a worldview, the development of intelligence, and the

choice of value orientations. Communicative competence includes the following multifunctional components: activity in communication, emotional reactivity, speed of decision-making (personality temperament), communicative confidence, stability of self-regulation, communicative objectivity and subjectivity.

Let's consider the factors that influence the success of the formation of students' communicative competence, the ability of a specialist to communicate in labor and educational activities, using the means of speech, various communication technologies to meet intellectual needs.

1). A factor of the developmental environment for the activation of speech knowledge, skills and abilities, reflecting educational processes, forms and methods of teaching using different types of communication, listening techniques, success strategies. This increases the level of an individual's ability to establish and maintain the necessary contacts, operate with verbal and non-verbal means of cognition and perception, and assess reality in various situations of partnership interaction. This factor is characterized by the structure of the language learning process as a model of real communication with practical topics and issues for discussion. This determines the selection of certain necessary linguistic, phonetic, morphological, syntactic and lexicological elements of professional speech. Under conditions of a stable system of performing various exercises, forming speech skills and operations, communicative competence can be improved constantly.

2). The factor of establishing partner interaction: a factor that reproduces and verifies the significance of partner discourse (dialogue, agreement or consensus), the development of experience of social and interpersonal interaction [3]. This factor gains importance on the basis of respect for an equal partner. Partnership interaction is the exchange of experience, ideas, feelings, material carriers of the results of activities, in which partners show the ability to engage in various subject-subject relations, adequately define the goals of joint actions and constructively achieve them [1]. Group interaction involves the creation of proper partnerships during the educational process for the individual development of each student's abilities and the establishment of relationships in the team. This factor requires active tutoring by teachers or senior students. Under such conditions, one can hope for an increase in the communicative competence of a higher education student. To enhance interaction within the group, business games and case methods (possibly with home-made mini-preparations) have proven to be good in the practice of working with students for self-presentation of each newcomer, and in the future - for unlocking their potential in the university. Dyads “teacher - student”, “teacher - group of students”, “student - student” dyads require competent communication tools, clearly defined educational tasks and ways to solve them, accessibility and achievement of success situations by means of their own communication. Accordingly, there is a need to search for new approaches, principles, and directions in the educational process, which is constantly changing and

filled with innovative content in the light of the new educational paradigm.

3). The next, no less important factor for the development of higher education students' communicative competence is the factor of positive motivation for the future profession. The need for professional self-determination and, as a result, professional self-realization is also associated with the manifestation of independence and responsibility in making a decision, which is due to the specifics of partnership interaction.

Tutoring support for educators should be in the plane of maximum disclosure and demonstration of all the advantages of the future profession, the specifics of work, difficulties and requirements of the employer-stakeholder, for which the student should be ready today. Of course, it will be appropriate to include in the hours of the supervisor's work with students the acting out of possible situational tasks in the specialty.

Positive motivation can be formed and strengthened in a higher education student under conditions of consistent, promising practical training, involvement in all-Ukrainian projects and grants, participation in conferences, forums, informal communication among young people, etc. "Entering the profession," feeling yourself in it - such vivid and lasting personal experiences are possible during students' volunteer initiatives at practice sites, when opportunities to express themselves are created. Students see what communication skills and abilities they need to work on, engage in self-education, and face conflicts, misunderstandings, and working moments of interaction in practice.

The development of communication competence requires learning tools that can be problematic and creative, evaluated, and prestigious in the youth environment. Among them, master classes by leading experts in the field that is close to the student are advisable. The experience of communication transmitted to students awakens internal and external activity, encourages them to ask questions (the principle of dialogic learning), clarify sources, and be in the context of the information presentation of practical material. The teacher should conduct a special emotional conversation or training that will motivate students' further work in the classroom.

Barriers to the development of communication competence faced by students in the educational process hinder their success, so let's consider them in more detail:

- *organizational barriers* associated with the formation of new forms of interaction (administrative procedures, lack of experience of students in partnership or their high employment, remuneration and compensation for hidden costs of partnership implementation, localized experience of professional activity in education);

- *role positions in the partnership* ("division of labor"; traditionally, the responsibility for determining the status in the partnership lies with the university), with previous negative experience of participation in the partnership, anxiety of teachers in terms of developing professional competence in comparison with leading specialists;

- *temporal factors* (duration of the process of establishing partnerships, individual time resources of partnership participants, time financing, evaluation of individual contribution, focus on reflective practices);

- *the need to harmonize theory and practice in education* (focus on reproducing the practice of an experienced teacher, reflection on professional experience, joint reflection on teamwork) [6].

Communication contributes to the expansion of people's worldview, the development of intelligence, the acquisition of new information, etc. It is characterized by the active position of a higher education student as a participant in public life.

Conclusions and prospects for further research. Thus, the analysis of scientific views on the factors of formation of students' communicative competence allowed us to determine the focus and multifunctionality of students' communicative competence by identifying and substantiating the principles of their implementation in a modern higher education institution. Students' communicative competence is characterized by the ability to communicate tolerantly using verbal and non-verbal means of speech, influence the interlocutor, build a constructive dialogue, resolve conflicts and tune in to their own emotional stability when communicating with educational partners.

СПИСОК ДЖЕРЕЛ

1. Sectoral concept of development of continuous pedagogical education: URL: <https://zakon.rada.gov.ua/rada/show/v1176729-13#Text>.
2. Dubrovina I. Formation of the communicative culture of educators as the basis of subject-subject interaction "teacher - student". Perspectives and Innovations of Science. 2022. № 4 (9). С. 104-118.
3. Kozubenko K. Objective pedagogical conditions for the formation of communicative competence of specialists in the tourism industry. Collection of scientific papers. Pedagogical sciences. 2017. Issue LXXVIII. - Vol. 2. P. 142-146.
4. Dictionary of terms and concepts in pedagogy of higher education: a manual / compiled by V. V. Prykhodko, V. V. Maliy, V. L. Galatska, M. A. Myronenko. Dnipropetrovsk, 2005. 181 p.
5. Stryzhakov A. Communication and social relations. Scientific notes. Series: Pedagogical Sciences. Iss. Edited by V. F. Cherkasov, O. A. Bida, N. I. Shetelya and others. Kropyvnytskyi: Kod, 2023. P. 149-153.
6. Rebetska N. Formation of communicative competence of future social workers as a pedagogical problem. Scientific Journal of the National Pedagogical Dragomanov University.

REFERENCES

1. Haluzeva kontseptsiiia rozvytku neperervnoi pedahohichnoi osvity (2018). [Sectoral concept for the development of in-service teacher education]. URL: <https://zakon.rada.gov.ua/rada/show/v1176729-13#Text> [in Ukrainian]
2. Dubrovina, I., Kazakova, N., Yuriev, O. (2022). Formuvannia komunikatyvnoi kultury osvitan yak osnova subiekt-subiektnoi vzaємodii «vykladach – student». [Formation of the communicative culture of educators as the basis of subject-subject interaction «teacher - student»]. Perspektivy ta innovatsii nauky – Perspectives and innovations of science. 4(9). [in Ukrainian]
3. Kozubenko, K. (2017). Obiektivni pedahohichni umovy formuvannia komunikatyvnoi kompetentnosti

fakhivtsiv turystychnoi haluzi. [Objective pedagogical conditions for the formation of communicative competence of tourism industry specialists]. Zbirnyk naukovykh prats. Pedagogichni nauky – Collection of scientific papers. Pedagogical sciences. Vol. LXXVIII. T. 2. [in Ukrainian]

4. Prykhodko, V. V., Maliy, V. V., Halatska, V. L., & Myronenko, M. A. (2005). Slovyk terminiv i poniat z pedahohiky vyshchoi shkoly [Glossary of terms and concepts in higher education pedagogy]. Dnipropetrovsk. [in Ukrainian]

5. Stryzhakov, A. (2023). Spilkuvannya ta suspilni vidnosyny. [Communication and social relations]. Naukovi zapysky – Proceedings. Vol. 3. [in Ukrainian]

6. Rebetska, N. (2017). Formuvannya komunikativnoi kompetentnosti maibutnikh fakhivtsiv sotsialnoi sfery yak pedahohichna problema. [Formation of Communicative Competence of Future Social Work Specialists as a Pedagogical Problem]. Naukovi chasopys Natsionalnoho pedahohichnoho universytetu imeni M. P. Drahomanova – Scientific journal of the National Pedagogical University named after M. P. Drahomanov. Vol. 29. P. 25–29. [in Ukrainian]

ВІДОМОСТІ ПРО АВТОРІВ

ЗАВІТРЕНКО Долорес Жораївна – кандидат педагогічних наук, доцент, доцент кафедри педагогіки та спеціальної освіти Центральноукраїнського державного університету імені Володимира Винниченка.

Наукові інтереси: інклюзивний підхід при викладанні спеціальних методик.

БЕРЕЗЕНКО Наталія Олегівна – викладач кафедри іноземних мов Донецького державного університету внутрішніх справ.

Наукові інтереси: інноваційні технології навчання іноземних мов, лінгводидактичні засади викладання іноземних мов у вищих навчальних закладах, комунікативна компетентність здобувачів вищої освіти.

ЖИГОРА Ірина Валеріївна – кандидат філологічних наук, доцент кафедри дошкільної та початкової освіти Центральноукраїнського державного університету імені Володимира Винниченка.

Наукові інтереси: методика навчання української мови; інноваційні технології викладання української мови у вищих закладах освіти; інклюзивний підхід при викладанні української мови.

INFORMATION ABOUT THE AUTHORS

ZAVITRENKO Dolores Zhoraivna – Candidate of Pedagogical Sciences, Associate Professor, Associate Professor of the Department of Pedagogy and Special Education of the Volodymyr Vynnychenko Central Ukrainian State University.

Scientific interests: an inclusive approach in teaching special techniques.

BEREZENKO Natalia Olegivna – teacher of the Department of Foreign Languages of the Donetsk State University of Internal Affairs.

Scientific interests: innovative technologies for teaching foreign languages, linguodidactic principles of teaching of foreign languages in higher education institutions, communicative competence of higher education students

ZHYHORA Iryna Valeriivna – Candidate of Philological Sciences, Associate Professor, Associate Professor of the Department of Methods of Preschool and Primary Education of the Volodymyr Vynnychenko Central Ukrainian State University.

Scientific interests: methods of teaching the Ukrainian language; innovative technologies for teaching the Ukrainian language in higher educational institutions; inclusive approach to teaching the Ukrainian language.

Стаття надійшла до редакції 19.01.2025 р.

УДК 373:512

DOI: 10.36550/2415-7988-2025-1-217-124-131

ЗІНОВЄЄВА Ірина-Анастасія Ігорівна – учитель математики Одеського ліцею №13 Одеської міської ради Одеської області
ORCID: <https://orcid.org/0009-0009-6162-4099>
e-mail: iizinovyeveva@onvk13.net

СИНЮКОВА Олена Миколаївна – кандидат фізико-математичних наук, доцент, доцент кафедри вищої математики і статистики Державного закладу «Південноукраїнський національний педагогічний університет імені К. Д. Ушинського»
ORCID: <https://orcid.org/0000-0002-8340-6940>
e-mail: olachepok@ukr.net

ЩОДО ЗАСТОСУВАННЯ КООРДИНАТНО-ВЕКТОРНИХ МЕТОДІВ ДО РОЗВ'ЯЗУВАННЯ ЗАДАЧ ЕВКЛІДОВОЇ ГЕОМЕТРІЇ НА РІВНІ ЗАГАЛЬНОЇ СЕРЕДНЬОЇ ОСВІТИ

Згідно уявлень сьогодення евклідова геометрія представляє собою аксіоматичну теорію відповідної аксіоматики. Теоретично, може існувати безліч різних аксіоматик евклідової геометрії. Зрозуміло, що практично розроблено лише певну скінченну кількість із них. Зрозуміло також, що усі такі аксіоматики у визначеному розумінні є еквівалентними між собою - породжують однакову за своїм контентом аксіоматичну теорію.

У певному сенсі полярними серед аксіоматик евклідової геометрії є так звані аксіоматики синтетичного і аналітичного типів. Усі аксіоматики евклідової геометрії, неявним чином покладені в Україні у основу сучасних підручників з геометрії для закладів загальної середньої освіти, з позиції синтетичності та аналітичності несуть мішаний характер, синтетична складова при цьому переважає. Для аксіоматичних теорій аналітичного типу, безпосередньо відповідно до їхньої сутності, координатно-векторні методи є первинними, основними методами розбудови відповідної теорії, справедливості кожного твердження теорії можна обґрунтувати за допомогою цих методів, синтетичні методи є вторинними, не завжди доцільними для застосувань. Для