# Research on the Effectiveness of Students' Communicative Competence Formation

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The formation of communicative competence among university students is becoming especially relevant in the uncertain and changeable world. In the study, competencies of a general nature are called invariant by the theory of the structure of the content of education, developed by Academician V. S. Lednev. The paper focuses on the effectiveness of the formation of students' invariant communicative competence in a nontraditional form of education - joint training of Russian and international students. The results of the study show that co-education of Russian and foreign students contributes to the development of their invariant communicative competencies better than traditional education. The novelty of the research is the formation of students' invariant communicative competence occurs in conditions different from traditional teaching. Namely, it occurs in the process of joint training of Russian students with foreign citizens. Research materials can be used in the work of higher educational institutions.

Keywords: invariant competences, communicative competence, co-education, Russian and foreign students, multicultural group

## INTRODUCTION

The VUCA world arose in the context of the developing information society. In this word, V – volatile, U – uncertain, C – complex, A – ambiguous. In these conditions, such a quality of a university graduate as the ability and readiness to communicate and interact in their native and foreign languages remains especially important. This quality is the central and integral part of communicative competence. In connection with the development of high technologies in various spheres of life, the formation of communicative competence in modern youth – Z – generation (digital generation, centennials surrounded by digital technologies from birth) does not lose its relevance (Kubrushko, Nazarova & Siman, 2019).

Communicative competence is one of the main in the group of general competencies, which are also called key, general professional, universal, etc. In publications, many definitions indicate specific essential characteristics or features of a group of general competence," etc. The composition of this group is similar to the so-called "soft skills." These are social and psychological skills that an individual needs in most life cases and situations: leadership, public, communication, team, etc. (Galazhinsky & Kovaleva, 2019). The new generation standards (three+ and three++) state that a university graduate should have general cultural or universal competencies, including communicative competence (Zaitsev & Gnezdilova, 2018).

Analyzing the names of competencies and their definitions, we believe that the authors, using one or another name for general competencies, emphasize its features. We believe that a group of general competencies should have a different name since we are talking about qualities common to professional specialists. We called this group of competencies invariant based on the theory of the structure of educational content, developed by Academician V. S. Lednev (Lednev & Kubrushko, 2006). By invariant, we mean competencies formed by any university student regardless of the profile of his training, inherent in all specialists, necessary for all specialists (Kubrushko & Lozhkina, 2014). Among the invariant, we include, along with others, communicative competence. Therefore, we talk about invariant communicative competence.

The analysis of the Federal State Educational Standard of Higher Education in training "Applied Informatics" (Ministry of Education and Science of the Russian Federation, 2015a), "Vocational Training" (Ministry of Education and Science of the Russian Federation, 2015b) and several other areas showed that each university graduate should have an invariant communicative competence at a high level. This quality plays an essential role in its preparation. It is the backbone, essential in the structure of the content of specialist training.

In our study, the structure of communicative competence includes the following:

- Recognition of differences in communication and interaction styles;
- Interest in culture, customs, traditions, and communication style of other people;
- Comfort dealing with foreigners;
- Ability to communicate with individuals from other cultures;
- Willingness to discuss and settle controversial issues and problems;
- Ability and willingness to be tolerant of different points of view on the same issue;
- Open position to accept disagreement with one's point of view, etc. (Takanova, 2015).

According to the law of double introduction of the main components into the system, there is a certain duality in the manifestation of the properties of the primary component. In the context of invariant components, this implies that, on the one hand, they pass through all stages and links of education, being their integral component (an implicit component of the content of education). On the other hand, they prevail at some levels in the sequential learning links (the apical component of the learning content) (Lednev et al., 2006).

It is essential to determine the forms, methods, and means of effective formation of invariant competencies. The required result can be achieved within the framework of the traditional training system:

- In the process of studying general scientific disciplines such as a foreign language, law, Russian language and culture of speech, introduction to the specialty, etc.;
- Using various active and interactive teaching methods and technologies (role-playing and business games, discussions, learning through projects, etc.).

The included teaching of students abroad is the most effective means of implementing the apical component of invariant components. However, for many reasons, it is impossible to carry out such training on all students scales. In Russian higher education institutions, this can be realized by organizing Russian students' training together with foreign citizens in groups with a multicultural composition. And with the participation of representatives of other educational systems.

Our research hypothesizes that teaching Russian students, together with foreigners, contributes to a more effective formation of their invariant communicative competence than the traditional system. We need to verify the validity of this hypothetical statement.

## MATERIALS AND METHODS

To assess the development of the inavariant communicative competence of students, we chose the criteria and indicators of its formation.

The following provisions became the basis for the definition of criteria and indicators:

- Measure of a specialist's compliance with the requirements is a criterion for assessing training quality. As requirements are the components of universal communicative competence formed by students in the process of implementing joint training of Russian students with foreign ones;
- Manifestation of the phenomenon or object properties helps highlight essential activity aspects
  and assess points. Consequently, each criterion can be represented by one or more indicators
  that allow us to assess the quality of future graduates' training and the compliance degree with
  imposed requirements.

The study of the formation of invariant communicative competences allows us to highlight the criteria for their development. Motivation and desire for activity are expressed using the motivational criterion. A positive attitude towards universal human values: life, man, society, and work, is reflected in the manifestation of personal responsibility for the results of activities in any area, expressed using the value-semantic criterion. Knowledge, abilities, and skills are included in the instrumental criterion. The individual's qualities and characteristics that determine the speed and success of the development of activities constitute an individual psychological criterion. The conative criterion, in turn, includes the mechanisms of personality self-regulation (Ilyazova, 2016). Table 1 presents the indicators and criteria for the development of communicative competence.

After we have identified the criteria and indicators of the development of invariant communicative competence, it is necessary to determine its formation levels.

Speaking about the high level of development of this competence assumed the following:

- High degree of student readiness to work with people, to unite in teams;
- Positive attitude towards the characteristics of different cultures:
- High degree of orientation of the individual towards effective interaction with colleagues from other countries and cultures;
- Presence of in-depth knowledge of the differences in communication styles between representatives of different cultures.

Speaking about *the level above average*, the level of aspiration to work with people in a team, in this case, is sufficient:

- Attitude to the peculiarities of different countries and cultures is positive;
- Orientation of individuals towards effective communication with people of other countries and cultures is manifested at a reasonable level;
- Students have a good knowledge of the differences in communication and interaction styles.

Speaking about *the average level* of formation of the universal communicative competence, we mean the neutral level of development of motivation to work together with other people:

- Neutral position concerning the characteristics of different cultures;
- Moderate level of personality orientation towards productive interaction with people from other cultures;
- General concept of students about the differences in communication and interaction styles among representatives of different cultures.

When a level below the average, it is characterized by a lack of desire to be in the company of other people and to work together with them:

- Phlegmatic attitude to the peculiarities of other cultures;
- Low level of orientation of the individual towards productive communication with representatives of other cultures;
- Lack of knowledge about the variety of interaction styles.

We are talking about a low level of development of invariant communicative competence, and it implies the individual's tendency to work alone:

- Denial of the existence of distinctive features of different cultures;
- Negative position of the individual to communicate with individuals of other languages and cultures;
- Possession of false knowledge about the differences in interaction styles between representatives of different languages and cultures.

The purpose of the experimental study is to identify the level of formation of invariant communicative competencies in students; to determine the pedagogical effectiveness of joint training of Russian and international students in a multicultural group.

Our research hypothesized that the development of invariant communicative competence in the process of teaching Russian students, together with foreign citizens, will be productive, provided that:

- Organizational and pedagogical conditions will implement co-training;
- Formation of multicultural groups of students is carried out considering their knowledge of the cultural experience of their peers, the level of proficiency in the language of instruction, cultural origin, and native language;
- Selection and ordering of training content is carried out according to the following principles: binary entry of the main components into the system, universal completeness of the training content, separation and integration of training content components, thoroughness, professional orientation, constancy and continuity, and the principle of taking into account the cultural characteristics of students;
- Formed a contingent of teaching staff with additional training for the implementation of pedagogical activities in a multicultural student group;
- Methods and forms of creating positive interaction and educational communication of students in multicultural groups are applied using interactive and active methods of organizing their joint educational activities;
- Level of development of invariant communicative competence will be determined using specially developed criteria and indicators.

We conducted a study of hypothetical provision legitimacy using the following methods:

- Analysis of pedagogical and scientific-methodical literature on the problem of the formation of invariant communicative competence;
- Analysis of the questionnaires of former participants of the student mobility program;
- Sociological survey;
- Questioning, etc. (Smelkova, 2006; Troinikova, 2005).

We formed two groups (control and experimental) trained for one semester at the experiment's main stage. The students of the experimental group studied together with international students. Foreign teachers carried out the training in a foreign language, the control group students – in the traditional way. The pedagogical experiment was carried out for three years in mixed Russian and international students at the Moscow State Agroengineering University named after V. P. Goryachkin. A total of 304 participants were involved in the experiment.

In the experimental groups, students' invariant communicative competence occurred since Russian students studied together with international students in a multicultural group. Foreign teachers in a foreign language carried out the training. During the training, students studied such disciplines as "Agricultural Market Economics," "Agricultural Training and Information and Consulting Service," "Management, Analysis and Management of Decision Making." An offsite lesson was organized for students once a week within the seminar "International Agriculture" framework. Besides, the experimental group, students took part in conferences of scientific and practical nature, seminars, and round tables. The students' leisure was quite rich and varied: foreign and Russian students visited cafes, theaters, concerts, exhibitions, sightseeing. Interactive and active teaching methods were used to deliver lectures and conduct practical exercises: work in pairs and micro groups, role play, project method, participatory methods, co-analysis of situations (case

method), moderation, and others. In addition to these methods, in the joint training of Russian students with foreign ones, modular training was used. It is possible to merge various progressive educational technologies. The control group studied according to the traditional system.

TABLE 1
INDICATORS AND CRITERIA FOR THE DEVELOPMENT OF INVARIANT
COMMUNICATIVE COMPETENCE

Criteria	Indicators					
Motivational	People' desire and aspiration to teamwork; interest in cultures, beliefs, values, a					
	communication styles of other nations and people.					
Value-semantic	A positive attitude towards other cultures, the individual focuses on effective posi					
	communication with representatives of other cultures, understanding the individ					
	that there are different views on the same issue.					
Instrumental	Knowledge about other cultures; awareness of cultural values and norms adopted in					
	student groups' cultures; awareness of differences in communication styles.					
	Ability to resolve and eliminate misunderstandings; the ability to discuss controversial					
	issues and solve problems; establish mutual understanding between interlocutors; the					
	ability to communicate positively with individuals from other cultures.					
	Skills of co-activities with people from other cultures; teamwork skills;					
	communication and interpersonal skills.					
Individual-	Ability to find a way out of conflict situations, showing respect for the interlocutor, to					
psychological	give constructive feedback; the ability to build understanding and organize the					
	interaction with foreigners; the ability to gather and not get confused when					
	communicating with representatives of other languages and cultures, to value and					
	respect different points of view on the same problem; the ability to look at the problem					
	from a different angle, to critical thinking, curiosity.					
Conative	The ability to mobilize, get together, show their best qualities in a situation of					
	intercultural communication and with representatives of their culture.					

The main instrument of experimental research is the questionnaire method. We have compiled a questionnaire to identify the level of formation of invariant communicative competence. Besides, we asked 49 third-year students of the engineering and pedagogical faculty of the Moscow State Agrarian University named after V. P. Goryachkin – the control group, and 37 students from the co-education group from different faculties – the experimental group.

During the ascertaining experiment, students of both the control and the experimental group were asked to assess their level of possession of qualities that meet the criteria for developing communicative competence. The data obtained from the ascertaining experiment were entered into the Microsoft Office Excel 2016, where their frequency analysis was carried out. The frequency analysis data were later used to determine the indices (Gaisina, 2004). To determine the average indicator (Av) of the development of each invariant competence, we calculated the arithmetic mean of the average indicators (Av) of all its constituent qualities.

# **RESULTS**

As a result of the analysis of the data obtained at the ascertaining stage of the experiment, it became clear that the students of the experimental group had the average indicators of the development of invariant communicative competence significantly higher than those of the students of the control group. This fact can be explained by the fact that the general academic performance in subjects and knowledge of a foreign

language among the experimental group students is higher. In this regard, they were selected for training in a multicultural group.

The unequal level of competence development among students of the experimental and control groups before the experiment leads to the need to conclude the formation of students' invariant communicative competence, analyzing the dynamics of its development (Dav) in each group of students as a result of a formative experiment.

During the formative experiment, Russian students studied together with international students. At the same time, the developed organizational and pedagogical conditions were implemented. After the training, a control measurement of the levels of development of readiness and abilities, which make up the invariant communicative competence structure, was carried out.

The results of the formative stage of the experiment – the general average indicators of the formation of communicative competence in comparison with the results of the ascertaining experiment and the values of the dynamics of the development of these qualities (Dav) – are given in Table 2.

TABLE 2
ASCERTAINING AND FORMATIVE EXPERIMENT. RESULTS

Competence	Ascertaining experiment		Formative experiment		Dav	D Av
	Av	Av	Av	Av	(kg)	(eg)
Communicative	Control group	Experimental	Control	Experimental		
		group	group	group		
	3.48	3.54	3.54	4.26	0.06	0.72

The data in Table 2 show that the development dynamics of invariant communicative competence in students of the experimental group Dav (eg) is higher than the control group Dav (cg). Therefore, in the joint training of Russian and international students, invariant communicative competence is formed better and faster.

We analyzed the final reports of 112 graduates of the IAMONET-RU international academic mobility program, who also studied in multicultural groups during their internship. We asked graduates to assess their internship's academic results, the general level of their personal development at the time of the internship. Moreover, they assessed the development of their intercultural competence, such as self-sufficiency, independence, self-awareness, and language skills. These qualities are an integral component of communicative competence. Table 3 shows the average values of indicators of graduates' formation of the program of these qualities.

TABLE 3
INTERNSHIP RESULTS AND AVERAGE DEVELOPMENT INDICATORS OF
COMMUNICATIVE COMPETENCE AMONG GRADUATES OF THE INTERNATIONAL
ACADEMIC MOBILITY PROGRAM

No	Internship results and quality (components of invariant competencies)	
1	Assessment of academic mobility outcomes	4.05
2	Assessment of common personal development as a mobility result	4.51
3	Intercultural competence	4.60
4	Language skills	4.17
5	Self-sufficiency	4.51
6	Independence	4.65
7	Self-awareness	4.37

We received high values of the average indicators of the development of quality, which are components of the studied competence, to confirm our hypothesis's validity.

In addition to the quantitative analysis carried out, a qualitative analysis of the responses of individuals-former co-educational participants to the open-ended questionnaire was carried out.

To the question "What qualities of students are promoted by the joint education of Russian and foreign students?" respondents gave different answers. Education in multicultural groups (according to the students who participated in it) contributes to the formation of:

- Communicative qualities (to overcome the language barrier and is a good language practice), communication skills;
- Communication skills in a team;
- Communication and interaction skills in various fields of activity in an international environment;
- Intercultural communication skills.

These qualities are integral components of invariant communicative competence. The respondents' emphasis on precisely these qualities confirms the hypothesis that in joint learning, invariant communicative competence is formed faster compared to traditional learning.

## **DISCUSSION**

In a changing world, one of the essential qualities of a university graduate is communicative competence (readiness and ability to communicate in a foreign and native language). This quality refers to a general nature's competencies, which have been called differently over the past 20 years: key, universal, general cultural, etc. In the scientific literature of recent years, one can find the names "competence of the XXI century," soft skills, employability skills. Any of the listed groups of competencies always includes communicative competence.

The variety of names for groups of general competencies is explained by the fact that different authors put their meaning in the names of these groups. In our case, under the theory of the structure of the content of education, developed by academician V. S. Lednev competencies common to all professions are called invariant. Invariant competencies are competencies common to all professions, necessary and formed in future specialists of all professions, regardless of training direction. In this case, communicative competence can be called invariant communicative competence.

This quality is formed in the process of implementing traditional education. Namely, it is during classes in general scientific disciplines. An example is "Russian language and culture of speech," "Foreign language," "Jurisprudence," "Philosophy," "Introduction to the specialty," etc. This quality is formed more effectively in foreign internships for students, but it is impossible to organize an internship for all students for obvious reasons. Therefore, we have to look for alternative ways out of the situation. One of these methods is implementing training for Russian students in a collaborative multicultural group with international students in a foreign language. We checked the effectiveness of this training form using the methods of questionnaires and analysis of documentation.

## **CONCLUSION**

The study and the data obtained confirm that this form of training organization (implemented by the teaching staff representing other educational systems) contributes to the effective formation of invariant communicative competence and can be an alternative to foreign internships for students.

Our work results allow us to draw the following conclusion: the possibilities of developing invariant communicative competencies of a modern bachelor or graduate of a master's degree in the process of joint training of Russian and international students have not been thoroughly studied. We have not studied all aspects of this problem sufficiently thoroughly. At the same time, the general approach to the study of the

formation of invariant communicative competence in the process of joint training of Russian and international students has been studied, tested, and gave positive results.

The identified ways of solving problems; in our opinion, there are still problems requiring severe and in-depth study. These are:

- Studying the formation of invariant communicative competence in the implementation of joint learning in a group where students of specific cultures are represented (from universities in the USA, France, and Russia);
- More detailed study of the mechanisms for the formation of this competence in the process of joint training of Russian and international students;
- Further study of the organizational and methodological conditions for the implementation of joint learning;
- Development of more accurate diagnostics for the development of the studied competencies of the future graduate of the university.

We will continue our research in these areas.

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