

# SCIENCE DIPLOMACY IN THE CONTEXT OF SOCIO-CULTURAL DEVELOPMENT OF EDUCATION

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**Abstract.** The article is devoted to the problem of development of scientific diplomacy of educational institutions by means of creative cooperation. The main task of scientific diplomacy to form the image of the educational institution and interpersonal relations of all participants in the educational process is substantiated. Attention is paid to the communicative activity as a phenomenon of scientific creativity; the theoretical content of the concepts of "diplomacy", "communicative culture", "educational diplomacy" is considered; diagnostics of the readiness of educational institutions for the development of educational and scientific diplomacy is carried out. The conducted analysis of the essence of pedagogical interaction in an educational institution allows us to conclude that the concept of "educational diplomacy" is a rather complex and multifaceted concept that is used in various spheres of human activity, covers a large number of objects and phenomena, as it is manifested in the educational process, personal interaction, technological processes, communications, etc. The article also pays attention to the development of science diplomacy, peculiarities of its implementation and influence on the generation of international initiatives in the globalized world. Using a comparative methodology, the approaches to understanding science diplomacy in domestic and foreign discourse are analyzed, taking into account the existing practice of its application. It is established that science diplomacy, as a type of public diplomacy, serves as a means of promoting and protecting the national interests of the state, and also plays a regulatory role in a complex system of international interaction. At the same time, science diplomacy can serve to solve specific foreign policy tasks of regional importance – first of all with neighboring countries in the fields of ecology, forecasting and elimination of the consequences of natural and man-made disasters, mining and rational use of marine natural resources, in the social and humanitarian sphere. The availability of permanent and sufficient funding for bilateral scientific projects on such topics, especially with neighboring countries, can actually be a manifestation of scientific diplomacy for establishing good international relations. Developing the institution of science diplomacy, it is extremely important to maintain a balance of interaction between scientific and political components, to prevent the use of political tools in the scientific sphere. It is also extremely important that scientific and diplomatic goals remain transparent to avoid manipulation of science for political purposes and to prevent politicization of science. The results of the study give grounds to assert that the development of educational diplomacy is a priority area of personal development and professional development of scientists and teachers of educational institutions, based on psychological and pedagogical theory and practice and focused on subject-subject relations in work. This direction is consistently implemented in the process of studying in the system of postgraduate pedagogical education by acquiring the necessary competencies, gradual improvement of communicative qualities and accumulation of experience in communicative interaction.

**Key words:** science diplomacy, scientific cooperation, educational diplomacy, diplomacy for science.

**JEL Classification:** M14, D61, I31, I38, Z10

## 1. Introduction

The dominant trend of modern social development is the integration of intellectual potentials and technologies. Combining the efforts of scientists from different countries significantly expands the boundaries of knowledge. The growing trend of

international scientific and technical cooperation is the most characteristic feature of modern science and an important tool for its global internationalization.

Countries with sufficient scientific potential have additional opportunities to realize their interests both within individual regions and in the space of

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world politics as a whole. Science diplomacy is of particular importance, because, on the one hand, it ensures the national interests of the state through the use of a wide range of classical and specific foreign policy actions that determine the prospects and status of the state in the international arena, and on the other hand, it creates additional means of counteracting global challenges of today (Berkman, 2018).

Terrible events in Ukraine, the beginning of a full-scale war forced Ukrainians to break into the scientific and educational European space. Thousands of scientists, women and children were forced to become temporarily displaced persons, fleeing from the occupation and the front line. Highly educated scientists and teachers were left without jobs (many universities in Kharkiv and Mykolaiv were physically destroyed), without homes, without their scientific achievements in home archives. They are forced to look for a job and actually start all over again, so the issues of science diplomacy and integration require thorough research, the need to develop a new paradigm and a new concept for the development of science diplomacy, scientific and educational space in Europe and around the world. Such turbulent simultaneity has created a unique synergistic effect and forced the integration of educational systems of different countries.

Joining the European educational space leads to the possibility of introducing pedagogical innovations that will contribute to the formation of a new strategy for the development of the world educational system, one of the vectors of which is to increase the level of pedagogical interaction of the subjects of the pedagogical process and improve the ways of education development. It has already become clear that education is the basis of intellectual, spiritual, physical and cultural development of the nation, through successful socialization and economic prosperity, the key to the development of a society united by common values, culture, development of self-awareness and self-identification of statehood (Romanova, 2017).

## **2. Terminological definition of "science diplomacy" and its role in the socio-cultural development of the country**

Certain types of diplomacy, such as economic, trade, energy, social, information, cultural, etc. are increasingly becoming the subject of research in scientific publications. Recently, the topic of science diplomacy has become the subject of domestic scientific discourse, although in the context of the concept of "soft power", which is considered in the works of M. G. Kapitonenko, O. V. Levchenko, Myronchuk O. (2019).

The works of P. Berkman (2018), R. Holt (2015), and V. Turekyan are devoted to the problems of the

scientific dimension of politics in general, as well as the place of science diplomacy in the field of foreign policy.

The foreign experience of the use and implementation of science diplomacy, which is increasingly considered by scientists in different countries, was also investigated in the works of M. V. Silantieva, O. M. Kharitonova, R. O. Reinhardt, and K. A. Ibrahimova (Fedoroff, 2009; Science diplomacy, 2022).

Despite the fact that modern scientific research is quite multifaceted, in the domestic scientific discourse, insufficient attention is paid to the issues of interstate cooperation in the form of science diplomacy, the peculiarities of its implementation, and the improvement of the practice of making mutually acceptable political and economic decisions of countries through the use of science diplomacy. Since February 2022, this problem has instantly aggravated and actualized due to the outbreak of a full-scale war in Ukraine.

As of 01.05.2022, 88 educational institutions were completely destroyed, 869 institutions were partially damaged, 33 institutions of higher and vocational higher education were forced to leave the places of permanent displacement and moved to other territories to organize the educational process (Word and Deed: Analytical Portal, 2022). It is clear that science diplomacy as a format of support and interaction should be used both inside and outside Ukraine.

In view of this, the urgent need to strengthen science diplomacy in Ukraine's foreign policy should be considered in the leapfrog aspect of revolutionary impulses, as a consequence of the declared course of integration into the European and world scientific space.

That is why the issue of science diplomacy requires a comprehensive study both in terms of its theoretical aspects and existing world practices adapted to the possibilities of modern realities. Therefore, the purpose of the article is to analyze the approaches to understanding science diplomacy established in domestic and foreign discourse, as well as to clarify the peculiarities of its implementation and influence on the generation of international initiatives in the context of socio-cultural development.

To understand the practical value of using the tools of science diplomacy, it is advisable to consider modern theoretical approaches to the concept of "science diplomacy" and its main components.

Science diplomacy is generally understood as the use of scientific cooperation between countries to solve common problems and build constructive international partnerships. Science diplomacy has become an umbrella term for a range of formal or informal scientific and technical exchanges. It is important to note that there is no single approach to the interpretation or definition of this form of international interaction.

The directions of science diplomacy that have already become "classical" are scientific and information support (science in diplomacy); promotion of international scientific cooperation (diplomacy for science); the use of scientific cooperation to improve relations between countries (science for diplomacy) – were formulated in the report on the results of the conference "New Horizons of Science Diplomacy", organized by the American Association for the Advancement of Science in cooperation with the Royal Society (UK) in June 2009 (Zewail Ahmed, 2010).

In 2017, scientific advisers to the foreign ministers of the United States, New Zealand, Great Britain and Japan formulated the concept of science diplomacy as actions aimed at directly promoting the national needs of the country; actions aimed at addressing cross-border interests; actions aimed at meeting global needs and challenges (Enhancing and focusing EU, 2012).

Today, science diplomacy is also understood as a global service that should use scientific cooperation between states to solve common problems and create constructive international partnerships (Materials of the conference, 2021).

Paul Berkman, who is engaged in the research of science diplomacy, believes that trust and successful interaction among scientists from different countries causes the emergence of a wave-like "goodwill effect", and science diplomacy offers a unique opportunity for building a common future (Berkman, 2018).

Highlighting certain features of diplomatic activity in the scientific sphere, this issue should be linked to the security factor, since the national security of the state largely depends on its intellectual, scientific and technical potential.

Leading scientific organizations that implement strategic goals to ensure the national interests of the state in the scientific and technical sphere, together with professional diplomats, lay the foundation for the implementation of the state's scientific policy in the international arena. The architecture of such policy depends on cooperation of diplomatic structures, scientific institutions and centers in the spheres of scientific and technical information exchange, joint research, analytical work, implementation of joint scientific programs, etc.

Thus, science diplomacy is becoming increasingly important for solving global problems, working on the implementation of two groups of tasks – classical and modern, determined by the dynamism of scientific and technological progress in the 21<sup>st</sup> century, as well as existing challenges and potential threats.

Science as a tool of diplomacy and one of the components of "soft power" has been used in many countries for several decades. Significant experience in the use of "soft power" has been accumulated by

the leading countries of the world, in particular, the United States, the European Union and Asian countries (Turekian Vaughan, Neureiter Norman, 2012).

One of the first steps in this direction was the creation in 1931 of the International Council of Scientific Unions, today – the International Council for Science (ICS), whose resources and tools are aimed at developing scientific solutions to world problems. The fundamental principle of the International Council for Science is the universality of science, which confirms the right and freedom of scientists to unite in international scientific activities regardless of such factors as ethnicity, religion, citizenship, language, political beliefs, etc. (New frontiers in science diplomacy, 2010).

An example of science diplomacy is the European Organization for Nuclear Research (CERN) – an international research center of the European community, the world's largest laboratory of high-energy physics. This influential international organization consists of 23 member states, 5 associate members, including Ukraine, as well as countries with observer status. In total, about 80 countries participate in CERN activities in one form or another. Today, about 12000 researchers from more than 600 scientific centers and universities work on the experimental equipment of CERN – this is half of all physicists-researchers of the microcosm (Mironchuk, 2019).

Today, the American Association for the Advancement of Science (AAAS) is actively working in the field of science diplomacy. This is an international non-profit organization whose efforts are aimed at promoting cooperation between scientists, protecting freedom of research, encouraging scientific responsibility, supporting education and science. The Association is a powerful scientific community and publisher of the famous scientific journal "Science" with a weekly circulation of more than one hundred thousand copies. The Association has a Center for Science Diplomacy, which aims to use science and scientific cooperation to promote international understanding.

No less unique example of international cooperation through the instruments of science diplomacy is the European Research Area (ERA), which has become an ecosystem of interaction between scientists and policymakers from different EU countries in order to increase the competitiveness of the EU as a whole. The uniqueness of the ERA lies in the duality of the purpose of its creation, because on the way to a common goal there are always contradictions that require a compromise and the need to coordinate the internal interests of countries, even in the field of science. To solve this complex task, the European Commission has built a structured system of advisory and working bodies that deal with the

formation of a common research strategy and priorities – the European Research Area and Innovation Committee (ERAC), the development of joint research infrastructures – the European Strategic Forum for Research Infrastructures (ESFRI), the formation and implementation of research programs and projects, etc. Such bodies are composed of state-nominated experts from a cohort of scientists whose main task is to represent and secure the interests of their own countries through the prism of demonstrating the active position and significant contribution of each country to the common good (Nye, Joseph S. Jr., 2011).

The last condition is the key to success, because in the world of science diplomacy you are worth and have the right to vote exactly as much as your contribution to solving common scientific problems.

As a rule, countries that invest huge resources in their R&D sector can definitely shape the global technological agenda and achieve foreign policy goals with the help of science diplomacy tools.

At the same time, science diplomacy can serve to solve specific foreign policy tasks of regional importance – first of all with neighboring countries in the fields of ecology, forecasting and elimination of the consequences of natural and man-made disasters, mining and rational use of marine natural resources, in the social and humanitarian sphere. The availability of permanent and sufficient funding for bilateral scientific projects on such topics, especially with neighboring countries, can actually be a manifestation of scientific diplomacy for establishing good international relations. In any case, the presence of a background of scientific cooperation in the sensitive topics allows real diplomacy to have a non-zero starting point for political dialogue and historical memory, for example, regarding the issue of ecological monitoring of the Danube Delta or historical-cultural dialogue in Zakarpattia or Volhynia (Pyschak, 2021).

Each country has developed its own system of implementation and functioning of science diplomacy. Of particular interest for Ukraine is the European experience of using the instruments of science diplomacy in view of the intensification of Ukraine's European integration course, in particular the common research area, as well as the fact that the EU is an active participant and donor of modern reforms in Ukraine, a significant part of which is directly related to the scientific sphere.

### **3. Ukrainian context of science diplomacy development**

For the first time in the history of Ukraine, the MFA has developed and approved the Public Diplomacy Strategy for 2021–2025. The Public

Diplomacy Strategy outlines the goal, objectives, key areas of activity in the relevant field for the medium term, ensuring the synergy of diplomatic and cultural policies. It was developed in the context of the Foreign Policy Concept of Ukraine and reflects its main provisions (Strategy of public diplomacy, 2020).

In addition to clear and measurable goals and objectives, the document defines seven main areas of public diplomacy: economic; expert; cultural; scientific and educational; digital; sports; culinary.

It is noteworthy that in the Strategy of the Ministry of Foreign Affairs of Ukraine for 2021–2023, the term "science and education diplomacy" appeared, which is defined as a direction of public diplomacy that promotes building strong partnerships with other countries through scientific and educational exchange; addressing global, regional and national challenges using scientific achievements; forming foreign policy decisions based on evidence.

Education and science are important factors of socio-cultural diplomacy. Science is an environment free from the influence of political ideologies, where ideas can be exchanged despite cultural, national and religious differences (Strategy of public diplomacy, 2020).

The concept of "science diplomacy" appeared relatively recently and is now distinguished as an independent direction of the state's foreign policy.

The purpose of science diplomacy is to promote the deepening of international cooperation in the field of science and education. Educational diplomacy is inextricably linked with science diplomacy, because for most modern universities, which are the main subjects of educational diplomacy, successful functioning is possible only in an inseparable combination of scientific, educational and commercial activities (Rozumna, Chernenko, 2016).

Educational diplomacy involves the definition of a new content of relations and mission of organizational culture in the educational institution, focused on the modern needs of teachers, students, parents, the state and society, international mobility of students, teachers, university staff, the growing interest of educational institutions in attracting foreign students, the optimal combination of all needs into a single cultural and educational whole, which is a living organism with humanistic principles and tolerant rules (Bukina, Perminova, 2021).

There are several definitions of the term "educational diplomacy". The most successful, in the authors' opinion, is the statement that educational diplomacy is a means of forming the image of an educational institution and an opportunity to show Ukraine to the world with the help of intellectual potential and professionalism (Myronchuk, 2019). This became especially important in 2022, in the midst of

Ukraine's full-scale war against Russia, when a large number of PhDs and Doctors of Sciences were forced to become temporary migrants and were forced to move to European countries. Many of them got jobs in educational institutions abroad and were able not only to confirm their status, but also to define a new approach to existing models of education.

The authors would like to define the following functions of educational and scientific diplomacy:

- promotion of values through their study and research;
- an informational function designed to inform and educate;
- the development of socio-cultural relations, that is successfully carried out in universities where representatives of different countries study;
- promotion of positive perception of culture and national identity through education.

Ukraine has a fairly extensive network of higher education institutions, which as of 2022 had quite serious international relations and great potential to influence foreign audiences – through foreign students, politicians, diplomats, scientists, educators from foreign countries, etc. International university cooperation is undoubtedly the most effective form of scientific and educational diplomacy.

Believe that now, despite the change in the model of relations, this cooperation will be even stronger and more effective. Ukrainian higher education institutions play a significant role in interstate relations. This especially emphasizes and strengthens the fact of the presence of national minorities in the regions where educational institutions are located, the study of language, history, culture, contacts of higher education institutions with organizations of the countries of origin of national minorities, etc.

Already now, in 2022, the Ministry of Education and Science of Ukraine recommends Ukrainian universities to take advantage of the opportunities to attract additional funding for the development of science, material and technical base, participation in international student and faculty mobility programs through programs funded by the EU, other foundations and international organizations, as the EU and almost all countries of the world support Ukraine in its struggle and help it to survive until the victory for its independence.

There are certain channels of science and educational diplomacy that include:

- digital: websites, social networks, YouTube channels, personal blogs, vlogs, eLearning platforms;
- media: local and international, all-Ukrainian, regional mass media – TV, radio, online, print;
- events: activities.

The tools of such diplomacy are quite diverse:

- scientific research;
- participation in the international conferences, seminars;

- scientific meetings organized by one of the parties;
- exchange of lecturers for giving lectures and consultations;
- development of joint courses;
- publication of the results of scientific works in periodicals;
- exchange of scientific literature;
- organization of joint cultural events;
- submission of joint projects for obtaining external grants;
- exchange of lecturers/students/researchers;
- studying under double degree programs.

#### **4. Improving the instruments of science diplomacy development**

At the first global meeting on science diplomacy "EU Science Diplomacy beyond 2020" in Madrid in December 2018, the "Madrid Declaration on Science Diplomacy" was signed, which addresses the need to strengthen science diplomacy strategies and practices around the world to support universal scientific and democratic values.

In the context of this Declaration, science diplomacy is seen as a set of practices at the intersection of science, technology and foreign policy: clearer science diplomacy strategies at the national and supranational levels will allow for better alignment of interests and more effective coordination of resources (Madrid Declaration, 2019).

Today, the modern world is experiencing economic, political and religious "turbulence", which puts new demands on science diplomacy. As noted by the former UN Secretary General (1997–2006) Kofi Annan, "95% of the world's new science is created in countries where only one fifth of the world's population lives." (Zewail Ahmed, 2010)

On the other hand, the existing risks are also associated with stimulating the transfer of not only new but also outdated technologies to countries where their use is still economically feasible (Myronchuk, 2019).

Therefore, one of the urgent tasks of science diplomacy is to support new scientific communities of those countries that are in the process of building their own scientific potential.

Science diplomacy is designed to help understand current trends and challenges that stand in the way of progress, and this, in turn, requires greater recognition of the scientific drivers of the new diplomacy (Holt Rush, 2015).

Experts in the field of science diplomacy are convinced that countries should use one of their best currencies – science – to achieve foreign policy goals, and the term "scientopolitics" should enter the lexicon of diplomacy. Back in 1999, the US National Academy of Sciences concluded that thirteen of the

sixteen US foreign policy goals are related to science and technology (Turekian Vaughan, Neureiter Norman, 2012).

The authors believe that the scientific and educational potential for the development of scientific and socio-cultural diplomacy is just beginning to manifest itself in Ukraine. Therefore, it is important to focus on solving a number of issues. This will be especially relevant immediately after the victory and the beginning of the reconstruction of the country. The key issues include the following:

1) Formation of its own model of international activity, which provides for cooperation with ministries of education, diplomatic and consular institutions, local governments, city halls, educational institutions, foundations, state and public organizations of foreign countries.

2) Establishment of an appropriate unit within the structure of each university to implement the strategy of international activities of the university. Its work should be aimed at developing, expanding and strengthening international relations and the authority of the university in the world educational and scientific community, that is:

- establishment of international relations with foreign partners (universities), organizations, associations, scientific institutions through the conclusion of bilateral or multilateral cooperation agreements;
- organization, coordination and control of international programs and university academic mobility;
- organizational and documentation support of foreign internships, international exchange programs, "double diploma", etc;
- informing about international scientific and educational grant programs, projects, funds, scholarships;
- organization of visits and receptions of foreign specialists and delegations;
- reporting on the results of the university's international activities.

3) Expansion of academic mobility of the University, its integration into the world and European educational and scientific space through the involvement of students, graduate students, faculty, researchers to participate in international projects, programs and research.

In general, academic mobility involves the involvement of participants in the educational process of the university in the educational process of another higher education institution (scientific institution) in Ukraine or abroad, conducting research with the possibility of re-enrollment of mastered disciplines in the prescribed manner.

The right to academic mobility can be realized on the basis of international agreements on cooperation in the field of education and science, international programs and projects, agreements

between Ukrainian or foreign higher education institutions (scientific institutions), their main structural units, and can also be realized by the participant of the educational process on his own initiative, on the basis of individual invitations and other mechanisms.

According to the place of implementation of the right to academic mobility it is divided into internal and international. International academic mobility is the participation of representatives of the educational process of the university in the educational, scientific and pedagogical or scientific activities of a foreign higher education institution, scientific institution, organization for a certain period. The optimal period is considered to be a semester or one academic year. Academic mobility programs should correspond to the educational activities of the university.

4) The educational process at the university should be organized in accordance with modern standards of quality education, which, in particular, initiate the development of international cooperation of universities and the process of internationalization of higher education. Thus, with the assistance of the British Council in Ukraine, more than 20 Ukrainian higher education institutions received grants for study visits and partnerships with British universities in various fields (Pyschak, 2021).

5) Stimulation of scientific research through the formation of scientific schools, scientific departments, staff researchers, scientifically active students at universities, as science at universities is an important segment of science in the state. University science has three important areas of application:

- use of the latest achievements of science in the formation of adequate content of education (new textbooks, manuals, specialties and educational and professional programs);
- training of scientific personnel through postgraduate and doctoral studies;
- a source of new knowledge, a base of the latest innovative educational technologies.

6) Systematic and coordinated efforts towards the development of educational and scientific diplomacy of the university in order to improve the quality of higher education; increase the efficiency of scientific research; enrich the individual experience of participants in the educational process by familiarizing themselves with other models of creating and disseminating knowledge; Increasing the competitiveness of both graduates and the university as a whole in the Ukrainian and international markets of educational services and labor; creating a positive image among Ukrainian and foreign higher education institutions. Concretization of the directions of diplomacy is promising.

These provisions formed the basis of our beliefs in identifying the features, directions, levels of

development of educational diplomacy in the education system, in connection with which a diagnostic study was conducted, because educational diplomacy is the interaction of all participants in the educational process. Diplomatic art is the professionalism of a manager, reduced to creativity, that is, an activity that generates a qualitatively new level of professionalism. Here are the main results of the study among 46 pedagogical workers to determine the level of development of educational diplomacy in the institution of vocational (vocational-technical) education (Table 1) (Pyschak, 2021).

The results of the survey (Table 1) showed that the majority of teachers of vocational (vocational-technical) education institutions consider communication qualities to be important for their professional activity, with the majority of respondents preferring to listen rather than talk. Almost half of the respondents (55.5%) can find a topic for conversation with a stranger. The question "Do you like to give advice?" was answered by respondents on a scale from 6 to 8 points. If the conversation is not interesting, more than half of teachers (88.7%) hide it from the interlocutor. The study also showed that 76.3% of teachers get annoyed when they are not listened to and almost all respondents have their own opinion on any issue.

In communication, teachers are attracted by the exchange of ideas, receiving new information, expanding their horizons, that is, 85% of respondents said that they like to be in the spotlight. Instead, only 36% of teachers consider themselves good speakers.

The study identified ways to improve the development of educational diplomacy for heads of educational institutions:

- providing the management staff of educational institutions with knowledge of the psychology of communication of managers (through lecture courses, online courses, special seminars and psychological

counseling during in-service training courses in the system of postgraduate pedagogical education);

- formation of communicative competence (through interactive trainings);

- raising the level of communication culture in educational institutions – it is advisable to use innovative technologies (discussions, didactic and business games, trainings, projects, multimedia learning tools, web blogs, technologies for the development of critical thinking, etc.);

- an important vector for the effective development of educational diplomacy for educational institutions is organized self-education, which is used to solve a wide range of problems in the educational sphere and can be successfully adapted in the process of developing the communication culture of heads of educational institutions.

The conducted analysis of the essence of pedagogical interaction in an educational institution allows us to conclude that the concept of "educational diplomacy" is a rather complex and multifaceted concept that is used in various spheres of human activity, covers a large number of objects and phenomena, as it is manifested in the educational process, personal interaction, technological processes, communications, etc. Educational diplomacy contributes to the implementation of qualitative changes in the pedagogical system (in education, in the upbringing of students, in the educational and socio-cultural environment), forms a high level of culture of relations between the subjects of the educational process in the context of humanistic relations.

## 5. Conclusions

Science diplomacy is a new and progressive direction of development of the system of international relations. The development of science diplomacy mechanisms as a type of public diplomacy should become one of the key elements of the state scientific

Table 1

### The level of development of educational diplomacy in vocational (vocational and technical) education

Question	Answer options (%)	
	Yes	No
1. Do you prefer to listen rather than talk?	66,7	32,4
2. Can you always find a topic to talk to a stranger?	55,5	42,7
3. Do you always listen carefully to the interviewer?	77,7	21,3
4. Do you like to give advice? Define on a 10-point scale	44,2	32,3
5. If the topic of conversation is not interesting to you, do you hide it from the interlocutor?	88,7	11,6
6. Do you get annoyed when you are not listened to?	76,3	21,9
7. Do you have your own opinion on any issue?	73,4	22,2
8. If you do not know the topic of the conversation, will you continue the conversation?	55,4	47,8
9. Do you like to be in the spotlight?	43,2	55,8
10. Are there at least three areas of your activity in which you have sufficiently deep knowledge?	65,4	33,7
11. Do you consider yourself a good speaker?	53,7	43,2

Source: compiled by the authors based on (Pyschak, 2021)

and technical policy of Ukraine. The tasks of the development of Ukrainian science should include the formation of such a model of international scientific and technical cooperation and international integration in the field of research and technological development, which allows to protect the identity of the national scientific sphere and state interests in the context of internationalization of science and to increase the efficiency of Ukrainian science through mutually beneficial international cooperation.

The development of science diplomacy in our country, given the significant scientific potential, is an extremely promising area of activity of the society, which requires more active promotion of the possibilities of Ukrainian scientific potential and intensification of work on the popularization of Ukrainian science; attraction of international funds for the implementation of scientific projects; strengthening of academic mobility programs – exchange of scientists and specialists, especially young scientists and students; creation of centers of excellence; creation of conditions for full participation of domestic scientists in international projects; development of a consistent and

comprehensive, not fragmented policy in the field of science diplomacy.

In the process of developing the institute of science diplomacy, it is extremely important to maintain a balance between the interaction of scientific and political components, to prevent the use of political instruments in the scientific sphere. It is also extremely important that scientific and diplomatic goals remain transparent to avoid manipulation of science for political purposes and to prevent politicization of science.

The results of the study are the basis for the statement that the development of educational diplomacy is a priority direction of personal and professional development of scientists and teachers of educational institutions. It is based on psychological and pedagogical theory and practice and is focused on subject-subject relations in work. This direction is consistently implemented during the educational process in the system of postgraduate pedagogical education by acquiring the necessary competencies, gradual improvement of communicative qualities and accumulation of experience in communicative interaction.

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