

# The Role of Higher Educational Institutions in the Implementation of UN Sustainable Development Goals (SDGs)

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*Higher Educational Institutions play the major role in the implementation of the UN Development Agenda and related Sustainable Development Goals (SDGs). Effective implementation of SDGs requires better cooperation between Higher Educational Institutions. There have been made certain efforts to strengthen the international and global cooperation in recent years. In this context, Higher Education and Research for Sustainable Development (HESD) developed by the International Association of Universities appear one of the most effective global tools. The aim of HESD is to provide support to global actions and initiatives to promote sustainability. Another strong effort for achieving Higher Educational Institutions' sustainability is made by the UNESCO, which is actively providing recommendations for research and actions concerning achievement of the SDGs.*

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Many Higher Educational Institutions around the world fall behind in promoting sustainability and do not take initiatives in this respect. The main reasons for this are a lack of priorities, leadership or external support. Therefore, more efforts are necessary to widen the engagement of Higher Educational Institutions. A better support from other actors, including government, public and private sectors appears important and urgent in this context. In the wake of the COVID-19 epidemic, it became clear that stronger and more immediate links between higher educational institutions worldwide are needed, as well as a proactive approach for establishing global partnerships to ensure sustainability and effective implementation of the UN Sustainable Development Goals (SDGs).

Higher Educational Institutions have to play a credible role in the implementation of the UN Sustainable Development Goals (SDGs).

The role of higher education in supporting the 2030 Agenda for Sustainable Development is critical; the SDGs cannot be achieved without higher education. Higher education

invests in future generations, conducts research to find solutions to complex problems, supports and interacts with local communities, and creates initiatives to make campuses more sustainable. In addition, it provides a critical voice on the issues reflected in the SDGs, encourages operational thinking and critical interaction.

The relevance of the problem under study is confirmed by the fact that good academic background facilitates the achievement of all the Sustainable Development Goals identified by the UN in 2015 (see Fig. 1).



**Fig. 1.** Sustainable Development Goals

Therefore, the effective implementation of the SDGs requires close international cooperation between universities, which train specialists for different industries and spheres of activities related to the achievement of certain Sustainable Development Goals (Teplov, Tarasova and Isaenko 2017).

One of the most important achievements contributing to the strengthening of international and global cooperation is Higher Education and Research for Sustainable Development (HESD), conducted by the International Association of Universities. The purpose of this study is to support global actions and initiatives, to promote sustainability and achieve Sustainable Development Goals.

The International Association of Universities (IAU) was founded in 1950 under the auspices of UNESCO and is the leading global association of Higher Educational Institutions and organizations from around the world, with members from more than 130 countries. IAU is an independent non-governmental organization. It is an official partner of UNESCO (Associated status) and promotes UNESCO and other international organizations' higher education policy.

In this context, the IAU's global HESD research, conducted in 2019, is of particular importance for the development of education from the standpoint of achieving Sustainable Development Goals by universities. Being global in scope, research fosters further universities' engagement and is closely linked to the 2030 Agenda for Sustainable Development. The Cluster is led by sixteen IAU Member Higher Educational Institutions; each of them works with the universities from other continents.

Both the 2015 United Nations General Assembly and the 2030 Agenda for Sustainable Development boosted the interest in sustainable development beyond the original borders. The first four-year cycle of the Global Goals took place in 2019. It is also the end of the awareness-raising period, the end of the 'trial' period for the SDGs. Starting in 2020, the world will have to do more to meet the ambitious goals by 2030. This is why, in the United Nations' political declaration issued at the first UN SDG Summit, world leaders called for a decade of action and delivery for sustainable development.

The United Nations acknowledges the important role of higher education by including access to tertiary education and universities in SDG Target 4.3 and by creating special mechanisms for an increased science-policy interface and thus better recognition of research. Yet, more work needs to be done to fully integrate higher education into the mechanisms established to achieve the 2030 Agenda.

UNESCO is actively working on holding special events aimed at developing recommendations for achieving Sustainable Development Goals.

We should note the role of universities and other Higher Educational Institutions in supporting sustainable development since the early 1990s. Already in 1993, the IAU Kyoto Declaration called on higher education leaders to articulate their work striving for sustainable future achievement. This commitment was confirmed in the 2014 IAU Iquitos Statement. The IAU has been one of the strongest supporters of providing equal access to higher education under one of the SDG's targets, which was not the case in the previous Millennium Development Goals (MDGs).

In 2016, in the context of UNESCO Global Action Program on Education for Sustainable Development (GAP ESD), the IAU worked out the Global Higher Education and Research for Sustainable Development Survey (HESD) to show what universities around the world are doing for sustainable development. 120 universities, most of which were IAU members, completed the survey. The first Survey Report showed that the SDGs increased interest for sustainable development at Higher Educational Institutions.

The survey, which reached all countries around the world, received 536 valid responses from 428 universities of 101 countries. IAU HESD global survey 2019 reflects the following areas: higher education and the SDGs; the main approaches of the organization; networking for sustainable development.

None of the seventeen Sustainable Development Goals (SDGs) can be achieved without contribution of higher education and research.

Through research, universities play a unique role in generating new knowledge and innovation to address global challenges and providing evidence for informed public policy. Universities accelerate creation of new leaders and skilled professionals' generations who are capable to drive social and economic development.

Higher education has a direct impact on the development of all nations. The 2030 Agenda for Sustainable Development cannot be realized without universities' partnerships.

SDG 4 concerns ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, in particular:

- higher education is an essential component of a sound and sustainable educational system;
- universities strengthen educational policies and practices at all levels through training teachers and conducting educational research;

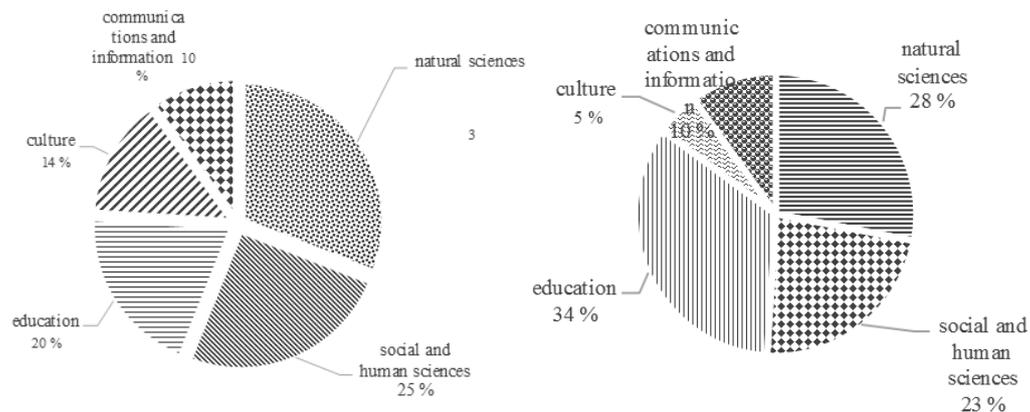
- access to good-quality higher education remains a challenge for women and girls, persons with disabilities, rural and low-income population, indigenous peoples and those affected by conflict (targets 4.3 and 4.5);
- higher education develops critical thinking and skills actual for the involved citizens (target 4.7);
- developmental impact scholarships can also be used to promote equality and inclusiveness, reward merits and provide broad access insurance, especially for disadvantaged people (Newman 2019).

Special attention should be paid to the contribution of UNESCO to the achieving the Sustainable Development Goals through the implementation of the UNITWIN/UNESCO Program aimed at reaching the Sustainable Development Goals identified by the 2030 Agenda for Sustainable Development. The UNITWIN / UNESCO program can be considered as an instrument of international cooperation between universities to join efforts to achieve the UN Sustainable Development Goals (SDGs) (Tarasova 2020).

A global partnership of universities is necessary to solve these problems and determine the directions for the universities' educational activities development.

UNESCO Chairs make a significant contribution on the way to UN Sustainable Development Goals implementation. An important area of their activity is the search and development of new educational programs, methods and technologies; the formation of new competencies; the creation of a sustainable educational environment; the application of the principles of sustainable development (Teplov, Tarasova and Isaenko 2018).

Globally, 31 per cent of UNESCO Chairs are actively involved in the natural sciences research. The second place belongs to social and human sciences (25 per cent). 20 per cent of UNESCO Chairs work in the field of education, 14 per cent in culture, and 10 per cent in communications and information (see Fig. 2).



**Fig. 2.** Distribution of UNESCO Chairs worldwide and in Russia by main area of activity

Currently, the Network of UNESCO Chairs in Russia is the second largest one and includes 62 UNESCO University Chairs and 6 UNITWIN Networks. Of these, 34 per cent work in education sphere, 28 per cent – in the natural sciences, 23 per cent – in social and human sciences, 10 per cent – in communications and information, and 5 per cent – in culture. The Chair network in Russia is actively involved in the exchange of experience,

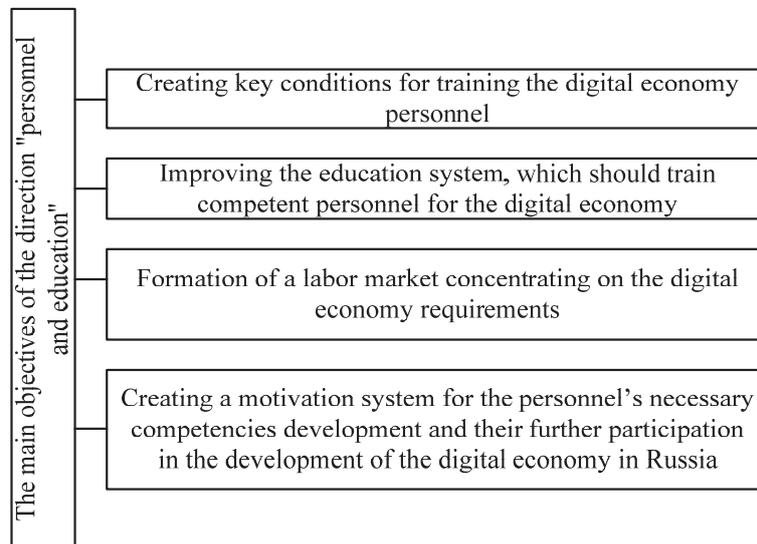
knowledge and information on a wide range of issues related to the development of higher education and science; ensures the entry of Russian universities and scientific organizations into the international system of inter-university cooperation.

Comparing the distribution of UNESCO Chairs in Russia by area of activity with international trends, it should be noted that in the global context UNESCO natural sciences Chairs predominate (31 per cent), whereas in Russia Education Chairs predominate (34 per cent). It should also be emphasized that there is a low share of UNESCO cultural Chairs in Russia: 5 per cent compared to 14 per cent globally

In the course of the study, the authors made an attempt to distribute the UNESCO Chairs according to their priorities within Sustainable Development Goals. The results of the analysis showed that out of 747 UNESCO Chairs, 182 Chairs pursue Goal 4 (Quality education); Goal 3 (Good health and well-being) is the main activity orientation for six UNESCO Chairs; Goal 5 (Gender Equality) is a priority for six UNESCO Chairs; Goal 11 (Sustainable Cities and Communities) is being realized by one UNESCO Chair; Goal 15 (Life on Land) is implemented by one UNESCO Chair. The enumerated areas are manifested in the Chairs' names.

The problem of education digitalization and the prospects for distance learning development in the context of the new coronavirus infection spread deserves special consideration. Nowadays special attention is paid to training personnel for work in the realm of digital economy and artificial intelligence.

Taking into account the importance of digital technologies in Russia, there was developed the Russian Digital Economy Program, which was approved by the Russian Federation Government decree of July 28, 2017. It defines goals and objectives within the framework of five basic directions for the digital economy development for the period until 2024. These include: statutory regulation; personnel and education; formation of research competencies and technical groundwork; information infrastructure; information security. The main goals of the direction Personnel and Education stated in the Russian Digital Economy Program are shown in Fig. 3.

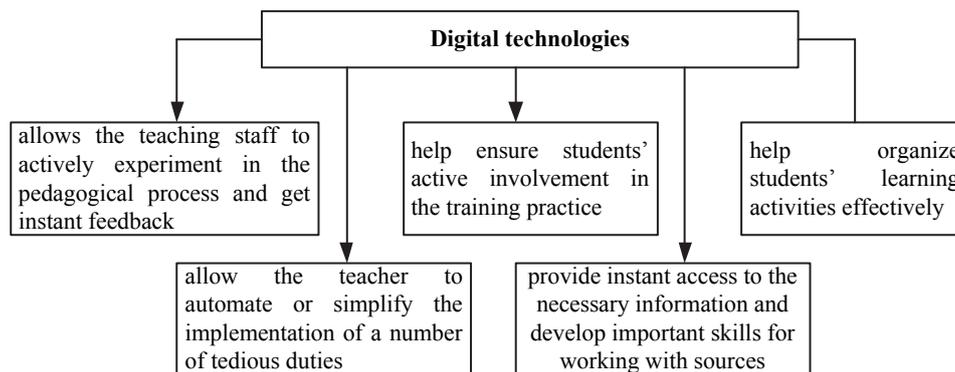


**Fig. 3.** The main goals of the direction Personnel and Education

The role of digital technologies in improving the activities and positioning of the university is:

- to improve the availability and quality of educational services; increase the university's competitiveness and effectiveness;
- to create an innovative educational platform for the development of a knowledge society;
- to build an information society in any region and in the Russian Federation by enhancing youth initiatives and project activity in the field of digital economy and socio-cultural sphere.

The study identified a number of advantages for using digital technologies in the universities' activities in the course of training specialists for the digital economy realm (see Fig. 4).



**Fig. 4.** Advantages of using digital technologies in the university activity

These advantages should facilitate the process of training specialists who will ensure further sustainability in all the areas identified by the UN.

The digitalization of the university is aimed at providing each student with the opportunity to form an individual educational path for further professional, career and personal growth. It is also aimed at diversifying the types, directions and forms of professional growth through the development of the digital information and educational environment; widespread use of students and teachers' personal online accounts; active implementation of new training technologies into the educational process (including technology of 'open education', interactive forms of on-line training; development of 'tutor' support; problem-based learning technologies; 'guest' lectures; master classes and scientific seminars conducted by professors of domestic and foreign universities in the format of webinars).

Furthermore, much attention is paid to scientific work to ensure sustainability in all areas. In the context of COVID-19 universities extensively use digital technologies for conducting conferences, seminars, forums, round tables for scientific and pedagogical workers, undergraduate and postgraduate students.

University's activity improvement by means of digital technologies is ensured by the implementation of the following tasks:

- transition to the modular principle structure of educational programs, including the ones in a foreign language; widespread use of technologies of 'open education', interactive

forms of training in the online mode, project and other methods, increasing the role of independent education of students and other members of the audience;

- introduction into the educational process of distance learning technologies, forms, methods and teaching aids by using information and educational arrays of the Internet with consideration of regional characteristics of the economy;

- widespread use of ‘situational cases’, simulators, computer simulators, business games, project methods, moderator seminars; organization of the educational process on the basis of interdisciplinary modular approach; practical application of interdisciplinary term papers and final qualification works;

- expanding the practice of conducting online lectures by leading practitioners and researchers of Russia;

- working out of a transformative educational and methodological literature, ensuring the implementation of methodological and technological approaches into the organization of educational process on the basis of updated laboratory equipment, modernized facilities, new software and methodological support;

- creation of specialized laboratories and classrooms equipped with modern tools and software for distance learning;

- creation of the system and the technology for an individual's educational trajectory to train masters, bachelors and specialists according to their individual curriculum providing for them an independent choice of professional competencies;

- conducting online training sessions on the basis of commercial companies and large industrial and trade organizations of the region;

- introduction of educational and communication Internet technologies, support with both electronic educational materials and multimedia educational resources available in all the disciplines of higher education curricula for the effective learning and personal development of students, as well as for their successful business careers;

- active development of electronic textbooks, teaching aids, *etc.* .;

- revitalization of the university's marketing activities in order to promote educational services.

There are aspects which require reconsideration and improvement:

- government strategies;

- legal regulation;

- promising areas of specialization and training that are in demand in the digital economy (Isaenko and Tarasova 2019).

In Russia, a special role is assigned to the interaction of UNESCO Chairs in the field of education. Networking of UNESCO Chairs aims to improve the quality of education and is an effective technology for the exchange of best practices in the field of education for sustainable development, including distance learning technologies.

Networking of UNESCO Chairs and development of universities' global strategic partnership contribute to improving the quality of education and achieving the Sustainable Development Goals.

Since June 2014, the UNESCO Chair on Education for Sustainable Development of Cooperatives has been functioning at Belgorod University of Cooperation, Economics and Law. It is a member of the UNITWIN / UNESCO Program and is actively developing its own network. During the period from 2017 to 2020, eight sections of the Chair have been created in Russia, the Republic of Belarus, Tajikistan, Kazakhstan, Moldova, Sudan, Morocco and the Republic of Maldives (Teplov *et al.* 2014; Tarasova 2020).

We considered the implementation of Sustainable Development Goals on the example of the activity of the Belgorod University of Cooperation, Economics and Law (BUCEL).

Currently, the University implements a system of continuing education, including secondary vocational education, higher education (baccalaureate, specialty, magistracy and post-graduate school) and additional education.

The University actively promotes the principles and values of UNESCO through its own network of UNESCO Chairs functioning at the University; promotes education for sustainable development and training in the field of social transformation; conducts researches promoting cooperation with UNESCO, UNESCO Chairs, state and non-governmental organizations, civil society by integrating research findings into practice; constantly masters new educational technologies and techniques in order to ensure a high level of scientific and educational work.

The University is constantly improving the Quality Management System of education. Measures are being taken on internal and external auditing, education quality monitoring and ensuring proper usage of the obtained results. Internal audits of the vocational training programmes implementation are carried out by the University on the regular basis in accordance with the plan.

The strategy, policy, mission and tasks of the University in the field of quality management have been formulated.

The University policy in the field of quality of education is based on the following principles and values:

- implementation and improvement of state educational policy;
- focus on international education quality standards;
- innovations in education, science and technology; pursuit of excellence in the professional environment;
- independence of thought and creative approach to solving the problems the University faces;
- involvement of the University Faculty in all areas of the University activity, allowing teachers, employees and students to fully realize their potential;
- corporate culture, aimed at providing openness and comfortable internal environment;
- individual freedom, expressed in the absence of racial, ethnic, religious, gender and political discrimination.

This policy is communicated to all the University employees and serves as the basis for anchoring objectives into the field of quality in every structural division; it is implemented by the quality management system and is under the personal control of the University Rector.

In accordance with the current mission, Belgorod University of Cooperation, Economics and Law positions itself as a university that contributes to the development of moral, highly professional, innovative, and socially-oriented students by improving quality of education and effectiveness of scientific research.

The University encourages the public and youth to contribute to the achievement of Sustainable Development Goals:

- The University is constantly improving methods of teaching and educating young people, enhancing their intellectual, cultural and moral development; digital and innovative technologies are being introduced, students' creative activity and independence are encouraged. The University educational process is based on the principles and values of

UNESCO, as well as the values of the new time, which are aimed at development of creativity, flexibility, social mobility, tolerance and other professionally and personally significant for the young generation qualities.

– partnership for sustainable development. The University interacts with the ILO Co-operative Sector, shares the principles and values of the International Cooperative Alliance, and supports UNESCO's sustainable development initiatives. The University is aimed at an open, constructive dialogue and responsible interaction with public authorities and business community. The University regularly holds round tables, promotes dialogues on the Belgorod Region's socio-economic development priorities. The Council of University Students and other bodies of student self-government closely interact with youth structures and public organizations of Belgorod and the Belgorod Region:

– elimination of poverty. The University helps improve the socio-economic situation in the region, promotes job creation, contributes to the growth of the population welfare and supports sustainable social development.

– decent work and economic growth. We associate future education model with students' social development supported by the University Center for Social Development, which involves all the actors into socio-economic projects aimed at the region's development, thereby contributing to the development of creativity and cooperation for achieving the common good. In such a model, the basis for achieving Sustainable Development Goals can be formed. Higher education organizations should become the very space which functions in the framework of sustainable development principles. The University seeks to attract youth's interest to those opportunities that can be realized through cooperatives. Cooperation provides a unique opportunity to discuss problems urgent for society, economy and environment in educational organizations taking into account their integrated nature. To further this goal, the university's academic circles issued a textbook on cooperatives in economic and social life. Such works help teachers with preparation of projects, excursions and school exhibitions, and can be used by young people as practical tools for creating cooperatives and in pursuing their own goals; they are useful for strengthening citizenship, solving environmental problems, and improving the socio-economic situation. These materials are distributed through the network of the UNESCO Chair at Belgorod University of Cooperation, Economics and Law.

– peace, justice and strong institutions. Belgorod University of Cooperation, Economics and Law organized a free legal consultation unit for citizens. It is a Legal Clinic which provides counselling services for the low-income population. The University Law students both provide legal assistance to the population free of charge and gain professional experience (Teplov, Isaenko, and Tarasova 2017b; Tarasova 2020).

The 2030 Agenda for Sustainable Development is a development vector for the UNESCO Chair at the Belgorod University of Cooperation, Economics and Law. The UNESCO Chair at BUCEL works in accordance with the Chair's Action Plan as a part of the University Development Program. Education in terms of the Sustainable Development Goals is the Chair's priority. The structure does not only consolidates the previously achieved results, but also within the framework of UNESCO Chair's Action Plan pays special attention to further educational activity improvement for training of highly qualified specialists capable of implementing the Global Agenda and the Sustainable Development Goals.

In order to achieve the SDGs the University:

– has developed and implements project-oriented educational programs, including programs on socio-economic development and/or social project management programs

with the involvement of real sector organizations, including socially oriented non-profit organizations;

- has linked the University research and development topics with the SDGs;
  - develops and implements joint educational programs and research projects;
  - provides conditions for the implementation of continuing education;
  - takes measures aimed at improving information, financial and legal literacy as well as expertise building;
  - stimulates development of students' social entrepreneurship, start-up initiatives;
- works out the programs for supporting social entrepreneurship with the participation of development institutions for creating socially-oriented non-profit organizations by students and alumni (Teplov, Tarasova, and Isaenko 2019).

More than 90 per cent of the budget is spent on achieving SDG 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Thus, the Higher Education Sector around the world is increasing its commitment to sustainable development due to the 2030 Agenda. However, there still exist barriers to full participation and more work should be done. It is important to strengthen interaction of science and policy and be aware of the tasks facing the higher education sector towards achieving the SDGs. Higher education is undergoing its transformation to incorporate the principles and challenges of sustainable development.

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