

ICEST 2020
**International Conference on Economic and Social Trends for Sustainability of
Modern Society**

**GLOBAL ROLE OF UNIVERSITY IN SUSTAINABLE
DEVELOPMENT SOCIETY**

I. V. Brylina (a)*, E. N. Viktoruk (b), N. K. Okonskaya (c), B. K. Turchevskaya (d)

*Corresponding author

(a) National Research Tomsk Polytechnic University, pr. Lenina, 30, Tomsk, Russia, ibrylina@yandex.ru

(b) Krasnoyarsk State Pedagogical University named after V.P. Astafiev, st. A. Lebedevoy, 89, Krasnoyarsk, Russia,
eviktoruk@yandex.ru

(c) Perm National Research Polytechnic University, pr. Komsomolsky, 29, Perm, Russia, nataokonskaya@rambler.ru

(d) Pacific National University, st. Tihokeanskaya, 136, Khabarovsk, Russia, bkturchevskaya@inbox.ru

Abstract

The pandemic of coronavirus COVID-19 forces humanity to rethink the fundamental foundations of society as set forth in the futurological theories of «super-industrial society», «post-industrial society», «information / network society», «knowledge society», societies of «pluralistic industrialism», «consumer societies», «risk societies» or «human-made risk». Under the conditions of uncertainty, instability, insecurity of social reality, the idea of synthesis of theories in the concept of a society of «sustainable development» is substantiated, one of the leading criteria of which is provision of security. General scientific methods are used. The comparative method is applied to the theories of society, the prognostic method is applied to trends in the development of society and the modeling method is applied to the society of the future, the University the Future and its graduates. According to the analysis of the concept of sustainable development, the formation of a model of a network society of «safe development» is forecasted. It is predicted that university will become more important in cluster-network interaction (university - business - state). The global role of university in the establishment of a network society of sustainable / safe development is approved. The article reveals the role of the university of the network society of safe development in the formation of the worldview of sustainable development among modern students (of generation Z), as well as the ways and methods of its formation. Generational and global values are analyzed, new (or demanded) competencies of a future university graduate are revealed.

2357-1330 © 2020 Published by European Publisher.

Keywords: Sustainable development, security, secure development network university, outlook of sustainable development, university of the future.



This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

1. Introduction

Today the world is on quarantine. In what way will the world change after the coronavirus COVID-19? The pandemic forces humanity to reassess the values. After the quarantine the world will be different - network, digital, but most importantly the humanity will realize that the main «common cause» of mankind is to ensure the safety of life, which is achieved by joint coherent actions (in this case, self-isolation), that between economic or existential arguments, the main thing is vital (existential), and not economic one.

In the face of a universal threat, it becomes apparent that the diverse theories of modern society such as «superindustrial society» (Toffler, 1981, 1984), «postindustrial society» (Bell, 1976, 1999), «information / network society» (Castells, 2004), «a society of» pluralistic industrialism (Kerr, 1982), as well as a society of knowledge, a consumer society, a post-capitalist society, a new industrial society, a technotronic society, a one-dimensional society, and others that are based on the dominance of any significant feature of society, which characterizes its innovative essence, gives way to such theories as «risk society» or «human-made risk» and are cumulatively reflected in the concept of «sustainable development», which was proclaimed by the International Commission on Environment and Development in 1987 and received general recognition at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992.

In scientific literature, the idea of a society of «sustainable development» is reflected in the works of many modern scientists (Gizatullin & Troitsky, 1998; Our common future, 1989; Ursul, 2017, 2019; Ursul & Romanovich, 2001; Ursul et al., 2014). A number of authors (Brylina & Kornienko, 2016; Brylina, 2018; Chervach et al., 2017; Ilin et al., 2017; Pokholkov & Zaytseva, 2017; Pokholkov et al., 2017; Quadrado et al., 2019; Sayapin, 2017, Ursul & Ursul, 2015, 2016) investigated the phenomenon of university and university education within a society of sustainable/safe development.

2. Problem Statement

After the coronavirus pandemic, the fundamental foundations of society are being rethought in the futurological theories of «superindustrial society» (Toffler, 1981, 1984), «postindustrial society» (Bell, 1999), «information / network society» (Castells, 2004), and «society of pluralistic industrialism» (Kerr, 1982), «knowledge societies», «consumer societies», «risk societies» or «human-made risks», etc.

The idea of synthesis of theories in the concept of a society of «sustainable development» is substantiated, one of the leading criteria of which is the provision of security.

The role of university and university education in the formation of the worldview of sustainable development in the face of uncertainty, instability, and insecurity of the riskogenics of social reality is revealed.

3. Research Questions

How will the world change after the pandemic of coronavirus?

Which of the models of university education – liberal or pragmatic – is most appropriate for the realities of the 21st century? Which one is for the future?

Will university lose its humanistic values after the economic damage caused by the pandemic? Will «temple» turn into «supermarket» under market conditions?

What are the main trends in the development of the University of Future?

Which graduates will be in demand by the society of the future? What competencies will they have to possess?

What kind of university education will be demanded by the students of the new generation in order to satisfy their needs (personal needs)?

4. Purpose of the Study

The purpose of the research is to justify the global role of the university in the formation of a society of sustainable / safe development.

5. Research Methods

5.1. University in the discourse of futurological forecast

The XX century gave rise to many futurological and prognostic concepts and projects that reveal the role of education and its mission in the culture of the future.

The authors Zaharov and Lyakhovich (1994) believe that the polemic of liberal and pragmatic (utilitarian) education, which we examined in detail through the example of the concepts of Bell (1976, 1999) and Kerr (1982) in our previous articles (Brylina, 2018), according to which Bell makes his futurological forecast for a post-industrial society, the main basis of which is considered to be information. It is this new substance that is becoming the leading factor determining the specificity and level of sociocultural and material development of society.

Information is responsible for the formation of communicative relations and the specifics of the sociocultural environment. He assigns a dominant role in society to university, which forms large-scale theoretical knowledge, to university, considering it as a «social creator», as the

primary institution of society. In this sense, university has been entrusted with greater tasks than those that it has ever performed in its long history. It must remain impartial with regard to knowledge, and at the same time it must be the main service agent – not only for the education of people, but also as a provider of political advisers. (Bell, 1999, p. 205)

In a post-industrial society organized around knowledge, the role of university is seen by D. Bell as a form of institutionalization of knowledge, as a source of knowledge and innovation generated through knowledge. Knowledge, according to Bell (1999), is the source of liberality, because it provides a learner with freedom in interpreting the facts. Thus, new elite arises – the «elite of the knowledgeable», which is responsible for making the most difficult political and technical decisions, offering options for expert decisions. Knowledge and technical competence become a condition for entry into the elite, where education is the basis.

The specifics of Kerr's (1982) approach to education are revealed through his conceptualization of university in the culture of the future, which he calls «pluralistic industrialism» or «individualism with a human face». Kerr speaks of such a sociocultural phenomenon as a multi-university. He writes that today a large American university is rather a series of communities and fields of activity, united by a common name, common managerial staff, and related goals. Some people criticize this great transformation, many accept it, very few celebrate so far, but everyone should understand it (Brylina, 2018, p. 153). He writes about a multi-university as a combination of the incongruous elements, under which society takes on a meritocratic character and the university campus becomes an arena of social conflict. He associates social changes with a segment of elite education as opposed to mass. He believes that the confrontation between liberalism and utilitarianism at the University of the Future will continue and intensify. We support this idea as especially relevant, which has clearly proved itself in modern crisis conditions.

Which model of university education – liberal or pragmatic – is most appropriate for the realities of the 21st century? Which one is for the future?

In our opinion, it would seem obvious that time gave preference to the pragmatic version. In the 21st century university turned into an expensive business, declaring it to be the most serious industry of the 21st century industry, showing the closest cluster-network interaction with innovative economy (business and government).

Krasikov (2008), reflecting on the pragmatic justification of the role of university education in the knowledge society, writes:

Knowledge in the post-industrial society is given the same importance as the «capital funds» in the industrial; training is a tool that enables a person to accumulate a «knowledge fund», just as a business allows accumulating «capital funds». The more people learn, the more «knowledge fund» they acquire. The hidden subtext of learning, therefore, sets a new social structure of society in which the main consumers of knowledge receive special privileges, have high income and access to more efficient means of production. This type of «capitalization of knowledge» determines the logic of the distribution of jobs and income. And if in the previous century entrepreneurs, businessmen and industrial leaders were the dominant figures, today they are mathematicians, economists and creators of new intelligent technologies. Traditional education gives qualifications, new education - meta-qualifications, i.e. the methodological and ideological system of skills as the basis for the assimilation and generation of new knowledge. (pp. 15-16)

However, neither knowledge, nor innovation, nor the market will provide guarantees of the survival and sustainability of society in the face of a common threat and danger. The main criterion for the development of society in the face of uncertainty and unpredictability is the practical systemic support for its security. It is the free disposal of knowledge capital that today becomes the most pragmatic solution to dangerous situations when a meritocracy in the political environment allows resetting the stereotype of subordination to the center, bridging the gap between economic balance and safety for public health.

5.2. Safety and sustainability of the development of society

As it was mentioned above, the term «sustainable development» came into widespread use at the end of the twentieth century.

«Sustainable development» can be understood as ensuring the decent living of the world's population, wisely using, preserving and increasing resources for the worthy existence of future generations.

In our opinion, modern society is aimed at competing with innovations and their economic efficiency, which corresponds to the basic needs of economically oriented society. However, such a one-dimensional society, where the difference between countries is connected only to the economic factor, corresponds to the model of unstable development of society. In this sense, the model of unsustainable development can be called the market (economic) model. Within the framework of the model of unsustainable development, security can be ensured only temporarily and minimally, and the pandemic clearly showed that the economic factor can not be the main base of society, as on its basis, it is impossible to ensure its safety and vitality.

Ursul & Romanovich (2001) suggested that in contrast to the model of unsustainable development (economic), in the model of sustainable development, along with the economic criterion (which remains), there are criteria for the development of the social sphere (human and socially oriented) and environmental activities (biosphere-oriented). Within the framework of the three-indicator model of sustainable development (economy, social sphere, ecology), it is important to maintain a development balance according to all three criteria, and not just one of them. Safety and sustainable development are so interrelated that it is about simultaneously ensuring economic efficiency and safety, social justice and security, environmental safety and co-evolutionary development.

The transition from a consumer society and the prevalence of material and economic interests to a noosphere-consensus partnership will allow the formation of new forms of management of safety tools, the informational basis of which, according to the authors, will be «noospheric intelligence of a global scale» (Ursul & Romanovich, 2001).

The movement of humanity towards sustainable development ultimately leads to the formation of the predicted by Vernadsky's (1991) the noosphere as a sphere of reason, i.e. liberal values, humanistic in nature.

The connection between the strategy of sustainable development and safety leads to the conclusion that the sphere of reason will turn out to be simultaneously the sphere of ensuring security, both globally and in all other respects. Ensuring safety through sustainable development during the formation of the noosphere is carried out mainly with the help of digital technologies, which extends the understanding of safety to the virtual sphere of a network society.

In the model of sustainable development, safety is extremely wide society-nature-oriented in the context of «Philosophy of the Common Cause» by Fyodorov (1906), and the theory of the «noosphere» by Vernadsky (1991).

Thus, the model of the university of the future, associated with the model of sustainable development of society, is seen as a further movement of the university from an entrepreneurial model to a model of a university of a network society of «safe development», the values of which will become the basic

humanistic values: from an individual desire to preserve one's own life to the realization of global need to preserve the existence of society itself and the co-formation of its own actions in accordance with the values of a higher level.

Will the university preserve in the near future the urgent need to restore the economy after the damage caused by the pandemic? Will «temple» turn into «supermarket» under market conditions?

5.3. University of network society for «safe development»

What are the main trends in the development of the University of the Future?

In a complex world, in the face of fluidity, uncertainty, insecurity, and risk, the University of the Future can become a guarantor of safety, cultivating, in addition to the competencies related to the manifestation of freedom of human creativity, the principles of social and personal responsibility, the ability to advance vision, design and forecasting. The formation of these competencies will be especially important for graduates of specialties associated with an increased risk of the development and introduction of the latest technologies. On the contrary, the cutting edge of modern science aims to create additive technologies that will increase sustainability and reduce the riskogenics of society.

Many researchers believe that the fundamentalization of knowledge and the expansion of the humanitarian component of education (applied ethics) are of great importance in increasing the sustainability and security of society. They are designed to «reconcile»:

- science and humanities;
- interests of university, business and state;
- to achieve a balance in the issues of commercialization of performance results and intellectual search, which will not be limited only by current socio-economic (market) tasks.

Intellectual, educational and social missions, as before, will remain characteristic and relevant for the university, however, the adaptive potential of the university (its stability) will be realized through the variability of its criteria, namely, the change of thinking styles, forms of knowledge, approaches and methods of cognition, types of scientific rationality, criteria of truthfulness, and adaptation to ever new sociocultural challenges through the emergence of new forms of educational practices, the expansion of university functions.

The global role of the University of the Future will be provided by its huge adaptive potential, the ability to meet both the requirements of the time (social order) and personal order for any sociocultural transformations, forming a competent specialist capable of the production of new knowledge, an adaptive, successful person capable of self-development and self-formation throughout life.

It can be assumed that the University of the future will remain stable, balancing between tradition and innovation, the university's mission (to be the source of the educational cluster of culture) and university pragmatism, the university's professorial culture and manager's culture, and for it, searches for new knowledge, commercial effectiveness and human adaptation to new sociocultural conditions will continue to be relevant.

One of the key ideas of society, and, consequently, of university education, may be the idea of sustainability and safety of society in the context of the concept of sustainable development, and,

consequently, the formation of a university model of a network society of «safe development» (Sayapin, 2017), where economy and safety will form a whole new unity.

What do we put in the concept of «network society of safe development», what are its main characteristics?

The concept of «network society» was introduced by Castells (2004). It comes from the metaphor «network», which is characterized through openness, flexibility, adaptability and multiplicity. It is characterized by decentralization / polycentric, anti-hierarchy / change of leaders, equal elements, virtuality of communications, flows / a changing system of norms, unpredictability, interchangeability / self-organization. Accordingly, it is characterized by the lack of centralization, symmetry, orderliness, hierarchy, predictability.

As for the «safety of development», it is associated with the general scientific characteristics of the «network society», such as uncertainty, uncontrollability / randomness. In this connection, one of the key concepts of the development of society, and, accordingly, of the university, may be the concept of sustainable / safe development.

In our opinion, an indirect confirmation of the high social significance of the university can be seen in the fact that the World Education Day was first celebrated in the world on January 24, 2019, proclaimed by the UN General Assembly resolution, which stated that education is a key factor in sustainable development and the university plays a leading role in this process (United Nations. International day of Education, 2018).

5.4. University graduate of the future

Which graduate will be in demand by the society of the future? What competencies will he have to possess? Philosophers also ponder on this subject.

According to the futurological project of university education (Toffler, 1984), the theory of superindustrial education corresponds to a «superindustrial» society:

in order to create a superindustrial education, we must develop successful alternative ideas about the future - imagine what types of jobs, professions and inclinations will be needed in the future, in 20 to 50 years, what forms the family will take and what human relationships will prevail; what moral and ethical issues may arise; what equipment will surround us and with what organizational structures we will have to work. Only through the development of such ideas we can come to the conclusion about the nature of cognitive and emotional skills that people of the future will need in order to survive the accelerating pressure» of time. (pp. 436–437)

In his opinion, a new person will need such qualities as: the ability to learn, the ability to communicate, the ability to choose (in conditions of over-choice). Summarizing these skills, we can say that a person of the future will have to «learn to change» (Brylina, 2018, p. 149).

According to the futurological education concept of Castells (2004), the information technology paradigm that emerged in the 20th century identified the development strategy of modern society as a network.

The network format of communication changed both the social structure and the lifestyle of a person. The key characteristics of a person in a network society are: freedom, fear of being excluded from networks and the development of the ability to process and generate knowledge. Since freedom and constant self-education become key values of a network society, M. Castells foresees that «we will need a new pedagogy based on interactivity, personalization and the development of independent learning and thinking abilities. At the same time, it promotes character education, personal protection» (Castells, 2004, p. 208), and the massive transition to distance education during coronavirus pandemic confirms the author's forecast.

According to Bauman (2001), the entry ticket to the new global elite will be

willingness to live in the midst of chaos» and the ability to «thrive in conditions of uncertainty»; the club card will be the ability to «position oneself in the interweaving of opportunities, and not remain paralyzed by one life specialty»; and the visiting card will be «consent to destroy what we have created with our own hands. (p. 256)

Summarizing the above-mentioned aspects, we can say that in the face of new sociocultural challenges, a university graduate of the future will be significantly different from a classical university graduate. This will be an employee who knows how to work with information and produce new data based on his fundamental knowledge. A measure of the relevance and completeness of the data generated (through processing all the information available on the problem) becomes a measure of the pragmatic effect of the university. The main personal and professional qualities will be creativity, critical thinking, the desire for innovation, stress tolerance, adaptability, the ability to live and create at risk, as well as leadership qualities, enterprise, competitiveness, sociability. All these characteristics will be in demand for the ability to independently generate new knowledge and adapt to changes in sociocultural conditions.

As it was already mentioned, a graduate of the university of the future, in contrast to a graduate of a «classical-type university» who was supposed to master qualifications, will have to master «meta-qualifications», i.e. the ability and willingness to act effectively in the face of uncertainty and unpredictability. Therefore, the University of the Future will have to generate a graduate with a high methodological culture, with the ability to self-development, mastery of languages, information technology, entrepreneurship and to the abilities which will still be in demand in the future. In addition to professional competencies, the University of the Future will form the humanitarian and spiritual foundation (universals) of a graduate, his personal identity in a changing world (Brylina, 2018).

Many researchers talk about the need for a pragmatic interpretation of identity and such humanistic values as self-expression, self-realization, self-presentation (values of a consumer society) (Shabanov & Surovtsov, 2006, pp. 63-64). However, in the context of the coronavirus pandemic it is possible to say that pragmatism has manifested itself as the awareness of the value of survival and safety. The increase in consumer value of a professional (through the quality of his education) and self-actualization of a person, subject to the comprehensive development of his abilities, assume the life and health of the bearer of these qualities as the foundation. Thus, pragmatism and liberalism are inextricably related, forming a new unity of the University of a Network Society.

6. Findings

The role of the university in the formation of the worldview of sustainable development among students.

After the consideration of the type of future graduate in the changing sociocultural conditions (social request), it is necessary to consider the question of which university education will be in demand by students themselves in order to satisfy their needs (personal requests) as much as possible?

According to a sociological study by Antipyev et al. (2019) on social orientations and ideas of students, modern university education forms three types of personality:

- terminal type - 44.3%, characterized by a high desire for self-education and self-development;
- instrumental type - 44.1%, considering education as an instrumental need;
- inert type - 6.3%, aimed at obtaining a diploma.

From this study, we can conclude that most students consider university education as a path to self-realization, and, therefore, strive to obtain a quality education. In addition, since the personal request of students for the quality and level of university education is different, this pluralism of needs will create in the education market the demand for various forms and levels of university education, through which both the adaptive potential of the university itself and the adaptability and success of the student in new sociocultural conditions when a graduate-creator will be in demand, the number of which, as shown by the above study, is significant, not conformist-consumer, which, judging by the results of the study, a minority.

Another sociological study conducted by Tomsk Polytechnic University (Chervach et al., 2017; Pokholkov & Zaytseva, 2017; Pokholkov et al., 2017; Quadrado et al., 2019) was aimed at the understanding of the level of education worldview of sustainable development of modern students.

By «worldview of sustainable development» they meant the idea of the community around the world and the behavior of people in it (a set of values and patterns of behavior), which would ensure the unconditional implementation of the principles of sustainable development.

In order to achieve this, a series of seminars were held with students and teachers of Tomsk universities, during which the researchers performed emotional expert assessment of the level of formation of the worldview of sustainable development among students of Tomsk universities, and which showed that most students rate it as low (43.7 %), while the majority of teachers rate it as average (52,8 %). The main indicators of the worldview of sustainable development were identified, the criteria were drawn up, the obstacles to the formation of sustainable development of students were identified and ranked and the recommendations on how to overcome them were drafted.

The study revealed that the low level of the worldview of sustainable development among students is due to systemic problems: at the state level, this is the absence of a state policy for sustainable development, the unstable development of Russian economy; on the part of society it is a low level of public consciousness, culture, systematic educational work; at the university level it is the lack of a systematic approach to the organization of the principles of sustainable development at the university; on the part of students it is the lack of motivation, low level of responsibility, inability to engage in self-education and self-training.

The results of the study allow concluding that, in accordance with the theory of generations (Howe & Strauss, 1991, 2007), the youth of generation Z are reflective, practical, self-critical, strive for self-development, have a high adaptive potential, have an active life position, seek to a healthy lifestyle. They are ready to accept personal (and social) responsibility and are interested in the formation of the worldview of sustainable development with the organizing and motivating support of the university, society, and the state (social demand for knowledge of the worldview of sustainable development).

7. Conclusion

In conclusion, it is possible to say that the University of the Future will be a cluster-network structure - a complex entity that will include many social communities, in its unity and integrity, engaged in the processes of generating knowledge, creating innovations, as well as forming the class of creative elite.

The University of the Future will remain a large-scale center of culture and education, a driver of innovative economics and politics. It will play a significant role in restraining the market and competition by changing the strategy to competition and cooperation, and university education will contribute to the formation of a new generation under the conditions of pragmatism as «New humanism» (Brylina, 2018).

In a pragmatic world, the purpose of the university is the education of personality and it will not disappear, but it will already be a person of a new generation and new values, and it is desirable that they are the values of safe and sustainable development:

- health and quality of life;
- social equality and unity;
- environmental Protection;
- economic efficiency;
- participation and devotion (of society to the principles of sustainable development);
- access to knowledge;
- local governance (decision making at lower levels of government);
- intergovernmental partnership and cooperation;
- warning (of negative consequences);
- prudence (preventive measures);
- preservation of cultural heritage;
- conservation of biodiversity;
- respect and consideration of ecosystem capabilities and limits;
- responsible production and consumption (taking into account the full product life cycle).

Acknowledgments

This research was supported by Tomsk Polytechnic University CE Program.

References

Antipyeu, K. A., Agafonov, A. I., Burko, V. A., Višniewski, Y. R., Višniewski, S. J., Viatkin, N. V., Wasserman, Y. M., Ganina, O. A., Duvanskaya, M. K., & Ermakov, M. A. (2019). *Molodezh v*

- informacionno-innovacionnom obshhestve: monographia [Young people in an information and innovation society]. Publishing PNRPU. <https://elibrary.ru/item.asp?id=42623783>
- Bauman, Z. (2001). *The Individualized Society*. Polity.
- Bell, D. (1999). Grjadushhee postindustrialnoe obshhestvo [The Coming Post-Industrial Society]. Academy. [In Rus.]
- Bell, D. (1976). *The Cultural Contradictions of Capitalism*. Basic Book.
- Brylina, I. V. (2018). Universitetskoe obrazovanie v kontekste komercializacii: futurologicheskij diskurs [University Education in the Context of Commercialization: Futurological Discourse]. *Humanitarian Studies in Eastern Siberia and the Far East*, 3, 147-155. <https://doi.org/10.24866/1997-2857/2018-3/147-155>
- Brylina, I. V. (2018). Formirovanie novogo antropologicheskogo proekta sovremennogo obrazovanija v kontekste neklassicheskoy filosofii [Formation of a new anthropological project of modern education in the context of non-classical philosophy]. *Novosibirsk State Pedagogical University Bulletin*, 8(5), 143-157. <https://doi.org/10.15293/2226-3365.1805.09>
- Brylina, I. V. (2018). Evolyuciya «idei» universiteta v kontekste novogo antropologicheskogo proekta [Evolution of the «Idea» of the University in the context of the new anthropological project]. *Journal of Science of Siberia*, 2(28), 149-155. <https://www.elibrary.ru/item.asp?id=35395435>
- Brylina, I. V., & Kornienko, A. A. (2016). Stanovlenie universitetov kak predprinimatelskih struktur. Apologija kulturnoj missii universiteta [Formation of universities as entrepreneurial structures. Apologies of Cultural Mission of the University]. *Bulletin of Tomsk State University. Cultural science*, 2(22), 28-36. <https://elibrary.ru/item.asp?id=26375133>
- Castells, M. (2004). *Galaktika Internet: razmyshlenie ob Internete, biznese i obshhestve [Galaxy Internet: reflection on the Internet, business and society]*. U-Factoria. <http://www.library.fa.ru/files/Kastels.pdf>
- Chervach, M. Yu., Pokholkov, Y. P., & Tolkacheva, K. K. (2017). Harmonized master programs for fostering extra in-demand competences. In *11th International Technology, Education and Development Conference (INTED2017)* (pp. 7204-7208). IATED. <https://library.iated.org/view/CHERVACH2017HAR>
- Fedorov, N. F. (1906). *Filosofija obshhego dela* [Philosophy of the Common Cause]. Verniy. [In Rus.]
- Howe, N., & Strauss, W. (1991). *Generations: The History of America's Future, 1584 to 2069*. William Morrow & Company.
- Howe, N., & Strauss, W. (2007). The Next Twenty Years: How Customer and Workforce Attitudes Will Evolve. *Harvard Business Review*, 85(7-8), 41-52, 191. https://www.researchgate.net/publication/6196698_The_next_20_years_How_customer_and_workforce_attitudes_will_evolve
- Ilin, I. V., Ursul, A. D., & Ursul, T. A. (2017). Obrazovanie dlya ustojchivogo razvitiya: global'nyj kontekst [Education for Sustainable Development: Global Context]. *Journal of Moscow University. Series 27: Globalist and Geopolitics*, 2, 3-29. <https://www.elibrary.ru/item.asp?id=29408288>
- Gizatullin, H. N., & Troitsky, V. A. (1998). Koncepcija ustojchivogo razvitiya: novaja social'no-ekonomicheskaya paradigma [The concept of sustainable development: a new socio-economic paradigm]. *Social sciences and modernity*, 5, 124-130. [In Rus.]
- Kerr, C. (1982). *The Uses of the University*. Harvard University Press.
- Krasikov, V. I. (2008). Universitetskoe obrazovanie v kontekste tradicij i realij sovremennogo informacionnogo obshhestva [University Education in the Context of Traditions and Realities of the Modern Information Society]. *Klassicheskij universitet v neklassicheskoe vremja: sbornik statej [Classical University in Non-Classical Times: Collection of Articles]*, 13-16. [In Rus.]
- Our common future* (1989). Progress. [In Rus.]
- Pokholkov, Y. P., Tolkacheva, K. K. & Chervach, M. Yu. (2017). Concept of responsible education – new trend in the higher education area. In *11th International Technology, Education and Development Conference (INTED2017)* (pp. 4272-4276). IATED. <https://library.iated.org/view/POKHOLKOV2017CON>

- Pokholkov, Y. P., & Zaytseva, K. K. (2017). Specific learning environments for fostering students' sustainability mindset. In *Education Excellence for Sustainability Proceedings of the 45th SEFI Annual Conference 2017* (pp. 223-228). SEFI. <http://www.sefi.be/conference/2017-azores/>
- Quadrado, J. C., Ferreira, E. P., Pokholkov, Y., & Zaitseva, K. (2019). Higher education institutions as key players to ensure sustainable development goals. In *Proceedings of the LACCEI international Multi-conference for Engineering, Education and Technology*. <http://doi.org/10.18687/laccei2019.1.1.211>
- Shabanov, L. V., & Surovtsov, V. A. (2006). Socializacija v kontekste kul'turnoj transformacii v Rossii: samoopredelenie cherez potreblenie [Socialization in the context of cultural transformation in Russia: self-determination through consumption]. *Gumanitarnye nauki v Sibiri [Humanities in Siberia]*, 1, 63-64. <https://elibrary.ru/item.asp?id=13074211>
- Sayapin, V. O. (2017). Problemy bezopasnogo razvitija setevogo obshhestva [Problems of safe development of network society]. *Socialno-gumanitarnye znaniya [Social and humanitarian knowledge]*, 9, 27-39. <https://elibrary.ru/item.asp?id=30022310>
- Toffler, A. (1981). *The Third Wave: The Classic Study of Tomorrow*. Pan Books.
- Toffler, A. (1984). *Future Shock*. Bantam Books.
- United Nations. International day of Education (2018). <https://www.un.org/ru/observances/education-day>
- Ursul, A. (2019). The evolution of values in the context of globalization. *European Journal of Humanities & Social Sciences*, 2(2), 29-46. <https://www.elibrary.ru/item.asp?id=38174551>
- Ursul, A. D. (2017). Bezopasnost i razvitie: mezhdisciplinarnyj podhod i globalnoe izmerenie [Security and Development: Interdisciplinary Approach and Global Dimension]. *Vestnik MGIMO Universiteta [MGIMO University bulletin]*, 3(54), 141-160. <https://doi.org/10.24833/2071-8160-2017-3-54-141-160>
- Ursul, A. D. (2017.) Global researches and security concern. *Safety issues*, 3, 62-87. <https://doi.org/10.25136/2409-7543.2017.3.21679>
- Ursul, A. D., & Romanovich, A. L. (2001). Koncepcija ustojchivogo razvitija i problema bezopasnosti [The concept of sustainable development and the security problem]. *Filosofiya nauki [Philosophy of science]*, 3. <http://filosof.historic.ru/books/item/f00/s00/z0000706/>
- Ursul, A. D., & Ursul, T. A. (2015). Obrazovanie v interesah ustojchivogo razvitija: pervye rezultaty, problemy i perspektivy [Education for Sustainable Development: First Results, Challenges and Perspectives]. *Sociodinamika [Sociodynamics]*, 1, 11-74. <https://www.elibrary.ru/item.asp?id=22806859>
- Ursul, A. D., & Ursul, T. A. (2016). Kljuhevaja rol obrazovanija v dostizhenii celej ustojchivogo razvitija [The key role of education in achieving sustainable development goals]. *Sociodinamika [Sociodynamics]*, 4, 1-18. <https://www.elibrary.ru/item.asp?id=25638808>
- Ursul, A. D., Ursul, T. A., & Ivanov, A. V. (Eds.) (2014). The problem of security in the perspective of sustainable development. *Strategicheskie prioritety [Strategic priorities]*, 2(2), 158-159. <https://www.elibrary.ru/item.asp?id=23604832>
- Vernadsky, V. I. (1991). *Nauchnaja mysl kak planetnoe javlenie [Scientific Thought as a Planetary Phenomenon]*. Science. [In Rus.]
- Zaharov, I. V., & Lyakhovich, E. S. (1994). *Missija universiteta v evropejskoj kulture [Mission of the University in European Culture]*. New Millennium. [In Rus.]