

RUSSIAN UNIVERSITIES IN THE INTERNATIONAL DISTANCE LEARNING MARKET

Arseniev D. G.¹, vicerector.int@spbstu.ru

Kovalenko T. I.², tatianakov@imop.ru

Krasnoshchekov V. V.³, krasno_vv@spbstu.ru

¹Peter the Great St. Petersburg Polytechnic University, Vice-rector, DrSci, Professor

²Peter the Great St. Petersburg Polytechnic University, Head of Department, MA

³Peter the Great St. Petersburg Polytechnic University, Director of Higher School, PhD

Abstract. The authors consider the place of Russian universities in the international distance education market. Before the COVID-19 pandemic, this segment was not very strong. The challenges of our time have forced Russian universities to look for ways to promote their educational programs in a distance format. First of all, the authors analyzed the demand for educational services of Russian universities, taking into account the fact that most of the higher education programs in Russia are in Russian. The authors named countries that, for various reasons, show little interest in educating their citizens in the distance learning programs of Russian universities. For convenience, the authors grouped the factors hindering the development of the Russian segment of the distance education market into 4 categories: political factors, economic factors, social (including cultural and psychological) factors and technological factors. The authors note the special importance for the Russian higher school of the educational market of the People's Republic of China. In this regard, the authors analyze the Chinese education system and Chinese cultural traditions. Based on their own experience in the implementation of educational programs for Chinese students in distance and blended formats, the authors offer several models of such programs that demonstrate their effectiveness.

Key words: distance and blended learning, Russian higher education, programs in Russian, training for Chinese students.

UNIVERSIDADES RUSAS EN EL MERCADO INTERNACIONAL DE EDUCACIÓN A DISTANCIA

Resumen del trabajo. Los autores consideran el puesto de las universidades rusas en el mercado internacional de educación a distancia. Antes de la pandemia del COVID-19, este segmento no era muy concurrido. Los desafíos de nuestro tiempo han obligado que las universidades rusas busquen formas de promover sus programas educativos en un formato a distancia. Ante todo, los autores analizaron la demanda de los servicios educativos de las universidades rusas, tomando en cuenta el hecho de que la mayoría de los programas educativos superiores en Rusia se implementan en ruso. Los autores nombraron a países que, por diversas razones, muestran poco interés en educar a sus ciudadanos en programas educativos a distancia de las universidades rusas. Por comodidad, los autores agruparon los factores que dificultan el desarrollo del segmento ruso del mercado de servicios de educación a distancia en 4 categorías: factores políticos, factores económicos, factores sociales (incluyendo los factores culturales y psicológicos) y los factores tecnológicos. Los autores señalan una especial importancia del mercado educativo de la República Popular China para la escuela superior rusa. En relación a esto, los autores analizan el sistema educativo chino y sus tradiciones culturales. En base a su propia experiencia en la

implementación de programas educativos para estudiantes chinos en un formato a distancia o semipresencial, los autores ofrecen varios modelos de dichos programas que han demostrado su efectividad.

Palabras claves: aprendizaje a distancia o semipresencial, educación superior rusa, programas en ruso, formación para estudiantes chinos.

Introduction

The need to move to a distance and blended format of work in Russian universities has posed many problems for higher education. The sphere of international education turned out to be especially vulnerable. Data on the reduction in the number of foreign students by country of study are given in the materials of the Russian International Affairs Council [1]. Before the onset of the coronavirus infection (COVID-19) pandemic, the prospects for introducing distance learning forms (DL) of foreign citizens at Russian universities seemed dubious due to the obvious difficulties of mastering Russian as a foreign language, although constructive proposals were made already then. The likelihood of introducing DL became a necessity in 2020. After acquiring the relevant experience [2], it was time to conduct a detailed analysis of the development possibilities of DL of foreign students without losing the quality of their training.

The introduction of the DL will inevitably change the profile of Russian higher education, including in the international aspect. This means that there is a need to rethink both the geography and the specialization of the export of Russian education, to choose the optimal strategies for its development. This analysis will help universities to adjust their marketing policy, focusing on promising regions and areas of study. One should not lose sight of the unequal nature of the categories of foreign students both in terms of learning objectives and approaches to organizing the educational process. The imposition of two matrices - target and geographic - will make it possible to clarify the international vectors of DL.

Finally, the authors give the illustrations of general considerations using own experience in the implementation of DL of foreign citizens, which is of undoubted interest for all participants in Russian international education programs.

Research objectives and methods

The authors of this study have several goals for themselves.

First, it is necessary to analyze the geography of countries and the main specializations of the export of Russian higher education in order to approximate the optimal strategy for this export in the context of the introduction of DL.

Secondly, it is necessary to identify promising forms of DL that are acceptable for various categories of foreign students.

Thirdly, based on the analysis of our own experience, it is possible to offer adequate formats of distance learning for various categories of foreign students.

To analyze the export of distance Russian education in the geographical aspect, the PEST analysis was used [3]. The substantive component of the analysis is based on the prospects for the implementation of DL [4], summary statistics of the Center for Sociological Research [5] and the Russian Association of Teachers of the Russian Language (ROPRYAL) [6], supplemented by elements of social psychology [7]. On the restrictions on the implementation of DL in China, data are given in a special work [8]. The authors included in the area of consideration four groups of international educational programs. Firstly, these are basic educational programs - bachelor's and specialties, which provide 66.8% of the contingent of foreign students in Russia.

Secondly, these are postgraduate education programs - master's, postgraduate and medical internship (12.8%). These two groups are associated with university preparation programs for foreign citizens (10.1%), forming the third group. Finally, the fourth group consists of partial education programs - short-term programs, internships, academic mobility and academic exchange programs. The programs of the fourth type in the aspect of organizing the learning process including DL are adjoined by joint programs, programs of multiple diplomas, etc., characterized by the absence of a preparatory cycle. This proportion can be estimated from 10.5% to 18.7% due to the mismatching categories and different calculation methods. In the total given contingent of foreign students of Russian universities, short-term students occupy a modest place. But in absolute terms, their share is significant for leading Russian universities. For example, at Peter the Great St. Petersburg Polytechnic University (SPbPU) in 2019 foreign short-term students accounted for 40% of almost 6,000 foreign students. In addition, students of the world's leading universities usually prefer to take part in short-term programs, which makes an undoubted contribution to the internationalization of Russian higher education.

Research results and their discussion

First of all, the authors identified two groups of states for which the Russian education market is unattractive, regardless of the format of education (in a class or in distance form).

The first group includes some states of the Asia-Pacific region: Singapore, Thailand, Indonesia and, in part, Malaysia. All of them at one time were active participants in the international segment of Russian education. At present, the internationalization of education in these countries is developing in the form of regionalization [9], which involves obtaining higher education at universities in Australia, New Zealand, as well as the USA and Canada. Singapore, striving to become a regional leader based on an economy based on a combination of high-tech and speculative components, is successfully promoting its universities in the TOP-100 of the world's leading universities. The unique fusion of Anglo-Saxon and Chinese cultures makes it possible for Singapore to become a link between East and West, including in the field of higher education [10]. It is clear that cooperation between Singapore and Russia in this context is relegated to the background. The educational ties between Russia and Thailand, which revived in the 2000s, are barely flickering now. On the one hand, Thailand has developed English-language educational programs, including franchised products from American universities [11]. On the other hand, the needs of the Russian-speaking tourism industry are met by our compatriots living in Thailand under the downshifting scheme, and the communicative competencies of workers serving Russian tourists are formed in the course of training in the non-university sector. Study abroad for Indonesian students is mainly focused on Australia, the government of which has done a lot to develop a national higher school over the past 15 years [12; 13], including the sphere of DL [14]. The territorial proximity of Australia in comparison with the distant and climatically alien Russia determines the choice of young Indonesians in favor of regionalization. In recent years, universities in New Zealand have confidently entered the international market, the additional advantage of which is the grandiose natural environment, familiar to young people from cinematic hits.

The second group includes states that actively reject Russia as a whole for political reasons. These are, first of all, the Scandinavian countries - Sweden, Norway, Denmark, Iceland. Of these, stable educational cooperation was conducted mainly with Sweden, therefore, for a number of universities, its curtailment turned out to be

sensitive. Finland finds itself in a difficult situation, which, on the one hand, shares the negative attitude of the Scandinavians towards Russia, and, on the other hand, it connects with our country by cross-border cooperation and numerous projects in the field of education and business. In any case, one can state a sharp decline in Russian-Finnish educational ties. Also, for political reasons, there is a temporary fading of educational cooperation between Russia and Poland, Romania, Bulgaria and a number of other states of Eastern, Southern and Central Europe, which is not expected to revive in the short term.

The authors advice to consider analysis above as recommendations for universities to focus their efforts on the development of educational cooperation with universities in more promising countries and regions.

Materials of the Federal Institute for the Development of Education give us large amount of factual data on the development of DL in various countries of the world [15]. The authors cannot fully utilize this information for this study. First, the materials mostly concern at school education. Secondly, they reflect an exclusively official, government point of view on the problem of introducing DL in each of the states, which often at odds with the existing practice of educational organizations. Thirdly, the classifying, integrative component is weak in the materials.

In this study, the authors used the PEST methodology (P - political, E - economic, S - social, and T - technological factors). In accordance with the given order of factors, the table 1 shows the difficulties and obstacles encountered by the participation of students from different countries and regions of the world in distance education programs of Russian universities.

Table 1. The main problems of attracting foreign students to participate in distance programs of Russian universities

	Factor	Content of the problem	Manifestation in different countries
Political	Protectionism	At the state level, students are encouraged to participate in distance learning programs at universities in their country, students are not encouraged to participate in distance programs at foreign universities	In the United States, the policy of protectionism minimizes the financial losses of universities due to a decrease in the number of foreign students. In China, as a support for students who are deprived of the opportunity to study abroad, the quotas of admission to domestic universities have been increased
Economic	Low income level of the population	There are no personal gadgets, as well as personal places for classes in the implementation of DL	It is typical for sub-Saharan Africa, Central and South Asia, partly a number of countries in Latin America, the Near and Middle East, the former Soviet Union - Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan

Social	High degree of cultural conditioning of education	Distance learning in a Russian university is considered ineffective without immersion in the country's culture	In Japan, South Korea, partly China and Vietnam, distance learning of the Russian language is considered ineffective due to the phonetic distance. In the UK, France, Italy, the socio-cultural component of language learning in the form of personal contact experience is considered very important.
	The high importance of the emotional component of learning	Distance learning is considered ineffective without direct contact of students with the teacher	In Italy, Spain, Portugal, Latin America, "live" communication between students and teachers is considered indispensable even in the study of exact and engineering sciences.
	Low degree of self-organization of students	Distance learning is considered ineffective in the absence of constant teacher control, sometimes it is not recognized as a full-fledged form of education	In the countries of North Africa, the Near and Middle East, partly in China and Latin America, it is believed that when using the DL, students are prone to academic dishonesty, skipping classes, homework failure, etc.
	Low level of support for academic adaptation	Students experience difficulties in solving organizational issues of distance learning, which negatively affects the quality of training	It is typical for students from countries with a significant cultural distance in comparison with Russia, who do not have experience of studying at a university - sub-Saharan Africa, South and East Asia
Technological	Low level of development of communications	The instability of the Internet, mobile communications, energy supply does not allow the implementation of DL in full	It is typical for many countries in sub-Saharan Africa, Central Asia, partly a number of states of the Near and Middle East - Yemen, Afghanistan.
	Technological limitations	It is not possible to use some common software products and environments	Not all Microsoft products are available in China

Of course, not all the problems of introducing DL of foreign students of Russian universities are equal. For example, Russian universities are unlikely to resist manifestations of protectionism or instability in the electricity supply. Therefore, the next stage of the analysis is to identify and clarify regional preferences for categories of educational programs and groups of specializations. As above, the authors draw on statistical data from various above mentioned sources.

First of all, it is obvious that the least “affected” by the introduction of DL is the sphere of education in economics and management. They translate easily courses of lectures and practical classes in the disciplines of these areas into a distance format [16]. According to a study by the Higher School of Economics (HSE), only a third of economics students consider universities unprepared for the implementation of DL, while among engineering students there are half of them [17]. Moreover, the leaders of the HSE talk about an increase in the admission of foreign students in connection with the expansion of the range of distance educational programs. At SPbPU, against the background of a general decrease in the number of students participating in summer schools in 2021, the indicators of the international short-term program in entrepreneurship and marketing, conducted in a distance format in English, have sharply increased.

Among the least adapted to the implementation of DL educational programs that are the programs of engineering, technological, medical and creative (culture and art) areas of training. Students from India, the countries of the Near and Middle East, North Africa, Sub-Saharan Africa and Latin America mainly prefer to study in medical areas at Russian universities. The table 1 shows that number of negative factors - economic, socio-psychological and technological expose also to students from these regions. This inevitably leads to a reduction in foreign medical study programs.

Traditionally, there is a large proportion of students from the USA and Europe in the programs for studying the Russian language and culture. Moreover, in other areas of training, the number of students from these countries is insignificant, with the exception of some humanitarian programs. Based on the data in the table 1, it is possible to predict a decrease in the intensity of educational cooperation with these groups of countries in the context of the dominance of DL. In the risk zone - mainly short-term programs, which give about 10% of the total number of foreign students. As a counteraction to the negative trend, it is possible to propose a temporary replacement of the open schools of the Russian language with specialized bilateral short-term programs with reliable partner universities. In the summer of 2021, SPbPU implemented such programs with universities in Spain and Germany.

Despite the difficulties in the transition to DL China remains Russia's largest partner in the field of higher education [18]. The loss of the Chinese market would be irreplaceable for the international component of Russian education. Therefore, domestic universities are taking additional measures to attract Chinese applicants [19]. The authors grouped these initiatives according to educational program categories.

First of all, we consider short-term programs for students of Chinese universities, which have been in great demand in recent years. Thus, among the approximately 2,000 participants in SPbPU summer and winter schools in 2019, more than 50% were citizens of the PRC. A significant part of such programs relate to the study of the Russian language and culture, many programs were of a vocational guidance, introductory nature. In 2020, due to the complete transition to DFL the number of Chinese participants decreased by more than 10 times. In 2021, the situation was slightly improved due to the launch of new economic programs in English. Taking into account the orientation of the Chinese mentality towards adherence to time-tested models, including established forms of educational activity [20], the authors recommend for Russian universities to take into account such facts in their marketing activities.

The traditionalism of the Chinese mentality has allowed Russian universities as a whole to retain the contingent of students in basic educational programs as citizens of the PRC. Moreover, graduates of Chinese schools have high degree of

predetermination in the choice of the country of study abroad, which is almost impossible to replace by studying at a Chinese university. This means that Chinese schoolchildren who chose Russian universities in 2019 are likely to become their applicants in 2020. Of course, some of them, on the recommendation of their parents, decided to postpone admission for 1 year to clarify the situation with COVID-19. Whether this trend towards maintaining the Chinese student population will become sustainable is difficult to predict at this time. An example of sustainable cooperation with Chinese universities is the Joint Engineering Institute of SPbPU and Jiangsu Pedagogical University (CPU), Xuzhou [21]. Every year, more than 200 students of the CPU transfer to the 3rd year of the SPbPU undergraduate program, and also enter the SPbPU master study program. In the 2020/21 academic year, under DL conditions, there was 100% preservation of the CPU students' contingent.

The organization of university preparation programs for Chinese students presents great difficulties. SPbPU has implemented two models of online and blended learning for Chinese applicants. In total, in the 2020/21 academic year, 253 Chinese citizens studied at the preparatory cycle of SPbPU. The first model, which trained 167 people, assumed that the students completed a full preparatory course in the online format in multicultural groups of applicants from countries with similar time zones (Model 1). Students had to connect individually to Internet services, accessible from any place convenient for them. In the second model, we implemented a blended learning scheme on the basis of a partner organization: Chinese teachers provided 2/3 of the workload in the classrooms, their Russian colleagues provided general guidance and provided the remaining 1/3 of the workload online. We called this organizational form a Remote Preparatory Department of a Russian university (Model 2). This means that students got together even for online classes. They could use the help of a Chinese teacher who was constantly in the classroom during the online classes of students with Russian teachers. A total of 86 people prepared according to the second model. Table 2 shows the figures of students those finished the preparation course successfully. It means that they passed the final exams.

Table 2. Dependence of the preparatory course Chinese students' success on the training models

Model	Number of students	Number of successful students	Percentage of successful students	½ of confidence interval range	Confidence interval
Model 1	167	109	65,3%	6,1%	59,2% - 71,4%
Model 2	86	63	73,3%	7,9%	65,4% - 81,2%

The authors carried out the analysis of statistical data by the method of confidence intervals at a significance level of 0.1 (with a reliability of 90%). It is evident that the percentage of successful students who studied in Model 1 is not included in the confidence interval for the percentage of successful students who studied in Model 2, and vice versa. This means that we can speak of the statistical distinction of the results. Namely, we can argue that at a significance level of 0.1, students who studied in a blended format at the Remote Preparatory Department showed better academic success. The proximity of the Model 1 value: 65.3% to the lower bound of the Model 2 confidence interval: 65.4% speaks only of a sufficiently small number of students who studied according to Model 2, which led to a rough estimate of the value of the corresponding confidence interval.

For comparison, the authors presented in Table 3 statistical data on the academic success of Chinese students of preparatory programs for 4 academic years.

Table 3. Successes of Chinese students of the preparatory courses in 4 academic years

Preparatory program	Academic year	2017/18	2018/19	2019/20	2020/21
Preparation for bachelor study	Number of students	479	537	635	253
	Number/percentage of successful students	301 / 62,8%	381 / 70,9%	434 / 68,3%	172 / 68,0%
	½ of confidence interval range	3,6%	3,2%	3,0%	4,8%
	Confidence interval	59,2% - 66,4%	67,7% - 74,1%	65,3% - 71,3%	63,2% - 72,8%
Preparation for master study	Number of students	21	24	43	15
	Number/percentage of successful students	15 / 71,4%	19 / 79,2%	43 / 100%	15 / 100%
	½ of confidence interval range	16,3%	13,7%	0%	0%
	Confidence interval	55,1% - 87,7%	62,5% - 92,9%	-	-

As above, the authors carried out the analysis of statistical data by the method of confidence intervals at a significance level of 0.1 (with a reliability of 90%).

First, it is clear that there is a statistically significant difference between the academic success of Chinese students preparing to enroll in undergraduate and graduate programs. The percentages of academic success of pre-master students in all years are above the upper bounds of the confidence intervals for pre-bachelors. It is important to note that instead of the exam, pre-masters prepare and defend the graduation project. In 2019/20 and 2020/21 academic years, all Chinese pre-master students studied online.

Secondly, the introduction of distance learning has led to an increase in the academic success of Chinese pre-master students. This happened because they had an experience of self-organization in the educational field, in contrast to the applicants for the bachelor's degree. In addition, they had the opportunity to repeatedly study the recording of classes, which is important for motivated Chinese students. This means that we can talk about maintaining or even improving the quality of training for pre-master students from China when studying online.

Third, the projections of successful preparatory students are statistically indistinguishable over the last 3 academic years at a significance level of 0.1. Indeed, all values of the percentages of successful students for each year are included in the confidence intervals of the corresponding percentages of the last three years. This means that we can talk about the drop in the number of Chinese students for the reasons indicated above, but we cannot talk about a decrease in the quality of training university applicants online.

Thus, the experience of online and blended learning of Chinese applicants from Russian universities has shown that SPbPU has found learning models that do not reduce the quality of training for these categories of students.

Conclusions

Based on the analysis, the authors identified states and regions that are less and more favorable for educational cooperation with Russia in a distance format. With regard to the Chinese market for educational services as one of the most promising for Russia the authors have established, on the basis of their own experience, promising areas of cooperation in short-term educational programs and effective formats for the activities of preparatory departments in distance and blended mode. Chinese students in the Remote Preparatory Department, who studied in a blended scheme, performed better in academic success at a significance level of 0.1 than Chinese students who studied online in multicultural groups. The results of this study demonstrate statistically significant differences between the academic success of Chinese students preparing for undergraduate and graduate studies. One can state the improvement in the quality of training of Chinese pre-master students in the online format.

REFERENCES

1. Mardzhinson, S., Karpinskaya, E. O., Kuzmina, K. A., Larionova, A. N., & Bocharov, I. A. (2020). *The response of higher education systems and national governments to the challenges of the pandemic* (Report No. 64/2020). Russian International Affairs Council. <https://russiancouncil.ru/papers/HigherEducation-Covid-Report64-Ru.pdf>
2. Strelchuk, E. N. (2021). Prospects of Russian as a Foreign Language Online Learning in Russian Universities. *Russian Language Studies*, 19(1), 102-115. <https://doi.org/10.22363/2618-8163-2021-19-1-102-115>
3. Sammut-Bonnici, T. & Galea, D. (2015). PEST analysis. In C. Cooper, T. Sammut-Bonnici & J. McGee (Eds.) *Wiley Encyclopedia of Management: Volume 12 Strategic Management*. <https://doi.org/10.1002/9781118785317.weom120113>
4. Zambito, V. (2021, March 11). *The Rise Of Remote Learning In 2021*. eLearning Industry. <https://elearningindustry.com/rise-of-remote-learning-2021>
5. Arefiev, A. L. (2020). *Education of Foreign Citizens in the Educational Organizations of the Higher Education of the Russian Federation: Statistical Collection Issue 17*. Pushkin State Russian Language Institute. https://www.fnisc.ru/index.php?page_id=1198&id=9163
6. Verbitskaya, L. A., Korotyshev, A. V., Shlejninkova, E. E. (Eds.). (2019). *Russian as foreign language in the system of preparatory departments of Russian universities*. ROPRYAL. http://ropryal.ru/wp-content/uploads/2019/04/Preparatory_Programs_Statistics.pdf
7. Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, 26(1), 29-48. <https://doi.org/10.1080/01587910500081269>
8. Lau, J. (2020, April 16). *China's Limitations on Distance Education*. Inside Higher Ed. <https://www.insidehighered.com/news/2020/04/16/chinese-limits-internet-complicate-distance-education>
9. Choi, E. W. (2017). Higher Education Regionalization in East Asia. *International Higher Education*, 90, 26-28. <https://doi.org/10.6017/ihe.2017.90.10008>
10. Yeo, S. C., Lai, C. K. Y., Tan, J., & Gooley, J. J. (2021). A targeted e-learning approach for keeping universities open during the COVID-19 pandemic while

- reducing student physical interactions. *PLoS ONE*, 16(4), Article e0249839. <https://doi.org/10.1371/journal.pone.0249839>
11. Rhein, D. (2017). International Higher Education in Thailand: Challenges within a Changing Context. *Journal of Alternative Perspectives in the Social Sciences*, 8(3), 281-298.
https://www.researchgate.net/publication/327337191_International_Higher_Education_in_Thailand_Challenges_within_a_Changing_Context
 12. Meiras, S. (2004). International Education in Australian Universities: Understandings, Dimensions and Problems. *Journal of Higher Education Policy and Management*, 26(3), 371-380. <https://doi.org/10.1080/1360080042000290212>
 13. Deuchar, A. (2021, July 25). *International students enhance Australia's universities*. Education. University of Melbourne. <https://pursuit.unimelb.edu.au/articles/international-students-enhance-australia-s-universities>
 14. Stone, C. (2019). Online learning in Australian higher education: Opportunities, challenges and transformations. *Student Success*, 10, 1-11. <https://doi.org/10.5204/ssj.v10i2.1299>.
 15. Tarasova, N. V., Pestrikova, S. M., & Pastuhova, I. P. (2021). *How does the transfer of the educational process into a distance mode affect educational results now and will affect in future*. Russian Presidential Academy of National Economy and Public Administration. <https://firo.ranepa.ru/novosti/105-monitoring-obrazovaniya-na-karantine/803-tarasova-ekspertiza>
 16. Yan, Z., & Heping, L. (2021). Case-based teaching research of media management course. *Delivering Impact in Higher Education Learning and Teaching: Enhancing Cross-Boarder Collaborations. SHS Web of Conferences*, 99, Article 01006. <https://doi.org/10.1051/shsconf/20219901006>
 17. Bekova, S. K., Gruzdev, I. A., Kalinin, R. G., Kamaldinova, L. R., Maloshonok, N. G., & Terentyev, E. A. (2021). A year at a distance: what difficulties did the students face and what did the massive transition to online teach us. *Modern education analytics*, 4(53). HSE University. <https://publications.hse.ru/mirror/pubs/share/direct/465905036.pdf>
 18. Guruleva, T. L., & Bin, W. (2020). Higher education in China: institutions and mechanisms of the state and party management. *RUDN Journal of Sociology*, 20(3), 636-654. <https://doi.org/10.22363/2313-2272-2020-20-3-636-654>
 19. Krasnoshchekov, V. V., Wang, L., & Zhan, G. (2021). Experience in implementing online education programs for Chinese citizens in a Russian university. *Modern education: content, technology, quality*. Saint Petersburg Electrotechnical University "LETI", 8-10. https://sto.etu.ru/assets/files/2021/sbornik_sto-2021.pdf
 20. Ziyu, W. (2020, November 23). Chinese students' perspectives on learner identity. *Educational Studies*. <https://doi.org/10.1080/03055698.2020.1850425>
 21. Krasnoshchekov, V. V. (2019). Quality assurance of Russian-Chinese higher education programs. *Modern problems of science and education*, 3. <https://doi.org/10.17513/spno.28853>