## ПЕДАГОГИКА

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## ENTRY AND PROMOTION OF UNIVERSITIES IN THE WORLD RANKINGS: THE RUSSIAN AND CHINESE EXPERIENCE

This article deals with a topical issue: the need for participation by Russian and Chinese universities in the world rankings. The positions of universities in Russia and China in the ranking of the QS World University Rankings in 2011–2018 and the number of universities in Russia and China which were included in the Webometrics ranking in 2013–2019 are presented. The position of the Russian and Chinese governments, the adoption of strategic decisions on the development of the Shanghai Ranking, the International Ranking of Universities of the BRICS countries, the creation of national platforms associated with the Web of Science are discussed. The authors conclude on the internationalization of the national higher education system in Russia and China. **Keywords:** universities; international rankings; Webometrics; World University Rankings.

The current situation in higher education is determined, on the one hand, by the requirements and resources of the state, and, on the other, by the processes of globalization. The formation of a global education market and the internalization of education form the response of universities to the processes of globalization. The entry of Russian universities into the international education market is associated with solving the problems of attracting foreign applicants and exporting Russian education. Similar problems have been tackled by Chinese universities since 2006. This is confirmed in the study by J. Binh and J. Tsepine: "Institutes and universities have become the symbols of national ambitions, both during the economic growth and during the recession. The intensively developing system of higher education in China has already outpaced the systems in all world countries in terms of quantitative indicators" [1]. It is important to note that the experience of cooperation between the universities of Russia and China is unique and differs from the practice of joint activities with European universities.

The need to enter the international rankings and to hold such positions that can be comparable to the world's leading universities can speak for the high competitiveness of a university. Most international rating agencies [2] agree that over the past few years the academic field of South-East Asia (including China) has been developing so actively that it has increased competition for human and financial resources in the global market. From the point of view of a university, any rating can be presented as a tool with which it is possible to compare, to plan strategically activities to improve the educational process in the university, build its reputation and to institutionalize partnerships with the world's best universities, investing in development and competitiveness programs.

The task of modern higher schools is to select world rankings and determine the mechanisms for promoting universities there. It is important to fix the key criteria and indicators that will allow us to assess the effectiveness of a university's advancement in the world rankings. We consider monitoring studies to be an adequate tool for the scientific evaluation of the changes taking place not only within universities but also in the region and in the whole country. We define pedagogical monitoring as a humani-

ties-intensive technology which can capture educational outcomes that show a new quality of education and provide an opportunity to assess the effectiveness of innovative changes [3]. Pedagogical monitoring of the universities taking part in the world rankings is well integrated with the rating system itself since it coincides with the parameters of durability, systematization and accentuation of quantitative indicators. Meanwhile, pedagogical monitoring allows conclusions about the existing and expected problems to be made, as well as of the effectiveness of the management mechanisms being used to fix the "change points" of a higher educational establishment which contribute substantially to the growth of rating indicators.

The modernization of the Russian higher school has led to a new understanding of educational results and the need for a radical revision of the basic processes of higher vocational education: educational, research, etc. Current changes are reflected in the Decree of the President of the Russian Federation No. 599 of May 7, 2012, "On Measures for Implementing State Policy in Science and Education" [4]. One option for systemic changes in universities was the 5-100 project proposed by the Ministry of Education and Science. It is aimed at ensuring the entry of at least five Russian universities into the top 100 of the world's leading universities by 2020 (according to the World University Rankings and Times Higher Educational Supplement). Under the Russian Government's Decree No. 211 of March 16, 2013 [5], an International Council for Increasing Competitiveness of Leading Russian Universities was established.

A similar situation can also be observed in Chinese education. Since 2009 the Chinese government has been working systematically to promote national universities in the international rankings of THES and QS. The project to promote Chinese universities in the world's top 500 universities is being implemented [6, 7] on the same basis as in the Russian higher schools: the universities that have achieved significant results and advanced in the world rankings get state support.

Having analyzed the positions of universities of Russia and China in the QS World University Rankings since 2011 (Table 1), we can speak about the positive dynamics of the two countries in the international educational market.

Year	The best position of the university	TOP-100	TOP-200	TOP-300	TOP-400
		Russia			
2011	276–300			1	2
2012	201–225			2	2
2013	226–250			1	1
2014	101–125		1	1	3
2015	114		1	1	3
2016	108		1	2	4
2017	108		1	2	5
2018	95	1	0	3	6
		China			
2011	49	2	3	6	10
2012	46	2	2	6	9
2013	45	3	2	6	10
2014	28	7	7	4	8
2015	28	6	8	5	9
2016	25	9	6	7	8
2017	24	9	6	7	7
2018	25	12	2	7	9

Source: http://www.topuniversities.com/

Chinese universities show better results in the QS Ranking. According to data from 2014, the highest position is occupied by the University of Hong Kong in the 28th place, and in 2017 it rose by four points and became 24th in the ranking. A significant breakthrough was recorded in 2014 when 7 Chinese universities (including those in Hong Kong and Taiwan) entered the top 100. In 2014, Beijing University dropped 12 positions and ranked 57th compared to 2013 when it was in the 45th place. In 2015, Xinhua University took the 25th place and continues to hold this position to this day.

Russian universities improved their positions in 2014. In 2011 and 2012, two Russian universities were in the top 400 rankings. In 2018, Moscow State University (MSU) improved its position compared to 2011 and took the 95th place. The significant progress of MSU is associated with the growth of its academic indicators and reputation among employers, and there was an improvement in data for the indicator of "the percentage of foreigners in the total number of students." Tomsk State University (TSU)

showed the most significant progress in 2016, advancing by 104 points to become 377 in the QS ranking. Moscow Institute of Physics and Technology (MIPT) showed the second most important result as it advanced by 80 points and became 350th in the ranking. Russian universities, which were included in the QS ranking in 2011, had low rates of "the percentage of foreigners in the research and teaching staff" and "the number of citations per member of staff". Starting in 2017, the rates of "internationalization" have been improved and the proportion of international students and international faculty is increasing.

General ideas about higher education systems and research in the world are provided by the rating of universities' websites Webometrics. The compiler of this rating (Cybermetrics Lab, Spain) defines it as a tool for the evaluation of the results of research activities and the level of web communications development of most universities in the world. The number of universities in Russia assessed between July 2013 and January 2019 is shown in Table 2.

Number of Russian Universities Ranked in Webometrics

Table 2

Country	The number of universities						
	July, 2013	July, 2014	July, 2015	July, 2016	July, 2017	July, 2018	January, 2019
Russia	1,188	1,113	1,484	1,353	1,307	1,172	1,160

Source: http://webometrics.info/

The evaluation of the Webometrics rating of university sites is indicative, as it allows the current situation to be shown. Between 2013 and 2014 there was a decrease in

the number of Russian universities (from 1,188 to 1,113), which is related to the restructuring of the entire higher education system, which was carried out on the basis of

the monitoring data of the universities' effectiveness. The Siberian Federal University, the Peoples' Friendship University of Russia, the Southern Urals State University, Tyumen State University and the First Moscow State Medical University began to be indexed in the Webometrics rating in February 2016. In January 2019 Moscow State University had the highest position in the rating in the 222nd place. St. Petersburg State University and the Higher School of Economics followed it. It is important to emphasize that compared with the data of July 2018 the leading universities have maintained their rankings. We can describe the position of Russian universities in the world rating as an unstable one; for example, in 2016 (July) MSU ranked 183rd, in 2017 (July) it ranked 215th, in 2018 (July) again 215th and in 2019 (January) it was 222nd. A similar situation is demonstrated by St. Petersburg State University, which ranked 532nd in 2016 (July), in 2017 (July) it was 482nd and in 2018 (July) 426th. Since 2016 there has been a gradual decline in the number of Russian universities. We connect this with changes in the Webometrics method for testing universities' websites—the increasing weight of the "Excellence" criterion up to 35% and reducing the "Presence" criterion to 5%.

The number of universities in China in the Webometrics rating of university sites is constantly increasing. For example, there were 1,164 universities in July 2013, 1,340 in July 2014 and 2,381 Chinese universities in January 2019. It should be noted that due to the "closed nature" of China's information space, the growth of indicators in the rating relates solely to Chinese universities. The number of universities in Hong Kong is decreasing (in 2013 there were 24 universities; in 2019 there were 22), the number of universities in Taiwan is growing slightly (in 2013 there were 157 universities; in 2019 their number has grown to 160). The recorded increase in the number of universities in China over the past seven years shows the significance of the achieved results and effective mechanisms for promoting the websites of Chinese universities in the world information education space.

The strategic move by the Chinese government to form a ranking that will determine the position of the world's leading Chinese universities (Shanghai Jiao Tong University Ranking) is very interesting. Today, the Shanghai ranking is the most widely used ranking of the world's leading research universities [8]. The advantage of this rating lies in the absence of a subjective assessment (expert) position in assessing the quality of the excellence of universities. The rating analysis is constructed based on aim, publicly available data (excluding the data provided by universities). The success of Chinese universities in this ranking is obvious and natural: the developers of the ranking from Shanghai University originally pursued the goal to its use as a tool to compare national universities with the world's leading universities.

The positive experience above and the initiative of the President of the Russian Federation [9] gave impetus to the creation of the Russian ranking of the world's leading and national universities. Undoubtedly, the experience of Chinese universities in the development of the Shanghai ranking is the most successful example, which can be considered as a mechanism for promoting Chinese uni-

versities in the global educational market. However, the development of the BRICS International University Ranking has several problematic issues: the need to comply with the Berlin principles and key rules of any international academic ranking; rapid collection of reliable and comprehensive information about the activities of universities; the motivation of the Russian academic community and employers to take part in reputational measurements.

The criteria recommended by Russia's leading universities to the Ministry of Education and Science in the autumn of 2012 were taken as the basis for the development of the international ranking of BRICS universities. These criteria are integrated into three groups: educational, research, and international activities, and then categorized into larger units for the most accurate collection of data from all universities in the countries involved. The interest of foreign rating agencies in the development of this ranking is to design a new model of assessment of universities (including in the post-Soviet space). The methods and evaluation procedures have been expanded and enhanced in relation to universities in the BRICS countries.

In the past year, they associated a significant section of the work of universities with the entry into world databases of indexing publications of Russian academic researchers. Russia's leading universities point out several problematic points for achieving citation rates in the Scopus and Web of Science systems. It is necessary to note the move by the state in solving the issue of citation of Russian scientists: the launch of the Russian Science Citation Index project. Integrating the Russian academic and scientific community into the international community is taking place quickly; the internationalization of Russian academic journals is growing and this results in increasing requirements for the quality of publications and research. A new project is aimed at creating a national database, including the best Russian journals and publications of the past decade, which will become part of the international publishing space.

The results of the monitoring study of leading Russian research universities show that the transition from the model of a predominantly teaching-focused university to a research university constitutes a significant problem for universities. Changes that leading research universities have made to the planned activities of their roadmaps have been recorded, and they have facilitated the transformation of academic activity and staff renewal.

The monitoring research of leading research universities has allowed the creation of special structures to be recorded: strategic academic units (SAUs), which provide the leading positions of universities in the international education services market. SAU activities are organized through the concentration of the resources of the university and its partners for implementing complex interdisciplinary projects (educational, expert, scientific, analytical, etc.) that meet the objectives of the integration of Russia into the international educational space.

SAUs are created as scientific and educational consortia of the university, which are based on teams of actively engaged researchers who are involved in educational activities. The monitoring showed the uniqueness of the creation of SAUs as PT schools in MIPT through an asso-

ciation of faculties. The results of SAUs in achieving a new quality of education are international educational programs; Web of Science and Scopus publications and international communicative platforms. All the above will ensure knowledge transfer into technologies and innovations for high-tech companies.

International Competitiveness Indicators of Leading Russian Research Universities

Table 3

University	SAU	The number of journals indexed in		
		Scopus	Web of Science	
Kazan (Volga Region) Federal University	4	4	4	
Novosibirsk State University	7	2	2	
Tomsk State University	4	14	18	
Higher School of Economics	8	12	13	
Urals Federal University	3	4	4	
Peoples' Friendship University of Russia	5	2	3	
Siberian Federal University	6	3	2	
Tyumen State University	0	2	2	
South Urals State University	1	3	3	

In addition to the data in Table 3, it is necessary to show that new laboratories and research centers are being established according to the subject of research corresponding to the strategic academic units.

Experts from the Higher School of Economics [10] believe that in current conditions, when over 250 different Russian-language publications appear every year, the issue of the quality of existing and new publishing outlets is relevant. To solve this problem, experts propose creating a competitive environment for scientific journals including both translated and original Russian journals, e.g., the original international Moscow Mathematical Journal and journals simultaneously produced in Russian and English, with different content (Foresight) or a combination of original articles in Russian and English (World of Russia). According to L. Gokhberg, the task of the project is to increase the visibility of Russian journals and to "consolidate the editorial community", to promote the best practices of major journals, including those from abroad. Similar experiences are already available in Chinese universities, but, as the researchers note [11], the Russian project is perceived much more broadly when national platforms associated with the Web of Science are created.

Internationalization of the national higher education system is a trend in the modern development of Russia and China. The world rankings of the QS World University Rankings and Webometrics can be used as a tool to test the development of Russian and Chinese universities and, in the long term, as a level of the internationalization of higher education. The position of universities in the world rankings reflects the actual policy of the state. Thus, the participation of Russian and Chinese universities in the world rankings is an important state task for the global competitiveness of universities. Today, the interest of the Russian and Chinese governments in the development of their universities is obvious. The Russian state has adopted significant decisions to create its own rating of a university as globally comparable, and the development of national platforms for placing periodicals compatible with the Web of Science. All this is reflected in the promotion of universities in the world rankings, their number and the importance of their positions. The recorded growth of universities in the rankings of the QS World University Rankings and Webometrics is determined by changes in the conditions of the international activity of Russian and Chinese universities. At present, the experience of universities in China serves as a guide for Russian universities to build programs for entering the world rankings.

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## ВХОЖДЕНИЕ И ПРОДВИЖЕНИЕ УНИВЕРСИТЕТОВ В МИРОВЫХ РЕЙТИНГАХ: РОССИЙСКИЙ И КИТАЙСКИЙ ОПЫТ

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Представленное исследование актуализирует проблему выхода российских и китайских университетов на международный образовательный рынок. Решение представленной проблемы связано с привлечением иностранных абитуриентов и экспортом российского и китайского образования. Для определения материалов исследования был использован мониторинг результатов участия вузов в международных рейтингах Webometrics (с 2013 по 2019 г) и QS World University Rankings (с 2011 по 2018 г.). В опытно-экспериментальной деятельности были использованы результаты мониторингового исследования, которые обладают необходимой валидностью и являются адекватным инструментом научной оценки изменений, происходящих не только внутри университета, но и в регионе и стране в целом.

В результате проведенного исследования было выявлено и подтверждено, что проблема современной высшей школы заключается в выборе мировых рейтингов и определении механизмов для продвижения университетов в этих рейтингах. Данные мониторингового исследования QS World University Rankings указывают на позитивную динамику российских и китайских вузов на международном образовательном рынке. Наилучшие результаты в рейтинге QS показывают вузы Китая. Самая высокая позиция российских университетов в 2018 году – 95 место, занял Московский государственный университет. Стабильно повышаются показатели «интернационализации» за счет возрастания доли иностранных студентов и международного профессорско-преподавательского состава. Зафиксирован рост числа вузов Китая в рейтинге Webometrics за последние семь лет. Это указывает на возросшую результативность и эффективность механизмов продвижения сайтов китайских вузов в мировом информационном образовательном пространстве. Результаты мониторинга показывают сокращение числа российских вузов, индексируемых Webometrics, что связано с изменением методологии оценки вузовских сайтов – до 1160 (по данным на январь 2019 г.).

Зафиксировано, что трендом современного развития вузов России и Китая становится интернационализация национальной системы высшего образования. Мировые рейтинги QS World University Rankings и Webometrics могут быть использованы как инструмент оценки развития российских и китайских университетов. Установлено, что опыт университетов Китая служит ориентиром для российских вузов в выстраивании программ по вхождению в мировые рейтинги.

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