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This Report was prepared by the Russian International Affairs Council (RIAC) as a part of the project “The Development of Russian—Chinese Relations”, based on research of the practical experience accumulated by several leading Russian universities. The Report contains a number of particular recommendations aimed at reinforcing Russia’s positions in the education market of China and the Asia-Pacific region in general, as well as developing Russia’s innovation potential through the expansion of mutually beneficial scientific and educational cooperation between the two countries.

The views and opinions of authors expressed herein do not necessarily state or reflect those of RIAC.

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INTRODUCTION

The global economic recession has significantly reshaped the landscape of the world economy. The Asia-Pacific region plays a huge role in this transformation, accounting for 62 per cent of the world's GDP (around \$62,100 bn).

The main players here are: the United States (which is still trying to maintain its dominant position), China (increasingly asserting itself), Japan, Republic of Korea and Democratic People's Republic of Korea. Up until recently, Russia's interest to the Asia-Pacific countries wasn't reciprocated. China is positioning itself as a global growth engine, hoping to lead the region in another 20–30 years, and is looking for relations with the world community to maintain global and regional stability.

Relations between Russia and China, despite their competition in a number of spheres, can generally be considered promising and mutually important. The countries need each other as partners willing to maintain a constructive dialogue, which enables Russia to strengthen its position in the Asia-Pacific. On the other hand, the development of Siberia and the Russian Far East is contingent upon attracting investments from the Asia-Pacific region and developing business connections with China.

In education, the two countries have many common interests and problems. The positive and negative experiences of Russian-Chinese cooperation in this area need to be summarized, and new incentives formulated.

Currently, Russia and China cooperate both in bilateral formats and through international organizations (e.g., the *APEC Education Foundation* and the *Shanghai Cooperation Organization*, or SCO).

The *SCO's Intergovernmental Agreement on Educational Cooperation* (signed in Shanghai, 2006) declares that "The concept of creating a single Eurasian educational entity as part of global education has become increasingly appealing from

academic, social and geopolitical perspectives.”¹ Leveraging the experience of the *Bologna Process* participants, the SCO countries have a unique chance to fill the *Bologna’s* formal requirements with content more relevant to their own national education systems. The ultimate objective of the initiative is to join the Bologna Process, while also enriching it with new ideas.

The main drivers of educational integration in the Asia-Pacific are intergovernmental bodies and NGOs: *UNESCO*, the *ASEAN University Network (AUN)*, *University Mobility in Asia and the Pacific (UMAP)*, the *Association of Pacific Rim Universities (APRU)*, etc. The world’s leading universities, particularly those in the United States,² have also been overhauling their competitive strategy for the Chinese education market.

A set of recommendations and a roadmap for advancing educational cooperation in the Asia-Pacific for the short (one year) and medium term (two to four years) need to be developed within the main lines of action defined by the Russian representatives and discussed at APEC meetings. In October 2012, participants of the *Second Asia-Pacific Forum*, organized by RIAC in Moscow, resolved that a project named ‘Internationalization of Russian Universities: the Chinese Vector’ be developed, incorporating all the experience accumulated by Russia and China over the last two decades.

The Project addresses the following questions:

1. What is the current state of cooperation between Russia and China in the area of education?
2. What are Russia’s ambitions in the Chinese education market?
3. What are the impediments to their realization?
4. What particular steps can Russia take to address the existing challenges, and what results can be achieved?

This Report was written using data from Moscow and St. Petersburg universities (which host half of the Chinese students and interns in Russia), as well as data from the universities in Siberia and the Russian Far East (the most promising area of Russian-Chinese educational cooperation). The Report was prepared with the participation of researchers from six universities: National Research University Higher School of Economics (HSE), People’s Friendship University of Russia (PFUR), St. Petersburg State University (SPbGU), Far Eastern Federal University (FEFU), Ural Federal University (UrFU), and Tomsk Polytechnic University (TPU), which all have wide and successful experience of cooperation with China.

¹ SCO’s Intergovernmental Agreement on Educational Cooperation (signed in Shanghai on June 15, 2006). URL: http://www.conventions.ru/view_base.php?id=1497 (in Russian).

² International Briefs for Higher Education Leaders, 2012. No. 1. URL: <http://www.acenet.edu/news-room/Documents/International-Briefs-2012-April-China.pdf>

1. THE PEOPLE'S REPUBLIC OF CHINA AND THE RUSSIAN FEDERATION IN THE GLOBAL EDUCATION MARKET

1.1. CHINA AS AN ACADEMIC MOBILITY HUB

The 21st century is witnessing rapid development of the global education services market. According to OECD's report *Education at a Glance 2012*, in 2000–2010, the number of students studying abroad grew 99 per cent (from 2.1 to 4.1 million).³ While universities in Europe, the United States and Australia remain the most attractive educational destinations, new players are entering the market: Canada (which educates 5 per cent of world's international students), Russia (around 4 per cent), Japan (3 per cent) and Spain (2 per cent). We are also seeing robust development of new destinations, including Latin America, the Caribbean, Asia and Oceania (52 per cent).⁴

The largest sources of foreign student inflow for all states, including Russia, were China, India and South Korea. The Ministry of Education of the Republic of China reports that between 1978 and 2012 a total of 2.644 million Chinese citizens received tertiary education, were offered internships, or defended dissertations abroad. In 2012, 400,000 students left China to study abroad (20 times more than in 1998). From 2007–2011, the annual growth of Chinese students studying abroad was 20 per cent; see Fig. 1). In 2014, the number of Chinese people receiving foreign education is expected to reach 550,000 in 2014, and 650,000 by 2020.⁵

³ How many students study abroad and where do they go? // *Education at a Glance 2012: Highlights*. OECD Publishing. 2012. URL: http://www.oecd-ilibrary.org/education/education-at-a-glance-2012/how-many-students-study-abroad-and-where-do-they-go_eag_highlights-2012-9-en

⁴ The number of international students worldwide has doubled // *On campus*. September 17, 2012. URL: <http://www.oncampus.ru/publicacii/kolichestvo-inostrannyh-studentov-v-mire-vyroslo-v-dva-raza> (in Russian).

⁵ More students choose to study abroad // *People's Daily Online*. April 25, 2011. URL: <http://english.peopledaily.com.cn/90001/90778/90860/7360264.html>

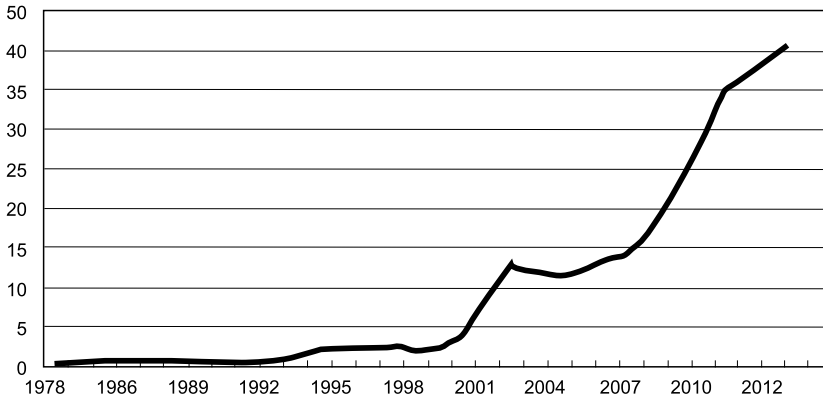


Fig. 1. Number of Chinese people studying abroad in 1978–2012 in tens of thousands of people⁶

This study abroad boom was spurred by China's new innovation policy, which turned the country into the world's largest 'exporter' of international students, staying ahead of India for the last few years.⁷

Three-quarters of students from China studying abroad choose five countries: the United States, the United Kingdom, Australia, Canada and Japan (see Table 1).⁸ Together with those studying in Germany, France, South Korea and Russia, they make up 90 per cent of all students studying abroad – despite the tuition costs in these countries being above the global average.

Table 1

Self-funded Chinese students' study abroad destinations in 2012/2013 academic year, per cent⁹

USA	30
United Kingdom	21
Australia	13
Canada	10
Japan	5
France	4
Germany	2

⁶ EOL China Study Abroad Report 2013. URL: <http://www.eol.cn/html/lx/baogao2013/page1.shtml> (in Mandarin).

⁷ Rahul Choudaha. Mobility of Chinese and Indian Undergraduate Students – Pros and Cons // *Journal of International Higher Education*. 2012. Issue 68. URL: http://www.bc.edu/content/dam/files/research_sites/cihe/pdf/IHEpdfs/ihe68.pdf

⁸ URL: <http://www.russian.people.com.cn/31517/8352371.html>

⁹ EOL China Study Abroad Report 2013. URL: <http://www.eol.cn/html/lx/baogao2013/page3.shtml> (in Mandarin).

The share of Asian-Pacific universities in the U.S. government-sponsored exchange programmes increased from 1 per cent in 1998 to 24 per cent in 2012,¹⁰ largely due to involving foreign universities in unilateral assistance programmes.¹¹ The U.S. *Institute of International Education* reported that since 2007 China has been the largest contributor to the growth of international student pool in the United States (in the 2011/2012 academic year, Chinese students accounted for 25.4 per cent of the total number of international students in the United States).¹² In the next four years, the Chinese government will commit 10,000 'Bridge Scholarships' for American students to study in China, to encourage the China–U.S. educational exchange, while the United States responded with its 100,000 Strong Initiative.¹³

The number of Chinese students studying in Great Britain has increased almost 500 per cent over the past decade.¹⁴ In 2012, even with the influx of students from other countries decreasing, it grew 9 per cent,¹⁵ with Chinese students comprising 15 per cent of all international students in the United States (as well as in Canada).

Global education market players have been repartitioning their shares in the fight over Chinese students. The previously mentioned leaders have somewhat lost their footing in the last decade, as new players – Sweden, Denmark, Ireland, Estonia and ASEAN countries – have emerged.

Western universities regard Chinese student flow as an important source of investment. According to official statistics, Chinese nationals spend over \$39.7 bn (¥250 bn) annually on study abroad programmes. And in 2012, 14.4 per cent of this amount went to the United States.¹⁶ (For reference: the total revenue of Russian universities from foreign students enrolled in full-time programmes in the 2008/2009 academic year was \$719.8 million.¹⁷)

¹⁰ Calculations based on: Annual Reports / Interagency Working Group on U.S. Government-Sponsored Exchanges and Training. URL: <http://www.iawg.gov/reports/annual>

¹¹ Tsvetkova N.A. Russian Education in the Asia-Pacific: Forgotten Lessons of the USSR, Experience of the US. Universities as Platforms for Promoting Russia's Interests in the Asia-Pacific. // Russian International Affairs Council. October 31, 2012. URL: http://www.russiancouncil.ru/inner/?id_4=986 (in Russian).

¹² China Tops the List of Foreign Students in the US. Report. / CNTV November 14, 2012. URL: <http://www.cntv.ru/2012/11/14/ARTI1352876332265626.shtml> (in Russian).

¹³ Yandong Liu. People-to-people exchanges and the future of China–US relations: Speech to the China Forum at the Massachusetts Institute of Technology. Boston, April 13, 2011 // Ministry of Education of the People's Republic of China. URL: <http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s5819/201107/122718.html>

¹⁴ URL: <http://www.chinaspace.ru/kitayskie-studentyi> (in Russian).

¹⁵ URL: <http://www.tourism-london.ru/news/2656-pritok-migrantov-v-velikobritaniyu-sokratilsya-natret.html> (in Russian).

¹⁶ EOL China Study Abroad Report 2013. URL: <http://www.eol.cn/html/lx/baogao2013/page1.shtml> (in Mandarin).

¹⁷ Arefyev A.L. The Current State of Russian Education and Prospects of Its Export. Moscow: PFUR, 2010. P. 29. URL: <http://www.socioprognoz.ru/files/File/publ/sostoyanie.pdf> (in Russian).

1.2. MAJOR FACTORS OF MOBILITY FOR CHINESE YOUTH

The major drivers behind the academic mobility of Chinese students are: government incentives (for more information, see Section 4.1); the high regard that the Chinese youth have of education systems in developed countries (in terms of the quality of education, the value of their degrees in the Chinese labour market, and the emphasis on personal development); and the growth of the Chinese middle class (in 2011, 92.5 per cent of Chinese students studying abroad were self-financed). Among other factors are the deficiencies of the Chinese examination system¹⁸ and the general lack of access to higher education in the country: in 2012, only 70 per cent of the 9.14 million applicants who took entrance exams to the country's universities were admitted. Due to the popularization of bachelor's degrees (see Fig. 2), the competition at entrance exams for master's programmes is especially rigorous, despite the growing admission numbers (a 20 per cent increase in the 2011/2012 academic year alone). Some students choose foreign educational institutions on the basis of certain programmes being particularly popular. Another reason to study abroad that should not be underestimated is the intent to migrate to a country with a better economy and social security.

Over the past few years, the average age of Chinese students leaving to study abroad has decreased.

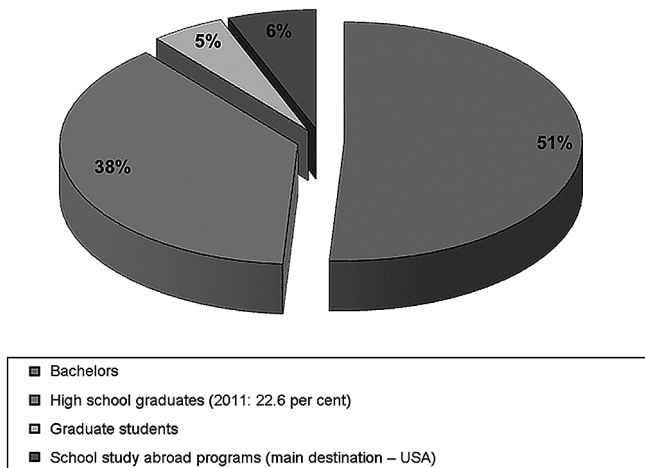


Fig. 2. Chinese citizens planning to study abroad in the 2012/2013 academic year: breakdown by education level¹⁹

¹⁸ Going abroad to Study // China News. October 2, 2012. URL: <http://www.chinaspace.ru/za-znaniyami-za-rubezh> (in Russian).

¹⁹ EOL China Study Abroad Report 2013. URL: <http://www.eol.cn/html/lx/baogao2013/page1.shtml> (in Mandarin).

Applicants choose different destinations depending on their degree level: those pursuing a bachelor's degree mostly go to Australia, the most popular countries to earn a master's degree are the United States and England, and PhD applicants head to the United States.²⁰

Despite the current boom, experts in several countries predict that by 2015 the stream of Chinese students to the United States and Europe will dwindle, due to a number of factors. Firstly, government support of private universities is expected to facilitate the improvement of the Chinese higher education system, which would ensure China's leading universities top places in global rankings. Additional factors limiting the demand for foreign education among Chinese people are the projected slowdown in the country's population growth and the waning reverence of Chinese employers toward foreign diplomas.²¹

1.3. CHINA AND RUSSIA AS EXPORTERS OF EDUCATION SERVICES

In recent years, the Chinese government has been fairly successful in developing and implementing strategies and tactics for the mass-recruitment of foreign students – in order to promote the national language and culture, as well as attract significant investments. In the 2007/2008 academic year, China's gross revenue from teaching over 200,000 international students was about \$880 million (with the average cost of tuition at ¥20,000 – around \$3,000 – per year). The country's gross revenue from teaching Chinese to foreigners amounted to about \$132 million.²²

The Ministry of Education of the People's Republic of China has been publishing yearbooks containing statistics on foreign students and interns at Chinese universities and research institutes since 2005. In 2008, China launched a unified digital database containing information not only on academic processes, but also on the movements of foreign students.

Since 2005, the number of foreign students in China has doubled. A target government programme envisions bringing the share of foreign students in China to 1.4 per cent by 2020 (compared to 0.8 per cent in 2009).²³

China is introducing a flexible system of scholarships for foreign students. It also sources funding for scholarships from local authorities, universities and businesses,

²⁰ In 2012, the number of Chinese students going to study overseas is likely to reach 410,000 // Sina News Agency. October 25, 2012. URL: <http://www.edu.sina.com.cn/a/2012-10-25/1529220571.shtml> (in Mandarin).

²¹ A report on the employment of repatriates published in 2012 stresses that the entry-level salaries for two-thirds of repatriates are under ¥60,000 per year, while other groups of employees can count on less than ¥40,000 per year.

²² More Foreign Students in China // Eureka. April 4, 2009. URL: http://www.eurekanet.ru/ewww/promo_print/9583.html (in Russian).

²³ Ibid.

and continually increases the amounts and numbers of scholarships (see Table 2). In 2006, the China Scholarship Council (CSC) and the China Development Bank established a Scholarship Programme to sponsor the distinguished international students from developing countries to study in China, and after the Study in China Plan was published in 2010, an additional programme was developed for rewarding distinguished students studying economics, finance or management. Every year the number of funded places for foreign students in Chinese universities increases on average by 1,000. A total of 77.8 per cent of scholarship holders were enrolled full time (including 53.7 per cent pursuing master's degrees and PhDs).

Table 2

**International students in China:
Growing numbers (in thousands of people)**

Year	Number of foreign students	Number of scholarship holders	Chinese government's scholarship fund (\$ million)	Number of countries and regions of students' origin
2008 ²⁴	223.5	13.5	71.4	—
2010 ²⁵	240.0	—	117 (16 more sponsored by province) governments)	190
2012 ²⁶	292.6	25.7	238	194
2015 ²⁷	360.0	50.0	—	—
2020	500 (including 150 in higher education institutions)	—	—	—

In 2012, foreign students studied or interned in 660 research institutes, universities and other institutions, with 13 of them having more than 1,000 foreigners enrolled. The government also allocated five pilot sites for working with foreign students: universities of the Jiangsu Province, the Harbin Institute of Technology and Harbin Engineering University, Beijing Foreign Studies University, and the Xian University of Electronic Science and Technology.

²⁴ Foreigners Studying in China Exceeds 200,000 // China.org.cn. March 26, 2009. URL: http://www.china.org.cn/china/news/2009-03/26/content_17502580.htm

²⁵ China Looks to Attract More Foreign Students // China Daily. September 28, 2010. URL: http://www.chinadaily.com.cn/china/2010-09/28/content_11355912.htm

²⁶ International Students' Scholarships to Increase // China Daily. April 26, 2012. URL: http://www.chinadaily.com.cn/cndy/2012-04/26/content_15143855.htm

²⁷ 12-Year Education Development Plan URL: <http://news.sciencenet.cn/htmlnews/2012/7/267228.shtm> (in Mandarin).

A decree of the Ministry of Education of the People's Republic of China established, starting with the 2010/2011 academic year, an integrated preparatory department for all foreign students receiving government scholarships (the duration of the programme is one to two years), where the Chinese language and culture are taught, along with basic professional courses.²⁸

The Chinese government encourages Anglophone and bilingual programmes in China's universities. *Confucius Institutes* are another important channel for recruiting foreign students who want to study in programmes that require knowledge of Chinese.

Analysing international experience, China implements new models of interaction between universities and society aimed at making the everyday lives of foreign students safer and more comfortable, and their academic experiences more productive.

Russia has yet to earn a place among the largest players in the educational services market. According to *OECD's Centre for Educational Research and Innovation*, Russia lags far behind the world's leaders in terms of annual revenues from exported educational services. Over the last few years, different sources have put this amount between \$150–200 million (0.5 per cent of the global educational services market)²⁹ to around \$0.5 bn (vs. \$10.3 bn in the United States, \$2.2 bn in Australia, and \$0.9 bn in China).³⁰ One of the reasons for this is that almost half (around 43 per cent) of all foreign students in Russian universities come from the CIS countries.³¹

Russia's relatively small share in the global education market is usually blamed on the difficulty of the Russian language, the local inclement climate, comparatively low quality of the social infrastructure of universities, and high rates of racially and ethnically motivated crime.³² Despite the universal acclaim won by the Russian education system in the 20th century, the profound differences currently existing between it and common international models and trends could also impede Russia's further evolution into a global (or Southeast Asian) higher education hub. Two characteristic features must be noted here.

Firstly, the expected duration of the education cycle is low. Russian children start school at a later age and finish school earlier than their peers in most

²⁸ URL: <http://www.russian.cri.cn/1070/2009/08/07/1s302069.htm> (in Russian).

²⁹ Challenges Facing Foreign Students in Russia: Findings of Research Conducted as Part of the Program "Protection of Foreign Students' Rights in the Russian Federation". Voronezh: Writers' Union Publishing House, 2008. Page 7. URL: http://www.citizens.ru/upload/iblock/923/book_inostudy_A5_2007_new.pdf (in Russian).

³⁰ Chebotaryova M.S. Russia in the Global Market of Educational Services // *Young Scientist*. 2012. No. 5. P. 249–252 (in Russian).

³¹ Foreign Students in Russian Higher Education Institutions: Statistics Digest. No. 9. / Compilers: A.L. Arefyev, F.E. Sheregi. Moscow: PFUR, 2012. P. 124. URL: <http://www.socioprognoz.ru/files/File/stat9.pdf> (in Russian).

³² Internationalization of Higher Education (Trends, Strategies, Future Scenarios). Moscow, 2010. P. 83 (in Russian).

developed countries. The resulting lack of instruction is offset at a later stage, though record-high university enrolment.

Secondly, higher education in Russia is underfinanced, and the structure of funding is inadequate. It is funding that provides the resource base, thus influencing the quality of education, especially in its most respected areas: natural sciences and engineering. In 2009, federal government spending on tertiary education per student (at PPP) was under \$5,000, which is less than half the amount spent in the OECD countries.³³

³³ Education at a Glance 2012: OECD Indicators. OECD Publishing.2012. URL: <http://www.dx.doi.org/10.1787/eag-2012-en>

2. THE EDUCATION MARKET OF THE PEOPLE'S REPUBLIC OF CHINA AND ITS OPENNESS

2.1. THE GOALS OF INTERNATIONALIZATION FOR CHINESE UNIVERSITIES AND REGIONAL PREFERENCES

In light of its rapid development since the 1990s (the country's global rank based on the main economic indicators has since shifted from sixth to second place), China is well-positioned to become one of the world's leading innovative economies in the next decade. According to China's *National Plan for Medium and Long-term Education Reform and Development* (2010–2020), formulated by the Central Committee of the Communist Party of China and the State Council (hereinafter the '*Plan*'), the internationalization of higher education in China serves to “enhance the nation's global position, influence and competitiveness in the field of education.”³⁴ The 18th National Congress of the Communist Party of China, held in November 2012, named among its priorities “making China strong by developing science and education and training competent personnel” through “deepening reform and opening up in an all-around way.” The Congress reiterated the previously formulated strategy whereby “scientific and technological innovation provides strategic support for raising the productive forces and boosting the overall national strength.”³⁵ Considering that the country started its economic and educational reforms in the 1980s at the deep end, the *Plan* faces many hurdles: the existing industry structure is unsustainable, innovation in science and technology is limited, and there are certain structural and institutional issues. This is

³⁴ Outline of China's national plan for medium and long-term education reform and development (2010–2020). Beijing, 2010. URL: https://www.aei.gov.au/news/newsarchive/2010/documents/china_education_reform_pdf.pdf

³⁵ Here and elsewhere quoted from the Full text: Report of Hu Jintao to the 18th CPC National Congress URL: http://www.china.org.cn/china/18th_cpc_congress/2012-11/16/content_27137540.htm

why, stressing the importance of promoting “innovation with Chinese features” worldwide, the Congress also underlined the need to “place greater emphasis on making innovation through collaboration,” in particular by promoting “infrastructure connectivity with [its] neighbouring countries.”

A separate chapter of the Plan is dedicated to the internationalization of higher education. It envisions “promoting international exchanges and cooperation” and seeking “the cooperation of renowned schools, education institutions, research institutes and companies outside this nation” (to all of which the government pledges its support). The following forms of internationalization have been singled out:

- participating in the setting up of “collaborative international academic organizations or global science plans”;
- “running demonstrative joint schools or joint projects in cooperation with foreign partners” and encouraging high-quality Chinese educational institutions to “run branches overseas”;
- supporting the teaching of Chinese as a foreign language in other countries.

Over the past 20 years, China has been working on the ‘brain gain’ strategy in the country to offset the ‘brain drain’ trend.³⁶ The project targets the following talent groups: Chinese graduates of foreign universities (who are, however, free to choose their country of residence), renowned scientists of Chinese origin (through investment, involvement in collaborative scientific projects, sourcing information and technology advising), and highly qualified overseas experts (see Table 3). A government programme involves the selection of the 110 best think tanks in the key areas of study among local universities, colleges and laboratories.³⁷ The winners are given five-year grants to procure equipment and retain foreign specialists. Overseas scientists doing research in Chinese universities and centres of high technology are granted five-year multiple-entry visas. The government is even considering granting residency rights to outstanding scholars.

Since 2000, Chinese public and private companies have been actively organizing job fairs in various countries (in 2008–2009, the number of applicants exceeded the number of vacancies), and the government has been carefully planning and supporting the activities of recruiting companies (e.g., Wang & Li Asia Resources). The website *www.e-jobfair.com* was launched to recruit foreign professors and experts.

³⁶ See: Borevskaya N. China: “Hunting for Intelligence”. URL: http://www.russiancouncil.ru/en/inner/?id_4=600#top

³⁷ In 2006, key disciplines were identified at three levels: state, provincial and university (by 2011, there were about 2,500 key state-level disciplines). Currently, the state registry includes the disciplines of the first two levels (the second one now comprises rare and university-specific ones).

Table 3

Foreign specialists in Chinese universities³⁸

Year	Number of professors and instructors	Number of foreign specialists
1978	102	2,500
1989	686	–
2009	11,000	480,000
2011	–	529,000
2015	–	1,974,000

The 126 ‘science towns’ built in China since 2006 employ (on a full-time basis or otherwise) 39 Nobel Prize laureates.³⁹ The 100 Talents Programme of *Chinese Academy of Sciences (CAS)*, launched in 2004, had by 2011 brought 2,237 young foreign scientists into the Academy, and the Innovation 2020 talent development programme approved in 2009 provides for the recruitment of 1,500 more researchers to CAS-affiliated institutes over the next five years, including 600 prominent experts working in strategically important areas of science.⁴⁰

Concerning China’s cooperation with Russia, the Ministry of Education of the People’s Republic of China noted that it has been developing dynamically, and by 2020 the two countries are expected to reach a new level of partnership: establishing joint graduate schools and scientific laboratories, intensifying the activities of university associations, etc.⁴¹

2.2. THE MATURITY OF THE CHINESE EDUCATION MARKET AND THE ACADEMIC POTENTIAL OF CHINA AS DRIVERS OF CHINESE—RUSSIAN COOPERATION

Russia needs to identify China as either an importer or an exporter of educational services in the global market.

³⁸ Xiong Qinian. Education Reform in China // *Vedomosti*. October 4, 2011. URL: http://www.vedomosti.ru/opinion/news/1382106/kak_my_uchilis_uchitsya (in Russian).

³⁹ The ‘Chinese Dream’ of Foreign Specialists. // *china.org.cn*. August 8, 2013. URL: http://russian.china.org.cn/exclusive/txt/2013-08/08/content_29661383.htm (in Russian and Mandarin).

⁴⁰ The Chinese Academy of Sciences to Invite 1,500 Prominent Scientists over the Next Five Years. // *Xinhuanet*. January 12, 2009. URL: http://www.russian.xinhuanet.com/russian/2009-01/12/content_796992.htm (in Russian).

⁴¹ The 10th Forum of University Rectors of the Russian Far East, Siberia, and North-Eastern China was held in Changchun (China). The Pacific National University rector attended the event // *Education in the Far East*. October 1, 2012. URL: http://www.sr.27.ru/archive2013/2012/10/01/news28092012_2 (in Russian).

Table 4

Major goals for education development from 2009 to 2020⁴²

Education level	2009	2015	2020
Nine-year compulsory education			
Number of students, million	157.72	161.0	165.0
Graduation rate, per cent	90.8	93.5	95.0
Senior middle school education*			
Number of students, million	46.24	45.0	47.0
Gross enrolment rate, per cent	79.2	87.0	90.0
Vocational education			
Number of students in secondary vocational schools, million	21.79	22.5	23.5
Number of students in higher vocational colleges, million	12.8	13.9	14.8
Higher education**			
Total enrolments, million	29.79	33.5	35.5
Number of university/college students, million	28.26	30.8	33.0
of which: in master's programmes, per cent	1.4	1.7	2.0
Gross enrolment rate, per cent	24.2	36.0	40.0

NOTES:

* including students in secondary vocational schools;

** including students in higher vocational colleges.

Table 5

Major goals for human resource development⁴³

Indicators	2009	2015	2020
Number of people with higher education, million	98.3	145.0	195.0
Average number of years of education received by the working-age (20–59 years old) population,	9.5	10.5	11.2
of which: percentage of those having received higher education, per cent	9.9	15.0	20.0
Average number of years of education received by newly-added members of the workforce,	12.4	13.3	13.5
of which: percentage of those having received senior middle school or higher education, per cent	67.0	87.0	90.0

⁴² Outline of China's National Plan for Medium and Long-term Education Reform. URL: http://planipolis.iiep.unesco.org/upload/China/China_National_Long_Term_Educational_Reform_Development_2010-2020_eng.pdf

⁴³ Ibid.

As of 2013, China is a country with sufficient economic resources to continue the robust development of its science and education.⁴⁴

By 1998, as a result of the development and consistent implementation of a comprehensive structural reform in national education, the country created an education system for the accelerated mass training of highly qualified and competitive creative specialists according to global standards. Having identified science and education as the cornerstone of China's prosperity, the government moved fast to promote comprehensive secondary and higher education (Tables 4 and 5). During the current decade, China will need to further transform its enormous education system (almost 25 million students in the regular tertiary education sector in the 2011/2012 academic year alone) into a strong one (replacing enrolment key performance indicators with quality ones). The 2012 statistics seem to indicate that China will attain its 2020 targets.

Over 30 years of reforms (by 2012), China managed to increase the gross enrolment of youth in higher education institutions from 4 per cent to 26.7 per cent by unlocking the potential of existing universities, opening new ones and supporting private educational institutions. This number is expected to reach 36 per cent by 2015, and 40 per cent by 2020.⁴⁵ Starting in the late 1990s, Chinese universities not only increased admissions to their main (bachelor's) and short-term programmes, but also expanded the share of master's and PhD students in the total number of students at the tertiary level (Figure 3).

The Chinese government has been increasing its investment in the education and science infrastructure. The soon-to-be-adopted amendments to the Education Law of the People's Republic of China and regulations thereunder will ensure future increases in science and education spending (declared in the original text of the Law back in 1995) by establishing the following mechanisms:

- indexing education spending at rates outstripping the growth of regular internal revenues;
- indexing science and hi-tech spending at a priority rate compared to other budget items;
- consistently increasing average spending per student, increasing teachers' and professors' salaries, and public subsidies;
- giving these budget items priority when allocating excess revenues.

⁴⁴ In 2003–2011, the average annual growth rate of the country's GDP was 10.7 per cent (while the global economy moved at a pace of 3.9 per cent). China's GDP ranks second in the world, and its GDP per capita has grown from \$1,135 to \$5,432. China's share of the world economy has increased from 4.4 per cent to 10 per cent, and the country accounts for over 20 per cent of global growth. See: Transformation Key to China's Economic growth // People's Daily Online. November 28, 2012. URL: http://www.russian.china.org.cn/exclusive/txt/2012-11/28/content_27247140.htm (in Russian).

⁴⁵ Ibid.

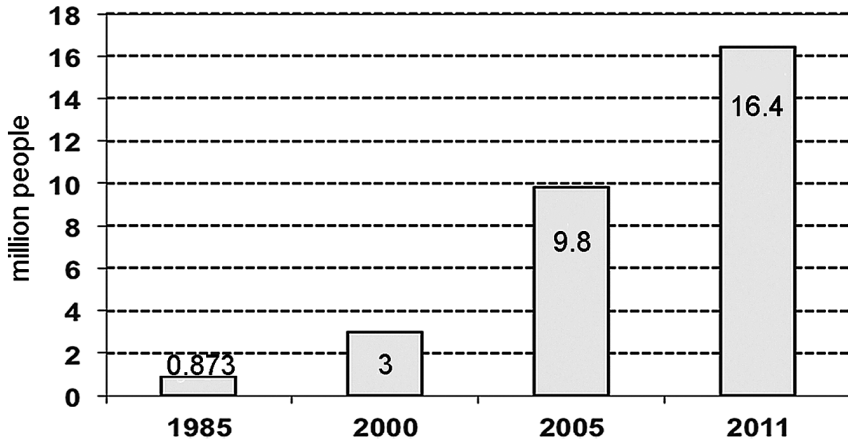


Fig. 3. Dynamic of enrolment in master's and PhD programmes in China
Source: Educational Statistics Yearbook of China (1986–2012)

Table 6

Growth of education spending⁴⁶

Year	Gross spending of central budget (¥ bn)	Gross spending of consolidated budget (¥ trillion)
2009	117.168	1.14
2012	378.152	2.20
2013	413.245	–

The Chinese government acknowledges the financing issues, noting the need for more cooperation from the local authorities and more transparency of financial flows, as well as the need to optimize the allocation and use of funds. Increasing budget spending per university student is on the agenda.⁴⁷ Investment in higher education is to be increased to 25 per cent of total education spending, or 1.5 per cent of GDP (vs. 18 per cent and 1.12 per cent in 2011, respectively), to attract foreign students.

The *Plan's* main role in the area of higher education is to make it competitive in the global market by giving it a 'balanced and distinctive' differentiated structure (which implies developing diversified research universities,

⁴⁶ Educational Statistics Yearbook of China. 2010. Beijing, 2011. P. 623. Report on the Execution of State and Local Budgets for 2012 and on the State and Local Budgets Proposals for 2013 (First session of the 12th National People's Congress) // china.org.cn. March 18, 2013. URL: http://www.russian.china.org.cn/exclusive/txt/2013-03/18/content_28281405_15.htm (in Russian).

⁴⁷ China raises education spending, but more needs to be done // Xinhuanet. March 13, 2013. URL: http://www.news.xinhuanet.com/english/china/2012-03/13/c_131464418.htm

as well as education and research institutes, and encouraging universities to distinguish and differentiate themselves in terms of their level of education and unique features) and improving education management policies (in particular, through fostering competition), and finance allocation mechanisms.

The *Plan* singles out three main prerequisites for the success of the reform:

- decentralization of control over universities and allowing them autonomy in their academic activities, research, and development of technologies and services;
- forming a new enrolment system, with a variety of examination types, in addition to national standardized tests;
- improving the quality of education.

One of the major projects implemented by the Chinese government since the mid-1990s involves establishing a number of world-class universities and turning them on a competitive basis into ‘platforms for innovation and advantageous disciplines’ (to promote them, supplementary government projects, backed with additional subsidies, will be launched).⁴⁸ Project 211 (started in 1995) aims to raise academic and research standards by promoting the hundred or so best national universities (currently, 112 institutions participate in it). Project 985, launched in May 1998, sponsors 39 universities with a view to propelling a dozen of them to world-class level and into the top 100 global universities. Other pilot projects receiving target funding from the government include, among others: the *Plan for Scientific and Technological Innovations in Higher Education*, the *Project for Improvement and Reform of Higher Education*, the *Innovative PhD Education Project*, etc.

Participation in global university ratings and preparing national ratings (see Appendix 1) has been steadily pushing Chinese universities up in the world rankings. Still, domestic polls identify several hurdles to further progress: insufficient financing and use of the funds provided, and a lack of international contacts, autonomy for universities and creativity among students. The Chinese government is aware that the existing system of higher education and its products are inadequate for the tasks at hand. In the 2011/2012 academic year, less than 60 per cent of the 23 million full-time students in China were enrolled in bachelor programmes. The rest were enrolled in specialized short-term professional courses. So far, China hasn’t implemented international quality standards of education, and its institutions don’t meet these standards. Only 10 per cent of university graduates have the necessary skills to work in international

⁴⁸ In 2010–2012, around ¥85 bn (\$13.4 bn) was earmarked in the central budget for financing the country’s 30 leading universities.

companies (in India, for example, it is 25 per cent). Of the 600,000 engineers graduating from Chinese universities every year, only 16,000 will have the technical and language skills required by international employers.

Despite the mixed quality of Chinese universities as a whole, a number of them do match their acclaimed overseas peers in material resources and quality of instruction. In other words, by 2020, China may become a large exporter of higher education services for certain programmes in the Asia-Pacific region.

Universities have been increasingly contributing to the national economy. The 2010–2020 Plan provides for the reform of the science and technology sector over the next five years, and establish their close connections with economy, forming a technological innovation framework that will “rally the efforts of higher educational institutions, research institutes, industries and enterprises”⁴⁹ by encouraging them to share scientific and technological resources and consolidating university laboratories into a shared infrastructure. The best research institutes and universities will become platforms for multi-functional scientific centres.

Between 2006 and 2009, China increased its R&D spending by 40 per cent,⁵⁰ leaving all other countries behind (see Table 7). In 2012, the government published its *Outline of the Opinions on Deepening the Reform of Scientific and Technological System and Speeding up the Building of National Innovation System*, which envisions China becoming a global innovation and technology leader by 2049.⁵¹

There are around 5,000 periodicals on natural and engineering sciences, and about 2,500 titles on social sciences in China.⁵² Ever since 2008, China has been one of the world’s most prolific scientific publishers, second only to the United States. Even so, the country is faced with two important tasks: leveraging science and technology for economic development, and reducing its dependence on technology imports to 30 per cent by 2020.

⁴⁹ Report on the Execution of the Economic and Social Development Plan for 2012 and on the Draft Plan for 2013 // china.org.cn. March 18, 2013. URL: http://www.russian.china.org.cn/exclusive/txt/2013-03/18/content_28281229_16.htm (in Russian)

⁵⁰ Arutyunov G.B. Development of the Concept of ‘Innovation’ at the Present Stage of Modernization (2003–Present) // Problems of Economics and Law. 2011. No. 3 .P. 225. URL: <http://www.law-journal.ru/articles/index/201103> (in Russian).

⁵¹ Over the past five years, the annual growth of the central government’s science spending has been 20 per cent.

⁵² Xiong Qinian. Education Reform in China // Vedomosti. October 4, 2011. URL: http://www.vedomosti.ru/opinion/news/1382106/kak_my_uchilis_uchitsya (in Russian).

Table 7

China's R&D spending

Year	Share of annual spending in GDP (per cent) ⁵³	Investment (¥ bn) ⁵⁴
2007	1.4	–
2012	1.97	229.15 (c. \$36.4bn)
2013	–	252.991 (c. \$37.4bn)
2015	2.2	–
2020	2.5	–

2.3. EDUCATION AS A PRIORITY OF THE RUSSIA—CHINA 2020 STRATEGIC AGENDA FOR HUMANITARIAN COOPERATION

The potential of China's education system has been under-researched by the Russian scientific and academic community, which impedes the development of a strategy for collaboration between the two countries in the education sector.

Administrations of many Russian universities sign cooperation agreements with their Chinese peers, never taking time to consult the works of Russian orientalists and get to know their partners better. That being said, China is Russia's most researched neighbour in the Asia-Pacific: the various aspects of its education system and strategy in the global education market are analysed in a number of Russian monographs and many articles in research journals (*Issues of the Far East, Pedagogy, etc.*).⁵⁵

Russian universities fell prey to one of the internationalization myths: "the more partnerships, the more successful the internationalization."⁵⁶ In pursuit of status and ratings, they signed dozens of agreements with Chinese universities, often with no benefit to themselves. Besides, most of these agreements were signed after taking on numerous partnership obligations under the Bologna Accords.

⁵³ Outline of China's National Plan for Medium and Long-term Education Reform. URL: http://www.pla-nipolis.iiep.unesco.org/upload/China/China_National_Long_Term_Educational_Reform_Development_2010-2020_eng.pdf

⁵⁴ Report on the Execution of the Central and Local Budgets in 2012 // china.org.cn. March 18, 2013. URL: http://www.russian.china.org.cn/exclusive/txt/2013-03/18/content_28281405_15.htm (in Russian).

⁵⁵ Borevskaya N.E. State and School: Chinese Reforms at the Turn of the 21st Century / Educational Reforms in Russia and China at the Turn of the 21st Century: A Comparative Analysis / Eds. by N.E. Borevskaya, V.P. Borisenkov and Xiaoman Zhu. Hong Kong: Comparative Education Research Centre, University of Hong Kong, 2010, and other works.

⁵⁶ Hans de Wit. Misconceptions on Internationalization of Higher Education / European association of Higher Education Institutions. URL: <http://www.eurashe.eu/wp-content/uploads/2011/10/intlztion-Misconceptions.pdf>

Their Chinese peers have also been contracting indiscriminately, while many European universities recently reduced their number of international agreements to 10–20 priority ones.

The *Russian—Chinese Intergovernmental Commission on Humanitarian Cooperation* is an important tool for developing cooperation between the two countries. Following the 17th regular meeting between the Chinese and Russian heads of government in December 2012, the parties signed the *Memorandum on the Implementation of the Action Plan of Russia-China Humanitarian Cooperation* (the long-term plan is at the final stage of drafting) and the *Memorandum of Understanding between the Ministry of Education and Science of the Russian Federation and the Ministry of Education of the People's Republic of China on Implementing Joint Projects in Priority Areas of Science, Technology and Education*. Additionally, the *Memorandum of Understanding between the Ministry of Education and Science of the Russian Federation and the Ministry of Education of China on Cooperation to Create Specialised University Associations of Russia and China* was signed at the 18th regular meeting of the heads of government in October 2013.

The draft Plan envisions several avenues of Russian—Chinese cooperation in education:

- establishing joint programmes of higher education, from undergraduate to postgraduate level: promoting collaborative PhD programmes, educational institutions and field-specific university associations, encouraging the development and implementation of joint programmes and scientific projects;
- promoting direct interactions between universities, particularly in the near-border regions;
- expanding educational exchange programmes for young people, particularly through leveraging the potential of base centres, encouraging young people to enrol in programmes of partner countries during youth exchange years (2014–2015);
- refining the methods of teaching and learning Russian and Chinese as foreign languages; advancing the role of student art festivals, summer and winter student camps, language competitions, education fairs, etc.;
- area studies: compiling a single base of resources for humanitarian cooperation, and providing information support for it;
- promoting regular interactions between educational institutions at the regional level; developing new models of cooperation based on regional initiatives, in coordination with the federal government as well as NGOs.

3. THE INFRASTRUCTURE AND LEGAL FRAMEWORK FOR EDUCATIONAL AND SCIENTIFIC COOPERATION BETWEEN THE RUSSIAN FEDERATION AND THE PEOPLE'S REPUBLIC OF CHINA

3.1. COOPERATION INFRASTRUCTURE: RUSSIA

In Russia, the Ministry of Education and Science and the Federal Agency for the Commonwealth of Independent States, Compatriots Living Abroad, and International Humanitarian Cooperation (*Rossotrudnichestvo*, created in 2008 and under the jurisdiction of the Ministry of Foreign Affairs of the Russian Federation), as well as certain universities, are responsible for cooperation in the educational sphere. The Government's Russian Language Council and the Ministry of Foreign Affairs are also involved. According to experts from the Ministry of Education and Science of the Russian Federation, by the end of 2012 around 130 ministerial universities had made direct contact with almost 600 universities and partner organizations from China, and over 900 contracts had been signed.

A new regulatory framework for educational cooperation between Russia and China was set forth in the 1990s (Table 8), with the 2001 signing of a *Treaty of Good-Neighbourliness and Friendly Cooperation Between the People's Republic of China and the Russian Federation* serving as a catalyst.

In addition, the *Russian—Chinese Commission on Cooperation in the Areas of Education, Culture, Health Care and Sport* has been in operation since 2000, with a separate sub-commission for education.

3.2. LEGAL FRAMEWORK AND THE MUTUAL RECOGNITION OF QUALIFICATIONS

The agreement *On Mutual Recognition of Qualifications and Academic Degrees* (hereinafter the '*Agreement*') governs such matters. An intergovernmental agreement regarding mutual recognition of documents issued to graduates of educational

**Regulatory framework for intergovernmental cooperation
between Russia and China in culture and education**

Intergovernmental agreement	Year
On Cultural Cooperation	1992
On Mutual Recognition of Qualifications and Academic Degrees	1995
On the study of the Russian language in China and the Chinese language in Russia	2003
On cooperation in education	2006 (in the framework of the Shanghai Cooperation Organisation)
Joint statement of the Russian Federation and the People's Republic of China on mutually beneficial cooperation and deepening of relations of a comprehensive partnership and strategic cooperation in the framework of the Concept of Participation of the Russian Federation in BRICS	2013

institutions in the Shanghai Cooperation Organisation is to be written and prepared for signing in 2013–2014.

The intergovernmental treaty will require documents issued by Chinese educational institutions to be recognized automatically in Russia. Russia and China are parties to the *UNESCO Regional Convention on the Recognition of Studies, Diplomas, and Degrees in Higher Education in Asia and the Pacific* (Bangkok, 1983, hereinafter the 'Convention'), but Russia has not yet considered it necessary to participate in the writing and signing of the *Asia-Pacific Regional Convention on the Recognition of Qualifications in Higher Education* (Tokyo, 2011). Because China has signed this new convention and Russia has not, the 1983 Convention applies to relations between China and Russia.

Both of these *UNESCO* conventions govern the general principles, mechanisms, criteria and procedures for recognizing documents, in addition to providing definitions of concepts. The primary principle suggests that a holder of a foreign qualification is granted the same rights in a foreign country as holders of national certificates, diplomas or degrees, with the caveat that such rights must not be greater than those the holder would enjoy in the country where the qualification was obtained. The conventions do not establish a detailed correspondence between documents and qualifications, as this is to be established on a case-by-case basis, based on each party's application of the *Convention* after a review.

China is expanding its international legal framework towards mutually recognizing educational qualifications with other countries. So far, it has signed 49 bilateral agreements with 39 nations. The distinguishing characteristic of the

agreements of the last decade is that there has been a shift in emphasis from mutually recognizing specific education levels to recognizing the quality of education provided.

China is the most active participant in the drafting of a new international bill on the mutual recognition of educational qualifications by members of the *Asia-Europe Meeting (ASEM)*. At the same time, in order to be actively included in the process of integrating Asian educational systems based on the Bologna Process, Beijing has to adapt the way it assesses and recognizes foreign qualifications, which it previously borrowed from the United States.

In China, the Ministry of Education and the *Academic Degree Committee of the State Council*, People's Republic of China have created two organizations to recognize foreign qualifications.

The first of these organizations is the *China Academic Degrees and Graduate Education Development Center (CDGDC)*. This independent non-profit agency was set up in 2000 to collect and distribute information on educational institutions and post-secondary education programmes in China, as well as the requirements for matriculating and studying at them. It also confirms the qualifications of Chinese educational institutions for foreign universities, evaluates and recognizes foreign educational documents (including examinations for holders of foreign master's degrees), and participates in academic exchange programmes.

The second organization is the *Chinese Service Center for Scholarly Exchange (CSCSE)*, which was established in 2000 to accredit foreign diplomas (qualifications) for Chinese citizens who have graduated from foreign universities. Chinese state-run universities (as well as employers) are authorized to make their own decisions about recognizing foreign students' academic qualifications, although in complex cases they turn to the CSCSE or its branches in the provinces (private universities are more independent). The Center also works to attract foreign students to China and sends Chinese students abroad.

In the next ten years, China plans to simplify the procedure for recognizing foreign qualifications and promote teacher and student exchanges for reciprocal academic credits or to award joint degrees. A 1995 agreement between the Russian and Chinese governments simplified the procedure for recognizing diplomas in China. However, the articles of the *Agreement* have their drawbacks for Russia. They do not take into account the specifics of the different levels of the Chinese education system, particularly the continuing practice of diversifying educational institutions, the qualifications assigned by them, and the educational documents issued. The Russian government approved a Model Provision of an Institution of Higher Professional Education (No. 71, dated 14.02.2008, Part 46, Article 3), which also simplified the procedure for recognizing diplomas issued by Chinese universities to Russian citizens (and, correspondingly, the issuance of dual degrees). As

a result, Russian “students who participate in bilateral or multilateral exchange programs can recount disciplines that they study in another institution of higher education, including abroad, in the manner determined by the institution of higher education.”⁵⁷ Thanks to this document, Russian universities are entitled to sign contracts with their foreign partners on joint educational activities that are not considered international and do not require lengthy approvals at the governmental level. Under such contracts, while implementing an integrated curriculum, Russian students studying abroad receive a diploma from a Russian and a foreign university under bachelor’s and master’s programmes, as do Chinese students at Russian universities. However, it is not currently possible to jointly award PhD degrees in China and Russia, because the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation has its own rules.

Difficulties in the translation of Chinese terms, and the diversity of documents that schools in China’s various provinces issue, add a level of complication to recognizing Chinese certificates and diplomas. Other problems arise from the fact that Article 1 of the *Agreement* does not take into account the various forms of final certification for graduates of Chinese schools, while Article 3 fails to account for the variety of diplomas and rights that graduates of various institutions of higher education have, as referred to in China’s systemization to programmes of ‘regular higher education’.⁵⁸

Also important is the fact that the *Agreement* (Article 7) only applies to documents issued to educational institutions that have been approved by the Ministry of Education of the People’s Republic of China (the official list, which includes 2,409 universities and colleges, can be found on the ministry’s website). However, the parties to the *Agreement* have failed to fully implement several provisions from Articles 8 and 10 in the past, including exchanging sample educational documents and lists of the relevant educational institutions, as well as submitting information on changes to the respective education systems, the titles of educational documents, and the criteria for their issue.

The number of falsified and forged certificates and academic degrees in China (thousands per year) have led experts in international education to consider the country risky. China itself has admitted this on an official level, and therefore, its educational documents require additional verification and review. Clearly, it is for this reason that a 2013 Russian government order⁵⁹ regarding the list of foreign

⁵⁷ On the approval of the Model Provision of an Institution of Higher Professional Education. Russian government resolution dated 14.02.2008. No. 71. URL: <http://www.base.garant.ru/192772> (in Russian).

⁵⁸ In contrast with institutions of higher education for people over the age of 35.

⁵⁹ Russian Government Order No. 1694-r ‘On the List of Foreign Educational Organizations Issuing Diplomas on Education and/or Qualification Recognized in the Russian Federation’ dated 19.09.2013 // *Rossiyskaya Gazeta*. September 25, 2013. URL: <http://www.rg.ru/2013/09/25/diplomy-site-dok.html> (in Russian).

educational institutions recognized in Russia does not mention 11 major Chinese universities that were published in the same order in 2012.⁶⁰ Russia also has to keep in mind the list of foreign documents not recognized in China when preparing joint programmes with Chinese universities. This list includes: certificates of participation in various short-term courses or research at foreign universities or research institutes; diplomas below the bachelor's level issued by joint universities if these institutions are not authorized to do so; academic degrees or other educational documents for distance learning; and non-academic and honorary degrees.⁶¹

3.3. RUSSIAN AND CHINESE EDUCATIONAL OBLIGATIONS WITHIN THE WTO

Russia acceded to the WTO in 2012, 11 years later than China, which has garnered a wealth of experience in narrowing educational risks and protecting education as a social benefit – balanced against its approval as a market service in line with one of the WTO's primary documents: the General Agreement on Trade in Services (GATS). Russia's new education law, which took effect in 2013, introduced Russian legal norms in full accordance with its international obligations by offering more precise definitions, particularly on the status of state educational documents. This makes it possible to protect the Russian education system from unfair and undesirable educational services.

The educational obligations Russia has assumed also guarantee that education receives maximum protection as a public good. Several specific obligations make this possible:

- A differentiated legal regime for private and public education: restrictions on market access mode and national treatment for foreign government organizations and services in order to avoid budget subsidies for them;⁶²
- In the cross-border provision of services and their consumption abroad, restrictions on national treatment for all educational subsectors apply only to the issuance of subsidies, which deprives foreign suppliers of access to government resources and lowers their competitiveness;

⁶⁰ Russian Governmental Order No. 811-r 'On the approval of a list of foreign educational organizations that issue documents of foreign states on the level of education and (or) qualification recognized in Russia' dated 21.05.2012 // Rossiyskaya Gazeta. May 25, 2012. URL: <http://www.rg.ru/2012/05/25/obrazovanie-dok.html>

⁶¹ Director of the Center for International Education at Moscow State University, N.I. Zverev, provided information about these documents.

⁶² Obligation for national treatment (Article XVI of GATS): "With respect to market access through the modes of supply identified in Article I, each Member shall accord services and service suppliers of any other Member treatment no less favourable than that provided for under the terms, limitations and conditions agreed and specified in its Schedule."

- Foreign suppliers are granted a commercial presence for primary and secondary subsectors and education for adults, albeit exclusively in the form of a Russian legal entity, which extends to suppliers of requirements for licensing, accreditation and quality assurance. There are no obligations on market access mode or national treatment with regards to higher education, thereby protecting this subsector, which hosts the most widespread competition and political influence;
- There are no obligations for either of the subsectors – access mode or national treatment – regarding the presence of individual foreign suppliers. This means that services can only be provided under contracts with Russian educational institutions, which bear the financial and other responsibilities.

When opening its education sector, China also applied a selective approach. Nevertheless, in contrast with Russia, China distributes obligations for market access and national treatment to both private and state educational services. China maintains restrictions on cross-border services for all subsectors of education. In terms of commercial presence, China does not provide national treatment to foreign suppliers of educational services. Market access for private individuals to receive national treatment is subject to certain conditions: an invitation and employment at a school or other educational institution, as well as the possession of a bachelor's degree or higher, a professional title or certificate with no less than two years of work experience.

3.4. CHINESE LEGISLATION GOVERNING THE ACTIVITIES OF FOREIGN PLAYERS IN THE DOMESTIC EDUCATION MARKET

China laid out the legal basis and functional mechanisms for the commercial presence of foreign universities, educational facilities and other scientific institutions in the mid-1990s. In the second half of the decade, documents made it mandatory to nostrify Chinese diplomas issued by these institutions and regulated the process of importing foreign educational services as an effective path to globalization.

In 2003, the State Council of the People's Republic of China published the *Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools* (hereinafter the 'Regulations'), which adhere to the key WTO principles on procedural transparency and the unacceptability of violating the rights of any of the parties. The Regulations also stress their interrelation with China's domestic obligations in educational services. According to the Implementation guidelines for the Regulations (2004), educational activity with the participation of foreign partners includes joint educational institutions and programmes.

Open laws, rules and political guidelines have been developed for organizations that grant permission to establish joint educational institutions. These regulations stipulate the conditions, procedures and deadlines for granting permits, and Chinese law guarantees the legal rights of entities and organizations that establish joint educational institutions. Joint educational institutions enjoy priority and have the right to independently engage in scientific and pedagogical activities. The Regulations address the shortcomings of the previous documents by simplifying the accreditation process. For joint educational institutions and programmes that do not issue degrees, accreditation takes place at the municipal or ministerial level, and for all the rest, it takes place at the State Council of the People's Republic of China. At the initiative of provincial educational bodies, China began to establish intermediary organizations to evaluate the quality of joint educational programmes (sometimes on the basis of universities).

The main reason that joint educational programmes on Chinese campuses do not enjoy the status of a joint educational institution – i.e., an independent legal entity – is that the majority of these programmes, especially diploma programmes, are usually executed at the level of overseas faculties, colleges or departments, rather than universities themselves. Both parties must have equal rights in order for a diploma to be awarded. In addition to that, few non-state universities in China have the right to issue a state diploma. At the same time, China encourages the creation of joint educational programmes, believing that using the curriculums of prestigious, world-class universities will open the path to new disciplines and raise the quality of study and academic standards at Chinese universities.

The key element of the Regulations is the ban they place on the unilateral establishment of educational institutions on Chinese territory by foreign organizations – the Regulations only encourage joint educational institutions. While limiting risks in the financial sphere, the Chinese government sets the cost of study at joint educational institutions itself, although it does grant its foreign partners sufficient rights and discounts (particularly, for the majority of the college property). Formally, China does not allow foreign universities to open branches on its territory, although there are legal loopholes, and several British and American universities have managed to do so under the guise of joint independent colleges at Chinese universities. At present, a whole host of foreign universities is counting either on a similar arrangement with the local authorities or on a weakening of China's legal alignments.

In 2011, the Ministry of Education of the People's Republic of China created a steering group for joint educational institutions. It established a committee of specialists for discussing their activities on a countrywide basis, and the Chinese government initiated a project to launch demonstration joint educational institutions and programmes.

Unfortunately, Russia does not yet have a regulatory framework to create and implement joint educational programmes or organize the educational process according to them. Sample documents were drafted as an experiment at the People's Friendship University of Russia.

3.5. FORMS OF COMMERCIAL PRESENCE FOR FOREIGN EDUCATIONAL SERVICE SUPPLIERS IN CHINA

Throughout the world, commercial presence comes primarily through foreign branches of universities,⁶³ representative offices and franchises. It has enormous potential connected with international investment.

Russia also has franchised forms of commercial presence at foreign universities – usually large universities. Nevertheless, there is still demand for a modern regulatory framework in Russia to organize franchises, branches of foreign universities within Russia, and international branches of Russian universities.

For Chinese universities, franchising curriculums was the first step in the 1990s. Now there are a host of joint educational programmes with western universities in English. In China, joint educational programmes are divided into non-diploma programmes and programmes that offer a diploma from a Chinese university (or dual degrees). The number of joint educational institutions and programmes is proliferating. If in 2004 there were 745 such institutions and programmes, of which only 169 offered diplomas from foreign (or Hong Kong) universities, then by 2013 that number had reached 1,780 – including 42 joint educational institutions at the bachelor's level or higher, of which just eight have the status of an independent legal entity⁶⁴ – and 775 joint educational programmes.⁶⁵ More than 80,000 students enrol in joint educational institutions and programmes every year.

Russian—Chinese joint educational institutions and programmes

Russian universities in the Far East first saw the prospects for developing and executing integrated studies with university partners in China at the end of the

⁶³ There were at least 183 such branches globally in 2011, including in the United Arab Emirates, Singapore and Qatar. The largest suppliers were the United States, Australia and the United Kingdom. See: Wilkins S., Huisman J. The international branch campus as transnational strategy in higher education // Higher Education. 2012. Vol. 64, No. 5. P. 1–2. URL: <http://www.academia.edu/1577729>

⁶⁴ For example, the China—EU School of Law at the Chinese University of Political Science and Law, the Sino—French Engineer School at Beihang University and the Sino—German College for Graduate Study at Tongji University.

⁶⁵ URL: <http://www.cfce.cn/a/news/zhxw/2012/1126/616.html> (in Mandarin).

1990s. The first sets of these programmes appeared in 1999 at the bachelor's level in the form of two models (both under the dual degree programme):

- 1+2+2 China – Russia – China for Chinese students;
- 2.5+2.5 China – Russia for students from both countries.

In contrast with China, Russia lacks a regulatory document on the development of joint educational institutions and programmes, as well as a list of priority innovative specializations for them. Most often, universities rely on market demand to solve these issues.

So far, a large amount of experience has been acquired in implementing joint educational programmes with Chinese universities, several of which are created in the form of centres.

A good example is the *Russian—Chinese Centre for Comparative Social, Economic, and Political Research*. It was founded in 2004 under a cooperation agreement initiated by the St. Petersburg State University Faculty of Sociology and the *Center for Comparative Politics and Economics in The Central Compilation and Translation Bureau (CCTB)* at the CPC Central Committee. This facility was established as a scientific information and coordinating unit of the Faculty of Sociology.

The first experiment in establishing a joint educational institution was the Sino-Russian Institute, which opened in 2011. This project, initiated by Novosibirsk State University and Heilongjiang University, operates as a college within Heilongjiang University and has the financial backing of the Ministry of Education of the People's Republic of China and the government of Heilongjiang Province. Every year, 190 Chinese students enrol for bachelor's and master's degrees at this college – unparalleled in Russian—Chinese cooperation – in such specializations as chemistry, biology, physics, mathematics, economics and jurisprudence (according to curriculums coordinated with Novosibirsk State University and offering a Russian diploma). The studies are in Russian and predominantly taught by professors from Novosibirsk State University. In the 2013/2014 academic year, 84 Chinese undergraduates and five master's students began their studies at Novosibirsk State University with Chinese scholarships.

Regional priorities

By analysing the activities of joint Russian and Chinese educational programmes,⁶⁶ several conclusions and trends can be established in relation to Chinese universities with Russian partners. A 2012 Chinese government decision to develop zones of international educational cooperation stimulated the development of joint educational programmes between universities in the Russian Far East,

⁶⁶ Website of China Academic Degrees and Graduate Education Information. Document dated 02.04.2013 (List of joint educational institutions and programmes approved and revised by the Ministry of Education). URL: <http://www.cdgc.edu.cn/xwyyjsjyxx/sy/glmd/266821.shtml> (in Mandarin).

Priamurye (a region in the South of the Russian Far East that includes most of the Amur Region, the Jewish Autonomous Oblast and part of the Khabarovsk Region) and Siberia, on the one hand, and the Heilongjiang Province, on the other. As Figure 4 shows, Russia dominates among this province's more than 150 partners.

In 2006, the Heilongjiang Province had just 22 Russian joint educational programmes, but they made up 65 per cent of the total number. At present, they make up slightly more than 50 per cent.

At the same, there is not yet a single joint educational programme with Russia in cities under the central authority (Beijing, Shanghai, Tianjin), the prosperous south-eastern provinces of Zhejiang, Guangdong and Sichuan, or even in the less economically developed Jiangxi, Hubei, Jilin, Liaoning and Hunan. There are very few in the other provinces – one in Jiangsu, three in Shandong, and three in Henan.⁶⁷

A zonal policy of cooperation gives Russia new prospects for establishing joint educational institutions and programmes. Whereas only world-famous Russian universities enjoyed popularity among Chinese youth at the turn of the 21st century, now, thanks to a dramatic increase in the activity of Russia's border regions, the situation is changing.

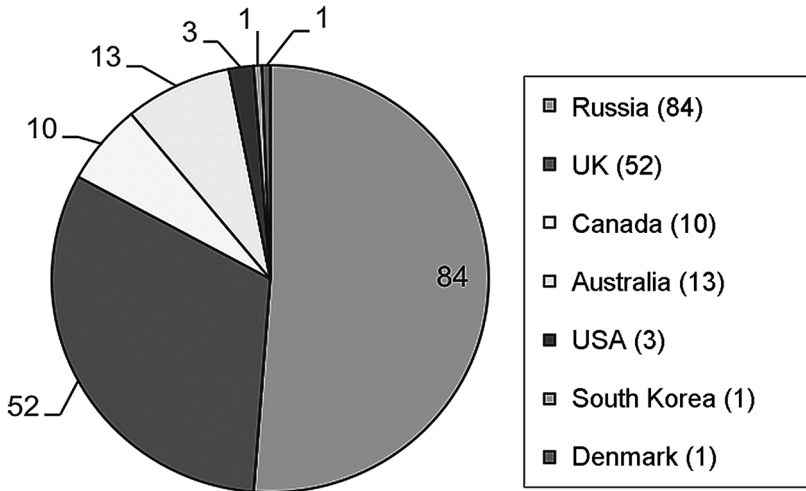


Fig. 4. Joint educational programmes with foreign partners at universities in the Heilongjiang Province in 2012.⁶⁸

⁶⁷ URL: <http://www.cdgd.edu.cn/xwyyjsjyxx/sy/gldm/266821.shtml> (in Mandarin).

⁶⁸ An updated list of joint educational institutions and programmes in the Heilongjiang Province was provided on the basis of the website of the Chinese-Foreign Cooperation in Running Schools. URL: <http://www.crs.jsj.edu.cn/index.php/default/approval/getbyarea/20> (in Mandarin).

There may be a promising trend in universities from several countries establishing joint educational institutions and programmes. For example, the University of Hamburg, which has a long-established and successful relationship with Fudan University, has come forth with an initiative to create a joint PhD programme that includes St. Petersburg State University and Charles University in Prague.

3.6. DUAL DEGREE PROGRAMMES

As practice in EU countries has proven, joint educational programmes require much more harmonization than dual degree programmes. A large number of major Russian universities, particularly in Siberia and the Far East, have jointly created dual degree programmes with Chinese universities, several of them on the basis of joint educational programmes. The rising prestige of graduates of these programmes piqued the interest of Russia's Chinese partners. However, in contrast with Europe, the majority of these programmes are at the full-time undergraduate level under the 2+2 scheme. There are two models:

- In Russian language for Chinese students: two years in China (with additional Russian language instruction) and two years in Russia (with subjects in the specialization or major being transferred);
- Programmes at partner universities for students from the other country (in the Russian and Chinese languages, accordingly).⁶⁹

Several universities already offer a substantial number of dual degree programmes; for example, there are 16 at Tomsk Polytechnic University. Of no little importance is the fact that the cost of studying in these programmes at several universities (including Tomsk Polytechnic) is 15–25 per cent lower than the average for foreign students.⁷⁰

There is now a move towards providing dual master's degree programmes.⁷¹ The preconditions for this are already in place: China is interested in sending its third-year master's students abroad, and Russian universities have both the potential and the interest in bringing in foreign master's and PhD students to enhance innovation.

Faculties select areas of training for dual degree programmes in agreement with their Chinese partners. They are especially interested in developing the high-tech and science-driven industries connected with the production and processing

⁶⁹ For example, the Baikal State University of Economics and Law and the Henan University of Economics and Law organized a Russian—Chinese faculty for several specializations for dual degree programmes.

⁷⁰ Data provided by Tomsk Polytechnic University.

⁷¹ Of the 100 Chinese undergraduates who graduated from Tomsk Polytechnic University between 2006 and 2012, 20 per cent continued on to master's studies, and 10 per cent went on to get PhDs.

of natural resource, transport infrastructure, IT, the aerospace industry, economically efficient energy consumption and regional security. There are many programmes dedicated to linguistic and intercultural communications, Russian language as a specialization, and Russian as a foreign language.

3.7. CROSS-BORDER STUDIES

The cross-border programmes exported by Chinese universities are no longer limited to language study. Now they include industrial management, trade and administration, marketing and accounting, electronics and informatics, engineering and economics, foreign languages, art, literature and pedagogy.

Collaboration in distance learning, especially between Far Eastern and Siberian universities and educational institutions in the north-eastern border provinces of China, is an insufficiently realized resource. Russia does not have any experience developing a full course of study for its foreign partners using remote technology, and tight control by China limits possibilities with that country.

Certain Russian universities make active use of studies via Skype, which does not require additional electronic platforms or the development of new ones. Tomsk Polytechnic University is developing Russian as a foreign language programmes on the basis of Webinar lingo-processing technology, which is science- and labour-intensive, but a promising direction for franchising. In the case of Russian as a foreign language, fully fledged distance learning is not very effective at the beginning stage (0–A2), as it requires a reshaping of the auditory and graphic reflexes. Distance and mixed (part-time) methods of study are possible at the A2–B2 stages and potentially more effective at the B2–C2 stages.

More promising is distance learning for professional disciplines and the creation of a system for the continued professional development of teachers of Russian as foreign language. In the meantime, Russian universities are rapidly developing e-learning technologies.

4. FACTORS IMPEDING ACADEMIC MOBILITY AMONG STUDENTS

New rules for studying abroad at the government's expense were introduced in 1996. They were dictated by the need to raise the quality and effectiveness of the workforce, avoid 'levelling', and firmly connect study abroad plans with the needs of particular organizations. For this purpose, the State Education Committee organized a council to manage the Study Abroad Foundation.⁷² All outgoing students signed a contract with the fund, pledged collateral and provided guarantors. Those who returned to their home country on time were given their collateral and interest back, while violators reimbursed the government for their expenditures and paid a fine.

At the end of 2002, graduates and postgraduates were freed of the requirement to work for the government for five years, and the provision on reimbursement for expenditures on higher education at home was cancelled. That same year, the government established an organization to govern study abroad, whose website featured a list of the best universities in 21 countries.

In the near future, mechanisms for sending Chinese students to elite international universities at the state's expense on the basis of competitive selection will be updated and improved. By 2015, a total of 25,000 people will have received their education under this model.⁷³ Meanwhile, the government will increase financial support for the most talented Chinese students studying abroad at its expense or the expense of organizations – that is 92 per cent of all students studying abroad. In 2000, China published its *Education Mediation Regulations* to secure their legal rights and interests.⁷⁴ Then, in 2003, it founded the *China Scholarship Council*, where

⁷² The committee operated from 1985 to 1998 in place of the Ministry of Education.

⁷³ URL: http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_630/201207/139702.html (in Mandarin).

⁷⁴ A standard "Fiduciary Contract for Mediation Organizations When Traveling to Study Abroad," appeared in 2004, and a document that regulates their status appeared in 2008.

students and PhD candidates under the age of 40 can apply for scholarships. In 2012, there were 16,000 Chinese government scholarship recipients in various countries. The plan for 2013 is to raise that number to 18,000 (12,000 of which will be undergraduates and 2,000 will be master's and doctoral students).⁷⁵

Russia saw both gains and losses during its transition from cooperating exclusively at the intergovernmental level to prioritizing university collaboration in the 1990s. Until recently, the government had been largely removed from the process, which on the one hand gave universities a substantial degree of independence, but on the other hand let the process take its course.

When signing agreements with Chinese universities, Russian universities should be aware that outgoing mobility is still the prevailing trend with China, although the tendency is clearly changing.

4.1. MOTIVATION FOR CHINESE YOUTH TO STUDY IN RUSSIA

In the last decade, Russian scientists have been researching, among other things, the development stages of academic mobility for Russian and Chinese students, and the regional and social cross-section of students.⁷⁶ There was even an idea to bring students from China to work at Russian organizations as a way to ease the demographic crisis in Russia.⁷⁷

The motivation and specializations of Chinese students in Russia, as well as how well they adapted, were analysed on the basis of a poll and survey of several hundreds of respondents in various Russian cities in 2002 and 2007, as well as a poll of 1,000 Chinese students in years 10–12 at school conducted by scientists from universities in Vladivostok in 2010.⁷⁸ Only 90 of those polled (0.9 per cent) expressed the desire to study in Russia. These are primarily students from schools in the north-eastern provinces from low-income families. They are attracted to Russia's physical proximity to China, the relatively low cost of study (Table 9) – respondents are willing to pay between \$2,000 and \$3,000 – and the ease of getting a visa. Less than a third of these students attributed their desire to study in Russia to the high quality of the country's higher education system or an inclination to learn about its culture. According to the Chinese press, "the

⁷⁵ URL: <http://www.csc.edu.cn/News/4fa022c7254648ffa2be9ed8dacbf8bb.shtml>

⁷⁶ Russian-Chinese Cooperation in Education: An Analysis of the Past and Prospects for the Future. Moscow: National University of Science and Technology MSIS, 2009. Parts 1 and 2 (in Russian).

⁷⁷ Gelbras V.G. Russia in the Midst of a Global Chinese Migration. Moscow, 2004 (in Russian).

⁷⁸ Vorozhbit O.Y., Yurchenko N.A. Research of the Demand for Russian Educational Services among Chinese Students // Modern Research of Social Problems [electronic scientific journal]. 2012. No. 5. URL: <http://www.sisp.nkras.ru/e-ru/issues/2012/5/vorozhbit.pdf> (in Russian).

choice to study in Russia is made by graduates with below-average certifications and children from low-wage families,” as well as those not accepted into prestigious Chinese universities.⁷⁹

Table 9

**Cost of study for foreign students at certain Russian universities
(thousands of roubles per year)**

University	Bachelor's degree	Master's degree/ specialist
Far Eastern Federal University	100	150
Tomsk Polytechnic University ⁸⁰	70	116

The *Russian Public Opinion Research Center* polled 200 Chinese students studying in Russia and got similar results (Table 10). To a large degree, these students were motivated by the same considerations as the aforementioned students. Fifty-eight per cent of respondents chose a specialization in order to be able to go to Russia in the future. Ninety per cent of respondents do not believe they came to Russia in vain, although there are dissatisfied students among them.⁸¹

Table 10

Moods of Chinese students in Russia

Dissatisfied with studies	30%
Dissatisfied with living conditions and xenophobia	45%
Live in halls of residence with other Chinese students	80%
Actively spend time with Russian friends	7%
Work and study ⁸²	35%

Until recently, the lack of legal rights for Chinese and other foreign students to work side jobs had hampered the inflow of foreign students into Russia. In the summer of 2013, the Federation Council of the Russian Federation adopted amendments to the law on the legal status of foreigners, eliminating this obstacle by granting students from various countries the right to find legal employment in Russia on the basis of a student visa.⁸³

⁷⁹ Beijing Wanbao. February 1, 2008 (in Mandarin).

⁸⁰ At Tomsk Polytechnic University, foreign students are eligible to compete for scholarships from the rector, the Academic Council and the governor of the Tomsk Region.

⁸¹ Larin A.G. Chinese Students in Russia (based on sociological research) // Problems in the Russian Far East. 2009. No. 4. P. 91–111 (in Russian).

⁸² Casual side jobs or regular employment as business employees, translators, etc.

⁸³ Foreign students allowed to work in Russia on the basis of student visas // Rossiyskaya Gazeta. July 17, 2013. URL: <http://www.rg.ru/2013/07/17/studenti-site.html> (in Russian).

Respondents pointed to the language barrier as another obstacle to studying in Russia. Due to the deterioration in Soviet-Chinese political relations and the subsequent 'cultural revolution' (1966–1969), China rolled back the widespread study of Russian language. The process gradually recovered in the 1980s and 1990s. Today, the rapprochement between Russia and China and their growing trade relations are pushing Chinese people to study Russian, both at a specialist and foreign-language level at school and university (Table 11).

Table 11

Russian language study in China – 2012/2013 academic year⁸⁴

Level of study	No. of universities	No. of students	No. of graduates annually
Specialization at university	61	3,000–8,000	1500
As a foreign language at university	98	30,000–40,000	–
Study in secondary schools (northeast)	100	80,000	–

After English and Japanese, Russian is the third most popular foreign language to study at Chinese universities.⁸⁵ Universities in the northern provinces (Heilongjiang, Jilin and Dalian universities) and the autonomous regions of Inner Mongolia and Xinjiang, as well as in the megalopolises (Beijing, Shanghai, Tianjin) all have Russian-language departments, 'bases' (three in the Heilongjiang Province) and centres (Beijing Foreign Studies University, Shanghai International Studies University and Heilongjiang University).

In 2000, China started using English-language textbooks, educational cassette tapes and discs from the leading U.S. universities in 20 areas of expertise (including the humanities and natural sciences, informatics and IT, medicine, law, and management) on a franchising basis.

According to instructions from the Ministry of Education of the People's Republic of China, from 2001, 5–10 per cent of the entire curriculum of the leading Chinese universities had to be translated into English within three years, especially in areas such as biology, informatics, international trade and law.

Today, major Russian and Chinese universities offer programmes in English (usually at the master's level in economics and international relations). This

⁸⁴ Statement of Cooperation between the Russian Federation and the People's Republic of China in Education / Russian Education for Foreign Citizens. URL: <http://www.vi.russia.edu.ru/news/events/kitai/cpravka> (in Russian); Li Lingjun. Russian Language Teaching in China. URL: <http://www.do.gendocs.ru/docs/index-4100.html?page=3> (in Russian).

⁸⁵ More than 300 million people are studying English at Chinese universities.

will eventually allow them to increase the number of participants in bilateral exchanges and joint educational programmes.⁸⁶

4.2. CHINESE STUDENTS IN RUSSIA: DISTRIBUTION BY TERRITORY, DEGREE TYPE, EDUCATION AND SPECIALIZATION

Despite the fact that Russian universities are becoming more appealing for Chinese students, Russia currently accounts for just 1.5–2 per cent of Chinese students studying abroad (Table 12).

Table 12

Number of Chinese students studying at Russian universities⁸⁷

Academic year	No. of full-time students	No. of universities	No. of universities with Chinese part-time students
2000/2001	6,700	108	
2008/2009	17,800	279	23
2009/2010	16,500	270	
2010/2011	17,000	273	28

The number of Chinese students has not grown on a stable basis. The share of Chinese students in the total number of foreign full-time university students is decreasing; it was 16.1 per cent in the 2006/2007 academic year and 14 per cent in the 2010/2011 academic year.⁸⁸ After 2007, the number of full-time students rose dramatically, primarily in specializations such as economics and management, Russian language, and the humanities and social sciences.

However, there is hope that the situation will change. In 2012, the Ministry of Education and Science of the Russian Federation announced that it would consider the number of foreign students at a university as a new criterion for evaluating the effectiveness of universities.

Regional education also requires improvement. Judging by the set of Chinese students participating in major educational programmes in the leading universities in Central Russia, the situation in the 2012/2013 academic year is not improving. There were 68 Chinese students studying at the People's Friendship

⁸⁶ Chinese students can get English-language master's degrees in International Relations at the People's Friendship University of Russia, affirming their knowledge with TOEFL certificates, Cambridge Exams and IELTS.

⁸⁷ Arefyev A.L. Chinese Students in Russia. // Centre for Social Forecasting and Marketing. 2011. URL: <http://www.socioprognoz.ru/files/File/2013/ChinaStudentsNew2011.pdf> (in Russian).

⁸⁸ Ibid. Based on data: Education in Figures: 2013: Pocket Data Book. Moscow: Higher School of Economics National Research University, 2013. URL: <http://www.hse.ru/primarydata/oc2013> (in Russian).

University of Russia, whereas there were 225 per year prior to 2008. The majority of Chinese students in Russia study at universities in the Far East (from 50 per cent to nearly 100 per cent). That number is slightly less for universities in Siberia and the Urals, at an average of about 30 per cent.⁸⁹

Many researchers believe that demand for Russian educational services among Chinese citizens will vary in the future. It will increase substantially in the Chinese provinces bordering Russia, while it will either remain at an extremely low level or decline in the rest of the country. These forecasts diverge from the Chinese government's plans (Fig. 5).

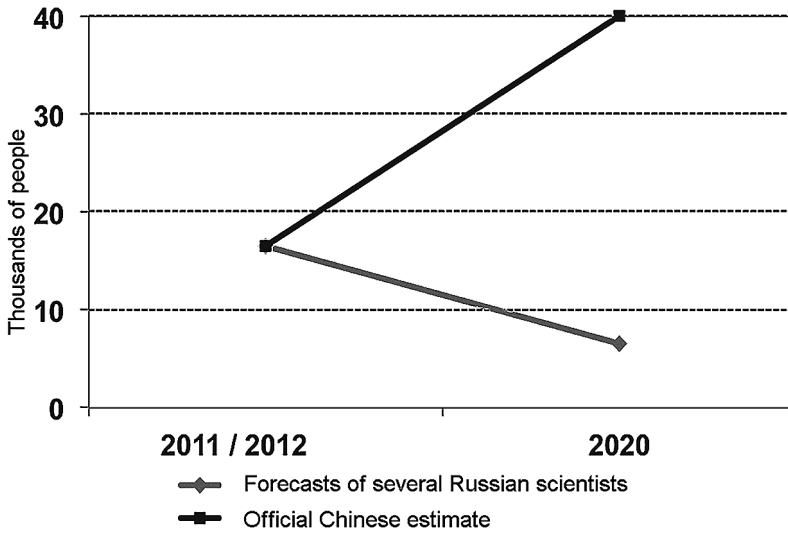


Fig. 5. Gap in Russian and Chinese estimates of Chinese student enrolment in Russian universities by 2020⁹⁰

The majority of Chinese citizens currently studying at Russian universities are on contracts. Five hundred people are studying in various forms with federal budget support, particularly extra grants from public organizations or universities and from extended university exchanges.

The level of tertiary education that Chinese students possess differs from the general picture of foreign student distribution in Russia (Fig. 6). In the 2010/2011 academic year, the number of foreigners studying in undergraduate programmes

⁸⁹ Ibid. Based on data: Education in Figures: 2013: Pocket Data Book. Moscow: Higher School of Economics National Research University, 2013. URL: <http://www.hse.ru/primarydata/oc2013> (in Russian).

⁹⁰ Vorozhbit O.Y., Yurchenko N.A. Research of the Demand for Russian Educational Services among Chinese Students // Modern Research of Social Problems [electronic scientific journal]. 2012. No. 5. URL: <http://www.sisp.nkras.ru/e-ru/issues/2012/5/vorozhbit.pdf> (in Russian); The 10th Forum of University Rectors of the Russian Far East, Siberia, and North-Eastern China was held in Changchun (China)... // Education in the Far East. October 1, 2012.

grew by 20.5 per cent, whereas there was just a 5 per cent growth among Chinese students. Meanwhile, the number of foreign students in master's programmes increased by only 5 per cent, and the number of those in PhD programmes grew by 5.2 per cent.⁹¹ The share of Chinese students studying in these programmes decreased, as did the share of Chinese students studying for specialist certifications (medical, cultural, and art faculties) that do not meet international standards.

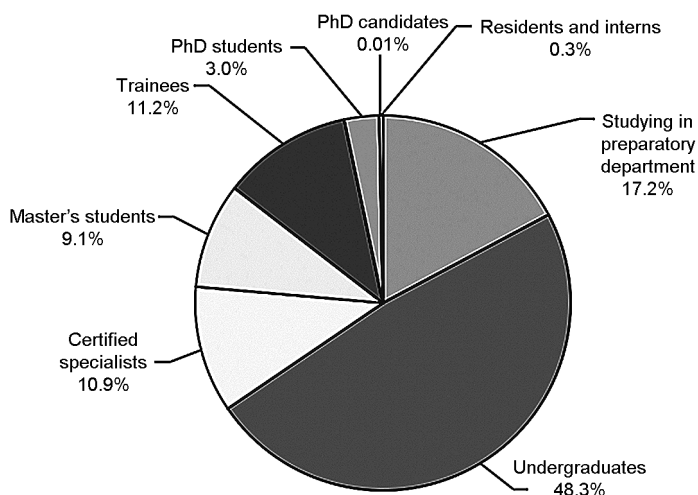


Fig.6. Share of Chinese citizens engaged in various types of study (programmes) during the day at Russian universities in the 2010/2011 academic year⁹²

However, this average ratio in Russia varies widely depending on the individual university and its geographical location. In several universities, the share of Chinese master's students is on the rise.⁹³

The significant discrepancy between the share of Chinese students in bachelor's and specialist programmes and the share of other foreign students in Russian universities hints at the particular nature of the specializations chosen by Chinese students. This is especially clear in comparison with the specializations chosen by foreign students from Western Europe and the United States.

⁹¹ Foreigners Studying in Institutions of Higher Education in the Russian Federation: Compilation. Issue 9 / written and compiled by A.L. Arefyev and F.E. Sheregi. Moscow: People's Friendship University of Russia, 2012. P. 10.

⁹² Arefyev A.L. Chinese Students in Russia // Centre for Social Forecasting and Marketing. 2011. URL: <http://www.socioprognoz.ru/files/File/2013/ChinaStudentsNew2011.pdf> (in Russian).

⁹³ At Tomsk Polytechnic University in the 2012/2013 academic year, the proportion was as follows: undergraduate students – 75 per cent; master's students – 10–15 per cent; students on courses and academic exchanges – 10 per cent; PhD students – 2 per cent. At the People's Friendship University of Russia: undergraduate/specialist – 37 per cent; master's – 32 per cent; PhD – 8 per cent.

China's 12th Five-Year Plan for socioeconomic development emphasizes the need for high-tech development in seven strategic industries that became particularly relevant after China's accession to the WTO: biotechnology, new energy resources, high-end equipment manufacturing, energy conservation and environmental protection, new-clean energy vehicles, new materials and new-generation IT.⁹⁴ The Chinese government offers financial assistance to students specializing in these industries abroad (70 per cent of all specializations – see Appendix 2).

In the last five years, Chinese students living in Russia have demonstrated a preference for studying economics, finance and management, and the humanities and social sciences (the share of Russian specialists and teachers is increasing). This inclination to study the humanities and social sciences is no accident. Given that the Russian value system is more familiar to Chinese society than are the American and Western European value systems, and taking into account the high opinion among Chinese scientists of the humanistic school in Russian philosophical and pedagogical thought,⁹⁵ the prospect of ramping up student exchanges in this discipline is very realistic. Chinese students will be able to fill the places that are not of interest to applicants from developed Western countries.

At the same time, Chinese students are showing less and less interest in studying physics and mathematics, the natural sciences and IT in Russia. In comparison with the 1989/1990 academic year, demand for engineering and technical training has plummeted by almost six times.⁹⁶ However, in the next decade, the Chinese government intends to lend support to training for national specialists at Russian universities in the exact and natural sciences, and engineering and technology, especially advanced technology. Intensified work by the *Association of Sino—Russian Technical Universities* may also stimulate this process. Russian universities and research institutes have already established several joint biology projects with China, and they are planning new projects for the future.

Agricultural specializations continue to be in extremely low demand, but clear areas of promise are materials science, geology, mineral resource exploration, oil and gas specializations, instrument-making and electrical energy.

⁹⁴ China's Twelfth Five Year Plan (2011–2015): the Full English Version / China Direct. May 11, 2011. URL: http://www.cbi.typepad.com/china_direct/2011/05/chinas-twelfth-five-new-plan-the-full-english-version.html

⁹⁵ For details, see: Borevskaya N.E. Soviet Pedagogy in the Opinions of Chinese Scientists // Pedagogy. 2007. No. 8. P. 57–71 (in Russian).

⁹⁶ Arefyev A.L. Chinese Students in Russia. P. 7. URL: <http://www.socioprognoz.ru/files/File/2013/ChinaStudentsNew2011.pdf> (in Russian).

4.3. RECRUITMENT CHANNELS FOR BRINGING CHINESE STUDENTS TO RUSSIAN UNIVERSITIES

Around the world, foreign students are primarily recruited through the internet. According to experts, as a rule, 92 per cent of them arrange their overseas studies through university websites (particularly in Asian countries), as well as websites like *chasedream.com* in China (220,000 members) and *pagalguy.com* in India (over 400,000 members).⁹⁷ Recruiting agencies also play a major role. Russian universities configured to large-scale and long-term cooperation with China have gone down this path in recent years. However, it should be noted that Chinese students planning to study in Russia use agencies much more rarely, preferring instead direct contact with a university (Fig. 7).⁹⁸

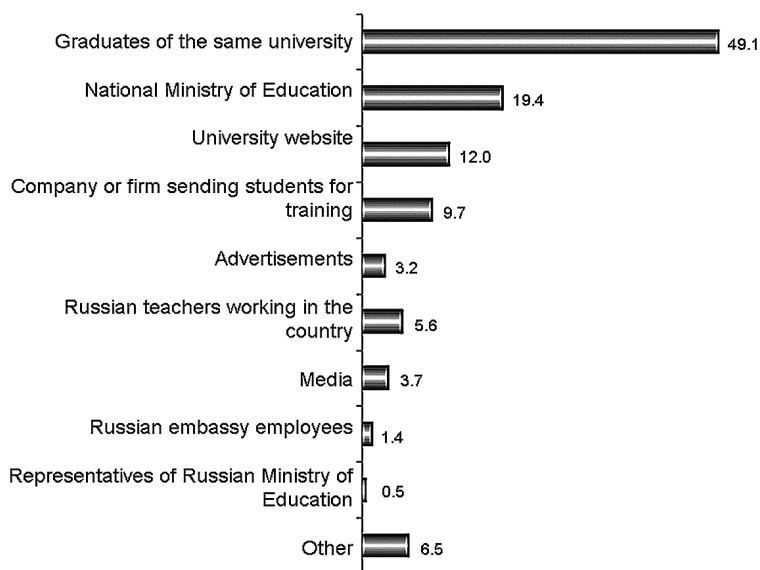


Fig. 7. Sources of information on Russian universities that host Chinese applicants, per cent⁹⁹

Russian universities currently use the following channels to recruit Chinese students:

- Participation in international education exhibitions in China. Direct recruitment at exhibitions and online is responsible for only a small

⁹⁷ Huang Futao. Internationalization of Higher Education in China // Global Campus.net. URL: <http://www.gcn-osaka.jp/project/finalreport/2/2-3e.pdf>

⁹⁸ Shchepin K. On Sabbatical // Rossiyskaya Gazeta. January 31, 2013. URL: <http://www.rg.ru/2013/01/31/student.html> (in Russian).

⁹⁹ Image by A.L. Arefyev, according to data from 2005–2007 sociological polls.

proportion of new student enrolment. Therefore, it is very important for Russian universities to participate in exhibitions more actively and more often, which requires the support of the Ministry of Foreign Affairs of the Russian Federation and Ministry of Education and Science of the Russian Federation. They also need to prepare materials in English and Chinese;

- Cooperation with communities of Chinese students;
- University websites in Chinese. The People's Friendship University of Russia is planning to launch the Chinese version of its website in the 2013/2014 academic year;
- University advertisements (banners) on Chinese social networks (see the People's Friendship University of Russia's page on youku.com: http://www.i.youku.com/u/id_UNTUyNjE3MjMy);
- Work with Chinese recruiting agencies and other intermediaries in Russia. The People's Friendship University of Russia works with LLC Dom Kitaya, paying an agency fee worth 15 per cent of the first year of study. Tomsk Polytechnic University works with *Beijing Bridge Cultural Exchange Co., Ltd*;
- Recruitment through partner universities in China. According to Tomsk Polytechnic University, this channel is responsible for 56 per cent of all accepted students.

The last two channels seem to be the most effective because they make it possible to select students in a targeted manner after a preliminary, comprehensive study of the potential partner and planning of potential disciplines.

4.4. RUSSIAN STUDENTS AT CHINESE UNIVERSITIES

The number of Russian students at Chinese universities has been increasing since 2005/2006 thanks to China's active education policy (Table 13).

Russian universities have the chance to occupy up to 4 per cent of the Chinese educational services market.¹⁰⁰

There are several factors at work behind the rising number of Russian students at Chinese universities (Table 14). Among them are: Chinese scholarships (the most important factor), rising interest in studies in China, and financial support by Russian universities that have agreements with Chinese partners. There is generally no stable growth trend, although the situation is different at certain universities in Siberia and the Russian Far East. For example, the number of Tomsk Polytechnic students at Chinese partner universities quadrupled from 2003 to 2012, with significant fluctuations. The

¹⁰⁰ Ibid.

majority of Russian students who go to China are future sinologists or students of other disciplines on short-term language courses.

Table 13

**Share of main countries
on the Chinese educational services market in 2010¹⁰¹**

Country	Share on the educational services market, per cent	Share of students in total foreign student population in China, per cent
Russia	2	3.5
USA	58	7.5
UK	20	–
Canada	8	–
Japan	–	9.5
South Korea	–	33
Vietnam	–	5.0

Table 14

**Number of Russian students at Chinese universities
in the 2011/2012 academic year¹⁰²**

Total number of students	13,300 (30,000 by 2020 ¹⁰³)
Including undergraduate	9,000
On a contractual basis	Over 90 per cent
Number of universities with Russian students	100 (in 22 provinces)

In the last two years, the key points of attraction for Russian students – metropolitan universities and universities located in China's north-eastern provinces (Heilongjiang and Liaoning) – have gone unchanged. The majority of Russian students are in the Heilongjiang Province, which is home to an exchange centre for students from the border regions.

One of the key elements to establishing equal relations for academic exchanges is to give Russian exchange students the opportunity to be educated in disciplines that have made a breakthrough in China or are weaker or non-existent in Russia.

¹⁰¹ Shchepin K. On Sabbatical. Russia loses its foothold on the Chinese education market but promises to return // Rossiyskaya Gazeta. January 31, 2013 (in Russian).

¹⁰² Arefyev A.L. Russian Students at Chinese Universities // Demoscope Weekly. 2010. Nos. 441–442. URL: <http://www.demoscope.ru/weekly/2010/0441/analit03.php> (in Russian).

¹⁰³ According to calculations by official Chinese bodies, and including various levels of education, the number is 50,000 people. See: The 10th Forum of University Rectors of the Russian Far East, Siberia, and North-Eastern China was held in Changchun (China)... // Education in the Far East. October 1, 2012; China and Russia Plan to Hold Joint Year of Youth Exchanges – China's Vice Minister of Education Hao Ping // News.Cn. December 6, 2012. URL: http://www.russian.news.cn/dossiers/2012-12/06/c_132023143.htm (in Russian).

In their efforts to forge a clearer and more active position on this problem, the Russian authorities would be well served to compare the disciplines that are popular among foreign students in China as a whole and among Russian students in particular (between the 2006/2007 and 2008/2009 academic years, in terms of the share of total number of students).¹⁰⁴

- Chinese language: decrease from 60 per cent to 55 per cent; Russians – 75.3 per cent;
- Medicine (including pharmacy): approximately 13 per cent (with 60 per cent of this being Western medicine taught in English and 40 per cent being traditional medicine); Russians – 1.7 per cent;
- Humanities: 8 per cent, Russians – 9 per cent; economics and management – 10 per cent,¹⁰⁵ Russians – 8 per cent;
- Natural and exact sciences: soared from 0.6 per cent to 4.5 per cent; Russians – approximately 1 per cent.

Very few Russian students (and foreign students in general) study in engineering and agricultural, pedagogical and historical faculties in China (there are four people in each of these two disciplines). However, the last several years have seen a substantial rise in the share of students in economics, management and area studies, as well as students specializing in physical education and sports.

Russians who study in China predominantly come from middle class families attracted to the low cost of education relative to the West. The price averages at \$3,500–\$4,000 per year at prestigious universities (it can top \$6,000 for certain specializations or courses in English), while it ranges from \$1,500 to \$2,500 for universities in the provinces.¹⁰⁶

The low quality of Chinese education in several disciplines – particularly for programmes offered to foreigners – has a negative influence on Russian students in China. Chinese university programmes require nearly half the number of academic hours that similar specializations in Russian universities require. Low educational requirements, the inaccessibility of certain lectures, language and cultural barriers, and living conditions all contributed to about a third of the problems that Russians have faced (54.3 per cent of those polled claimed to not have difficulties adapting).¹⁰⁷ Another significant obstacle is the difficulty of finding work with a Chinese diploma in Russia.

¹⁰⁴ Arefyev A.L. Russian Students in Chinese Universities. Demoscope Weekly. 2010. Nos. 441–442. URL: <http://www.demoscope.ru/weekly/2010/0441/analit03.php> (in Russian).

¹⁰⁵ Leading Chinese universities have made an enormous breakthrough in the teaching of these disciplines through the use of the best Western textbooks.

¹⁰⁶ Arefyev A.L. Russian Students in Chinese Universities. Demoscope Weekly. 2010. Nos. 441–442. URL: <http://www.demoscope.ru/weekly/2010/0441/analit03.php> (in Russian).

¹⁰⁷ Ibid.

Economic and regulatory barriers such as the procedure for scheduling staffing and business trips have resulted in a paucity of Russian teachers and professors at Chinese universities (teachers of the Russian language predominate). For the majority of Russian universities, it is either impossible or unfeasible to send staff to work in China; university statistics are opaque.

5. POTENTIAL FOR UNIVERSITY COOPERATION THROUGH ASSOCIATIONS

Today the world is transitioning from bilateral cooperation between individual universities in the context of specific educational or research programmes toward multilateral interaction among consortiums of universities on a wide range of issues and topics. This emerging trend is connected with the fact that a growing number of scientific problems (the environment, sustainable development, disease prevention, etc.) require collaboration among scientists from many countries. It is also connected with the fact that the aim of modern educational programmes is to prepare specialists with skills and experience in cooperating with people from a variety of cultures, as such specialists are in high demand in the global market.

Over the past several years, this tendency has begun to affect Russia's cooperation with Chinese educational and scientific centres.

The following Russian associations could potentially serve as actors in this process:

- The *Association of Leading Russian Universities (ALU)*: founded in 2010, it unites 40 universities;
- The *Association of the Leading Universities in Economics and Management (AVVEM)*: 2012, 18 universities;
- A consortium of universities that includes the *Confucius Institutes* (17 universities).

Bilateral associations:

- The *Association of Sino—Russian Technical Universities (ASRTU)*: founded in 2011 on the basis of Bauman Moscow State Technical University and the Harbin Institute of Technology, it unites 15 universities from each country;

- The *Association of universities of the Far East and Siberia of Russia and North Eastern regions of China*. This association was established in 2012 at China's initiative and in fulfilment of an order by the two countries' ministries. The founders are Pacific National University (Khabarovsk) and Northeast Agricultural University (Harbin).

Multilateral consortiums that include Russian universities:

- A consortium of 53 member universities of the of the SCO University;
- The *Association of Pacific Rim Universities (APRU)*: 42 leading research universities from 16 countries;
- An initiative to create a *BRICS League of Universities* (2013, from Russia it includes the National Research University of the Higher School of Economics, Moscow State Institute of International Relations of the Ministry of Foreign Affairs, Ural Federal University [URFU], and Far Eastern Federal University [FEFU]; from China it includes Fudan University, Tsinghua University, Sichuan University, East China Normal University and Zhejiang University). Other universities from the BRICS countries are expected to join the League. The challenge that these universities face is to identify key areas for joint educational and scientific projects and become leaders in their respective disciplines. URFU and the National Research University are now creating SCO and BRICS research centres.

China should develop cooperation on the basis of the following associations:

- The *China Association of Higher Education*;
- The *China Education Association for International Exchange (CEAIE)*;
- The *Chinese Service Center for Scholarly Exchange (CSCSE)*;
- The *Chinese National Office for Teaching Chinese as a Foreign Language (Hanban)* and the partner universities of the Russian *Confucius Institutes*.

AVVEM has the potential to collaborate with China in several areas, including monitoring the quality and improving the standards of educational programmes and facilitating staff recruitment on the inter-university specialist market.

The *Association of Sino-Russian Technical Universities (ASRTU)* has built up noteworthy potential in facilitating cooperation between Russian universities and innovative Chinese companies, experience-sharing in engineering education, and the mutual recognition of diploma equivalency for its members.¹⁰⁸

¹⁰⁸ In 2013/2014, the ASRTU will be chaired on the Russian side by St. Petersburg National Research University of Information Technologies, Mechanics and Optics (the base university for IT at SCO University). Tongji University will serve as the co-chair from China.

**Cooperation among associations
of Russian and Chinese universities in the 2012/2013 academic year**

Russian association or association with Russian membership	Chinese association or association with Chinese membership	Form of cooperation (year)	Result
ALU	CEAIE	Roundtable of leading Russian and Chinese universities at Education Expo (2012)	Agreement to organize regional cooperation, including in the context of associations
AVVEM	Chinese initiative union of Sino-Russian economic universities		
AVRIK	AVRIK	Executive Committee meeting 2013	Initiatives to exempt students of all levels from paying for studies at partner universities and to create an institute for PhD and master's students
ASRTU	Chinese university initiative to cooperate	Annual summits: Russo—Chinese forum “The Blue Silicon Valley” (2013); “Train of Friendship” student initiative (2012/2013 academic year)	
FEFU	APRU	Meeting of student organization leaders on the basis of FEFU (2013); annual meeting of presidents of APRU universities (2013); annual conference of deans of law schools of APRU members (2013)	Potential to create resource centres. Joint programmes for further study and raising qualifications for internationalizing higher education; joint projects on entrepreneurial education
FEFU	APEC	“Shaping Education Within APEC” conference (2012)	

Russian universities that have *Confucius Institutes* build their cooperation primarily along a bilateral vertical: Hanban – the Chinese partner – Russian university. However, as URFU's experience shows, collaboration through *Confucius Institutes* can move beyond the scope of the mere propagation of Chinese language and culture and be expanded to include academic exchanges.

SCO ministers of education have been meeting regularly since 2006, and an *Education Week* has been held annually since 2008. Their participants set forth the task of transitioning to systematic cooperation, introduce their own university rating system, develop joint criteria and draft university accreditation procedures. SCO University, the largest-scale educational project in Eurasia, was established in 2010 as a single networked learning environment by uniting 75 universities in Russia, China, Kazakhstan, Kyrgyzstan and Tajikistan. SCO University was thought up as a testing ground for engaging in joint scientific research and formulating innovative approaches to training staff for a variety of leading disciplines (ecology, nanotechnology, IT, energy, and regional management). It represents a new type of infrastructure for tertiary studies. However, despite the promise it holds, SCO University is still focusing on recruiting students from Central Asia to Russian universities. Participation by Chinese universities in this process is formal,¹⁰⁹ although their representatives annually declare the possibility of allotting quotas for students from these countries and Russia.

Russia's participation in APRU is promising, but not enough. The only Russian university represented in APRU is FEFU, whereas China is represented by seven universities. However, despite China's participation in many high-priority scientific research programmes, not a single one of its universities has led their implementation.

The *Asia-Pacific Economic Cooperation (APEC)* working groups have much potential to create and develop joint and/or international resources and expert centres, but the mechanism for initiating projects implies the presence of 'co-sponsors'. Russia's main educational initiative (FEFU) within APEC is to create a university regional network on the basis of APRU.

Collaboration between particular universities within the context of *BRICS* is realistic in the next few years only for particular groups of countries, although at this point educational cooperation even among Russia, India and China is stalling.

¹⁰⁹ So far, it has been limited to courses organized at Xinjiang University in 2012 to raise the qualifications of SCO University, which did not pass the approval procedure within SCO University mechanisms.

6. DIRECTIONS FOR INTER-UNIVERSITY SCIENTIFIC COOPERATION

6.1. SCIENTIFIC COOPERATION

Russia and China have had a fruitful history of scientific collaboration, signing an intergovernmental agreement in 1992 and later forming a special sub-commission. The most active cooperation with China took place among 30 institutes within the Russian Academy of Sciences.¹¹⁰ However, in the last two decades, as Russia's research universities have transformed into scientific centres,¹¹¹ inter-university scientific cooperation has intensified with Chinese universities that are on the list of foreign general institutions of higher education. These institutions' documents on education level and (or) qualifications are recognized in Russia. Over 50 per cent of joint scientific projects deal with technology (including IT); more than one third are dedicated to the natural sciences; and about 10 per cent are in the social and humanitarian fields.¹¹²

There are not yet very many Russian—Chinese resource and expert science centres at universities and their industrial parks, but China has expressed distinct interest in them. There are several paths to forming a resource and expert science centre: network interaction between universities (particularly SCO University) with the support of the Ministry of Education and Science of the Russian Federation and interested authorities; the creation of centres and mirror laboratories for developing

¹¹⁰ See: The Russian Academy of Science's Cooperation with the National Academies and Science Centres of Foreign Countries // Russian Academy of Sciences [official website]. URL: <http://www.ras.ru/about/cooperation/internationalcooperation4.aspx> (in Russian).

¹¹¹ By 2008, 63 per cent of all state pilot experimental laboratories and 36 per cent of national project centres, 90 per cent of scientists in philosophy and general sciences, and 62 industrial parks were concentrated at Chinese universities. Universities that are involved in pilot projects perform an enormous amount of R&D.

¹¹² Russian—Chinese Cooperation in Education: An Analysis of the Past and Prospects for the Future: materials from the third Russian—Chinese conference "Bilateral Scientific and Educational Cooperation between Russian and Chinese Universities." Moscow, 2009. Part 1. P. 171.

new technologies; the establishment of library networks; and collaboration between the directors of master's and PhD students (or candidates). Resource and expert science centres also have the potential for joint and/or multilateral financing and cooperation with regional and intergovernmental organizations.

One highly promising path to expanding scientific collaboration is trilateral joint projects between Russian and Chinese universities in conjunction with Western partners. Multilateral projects are more difficult to manage, especially for the head organization (in terms of issues related to financing, differences in mentality and understanding of terminology, and nuances in scientific methods). However, from the technical point of view, there are no objective obstacles standing in the way of effective interaction.

The Institute for Statistical Studies and Economics of Knowledge at the National Research University Higher School of Economics and the Beijing Institute of Technology have been implementing a three-year, four-sided project called Rising Powers since 2012. This project was initiated by the Manchester Institute of Innovation Research in the United Kingdom, with the United States' Georgia Technical Institute also participating. The project, funded by the UK's *Economic and Social Research Council*, aims to evaluate the influence of nanotechnology on the Russian and Chinese economies using various research methods. One feature of the project is that it supports academic mobility, involving students so they can apply their experience to their master's theses. Participants in the project communicate through a variety of platforms: video conference, e-mail, file exchanges on the internet (Dropbox), and in-person meetings at conferences once a year.

An *International Resource Centre for the Internationalization of Higher Education and Science* is gradually being formed on the basis of FEFU.

At this stage, few joint projects are being implemented, mostly because of weak interest on the part of scientists and their heavy workload. Given the successful experiences of several universities (FEFU, Peking University, etc.), it would seem most promising to open Russian laboratories in China or create bilateral or trilateral projects with the help of academic institutes (many universities have agreements with them as part industrial parks).

Among samples of these projects are the *Chinese-Russian Centre for Cooperation in the Creation of New Technologies and Materials* (formed on the basis of the Harbin Institute of Technology, the Heilongjiang Academy of Agricultural Sciences, scientific research institutes, and related enterprises in Harbin), as well as the Zh.I. Alferov Russian-Chinese Joint Laboratory of Information Optoelectronics and Nanoheterostructures (created by the St. Petersburg Academic University and Beijing Jiaotong University).

In contrast with projects in the areas of technology, physics and the natural sciences, the budgets for socio-economic projects are small. They yield

less direct benefits for Russian universities: expanded partner networks, new experience, knowledge, increased international recognition and better brand image.

6.2. PROSPECTS FOR JOINT INDUSTRIAL PARKS

Over the last three decades, China has substantially increased its scientific potential, which has allowed it to participate on an equal basis with its Russian partners when implementing projects in new materials, energy conservation, biotechnology, nanotechnology and alternative energy sources. The two countries are gradually transitioning from short-term, fragmented, minor projects to medium and long-term large-scale projects.¹¹³ In the Chinese government's opinion, this cooperation can help it overcome constraints on China's access to new Western technologies and even open up opportunities to get those technologies at lower prices.

Russia and China are also establishing scientific and technical cooperation in the context of joint industrial parks (there are 62 at major Chinese universities).¹¹⁴ In this case, the focus is a Russian—Chinese industrial park called *Družhba* ('Friendship'), created in 2004 at the recommendation of the *Sub-Commission for Scientific and Technical Cooperation under the Russian—Chinese Commission on Preparation of Regular Meetings of the Heads of Governments*. *Družhba* was founded by the Moscow Power Engineering Institute and Harbin Institute of Technology. Its primary tasks and activities include:

- Establishing partnerships between Russian and Chinese research institutes, universities, companies, and individual scientists and specialists, and the exchange of services at all stages of the tech business;
- Selecting Russian scientific and technical developments with commercial potential and choosing Chinese partners to commercialize them;
- Facilitating joint high-tech production.

With the help of the *Družhba* industrial park, over 60 Russian subjects are engaged in business relations with China. Cooperation is most active under interregional agreements, especially between border territories. Thanks to *Družhba*, over 400 contacts have been made between Russian and Chinese research institutes and industrial companies, as a result of which over 100 joint scientific and technical projects have been born (eight of which are high priority).

¹¹³ Ilinskaya I. New Forms of Russian—Chinese Cooperation. *Economic Policy*. July 10, 2012. URL: <http://www.ecpol.ru/index.php/2012-04-05-13-42-46/2012-04-05-13-43-05/196-novye-formy-rossijsko-kitajskogo-sotrudnichestva> (in Russian).

¹¹⁴ As of the end of 2012, China had a total of 100 industrial parks and industrial development zones for new and high technology.

Russia is carrying out a wide array of projects in China, although so far not a single project has been implemented with the help of Chinese partners in Russia. Russia offers weak economic incentives in comparison with China, which prevents it from establishing joint high-tech enterprises with Chinese capital on Russian soil. A lack of clearly formulated ideas, tasks and priorities of cooperation (at least in the medium-term) is preventing the industrial park from stepping up its activity. Also long overdue is the establishment of joint enterprises and the creation of the accompanying infrastructure (*Druz'ba*, the *Center for Scientific and Technical Cooperation in the Heilongjiang Province*, and the *China—Russia High-tech Industries Pilot Base* in Yantai City are elements of this infrastructure). There is also a need to identify the interests of partners, seek out advanced scientific ideas and technological developments, and foster the environment and conditions for their adaptation, transfer and staff training. These problems can be solved by speeding up the formation of a system of educational and consulting centres, improving the regulatory framework for protecting the results of intellectual activity, and commercializing technologies, particularly from Russia.

The *Druz'ba* industrial park is financed through participation in tender projects of the Ministry of Education and Science of the Russian Federation, the rendering of paid services during conferences and seminars, international exhibitions and communication sessions, and consulting services.¹¹⁵ Of extreme urgency is the need to organize joint project financing, as financing and commercialization are currently separate. Russia and China have different ways of offering them government support. Russia uses a tender system with arbitrarily established priorities and costs, whereas China offers direct government financing for strategic and special projects. The widely used parity principle is the most suitable form of project financing at the pre-commercial stage.

Another possible mechanism would be to create a joint venture fund with state participation or joint R&D with separate financing, but with subsequent joint commercialization of the results on national and international markets.

The year 2012 demonstrated that Russian and Chinese universities, research institutes and organizations can actively develop joint models for scientific and technical cooperation. The *Skolkovo Foundation* and Zhongguancun Science Park – Z-park at Peking University – signed a cooperation agreement, and plans are under way to jointly develop scientific and technological incubators and research (the first priority is to focus on biomedicines and IT, energy efficiency and new materials).

¹¹⁵ Preparations for and participation in exhibitions and negotiations, the presentation and creation of joint projects, and mutual secondments of experts.

By failing to publish articles in joint scientific publications, Russian and Chinese universities have made extremely poor use of the results of their joint scientific conferences and research projects. Russian journalists are willing to print materials by Chinese authors, but those materials need to be in Russian. Russian scientific articles are virtually unpublished in China; besides language difficulties, a lack of interest on the part of Chinese scientific journals and Russian scientists themselves stands in the way of publication.

CONCLUSIONS AND RECOMMENDATIONS

Both Russia and China are bringing their own ambitious plans to life, with the end goal of transforming themselves into centres of gravity for students from all countries in the Asia-Pacific region. At this time, China has a significant advantage over Russia in several ways. Therefore, it is of vital importance for Russia to develop tactics and strategies in education.

There are three powerful stimuli for internationalizing Russian higher education towards China:

- Opportunities for scientific and technical innovation and for preparing high quality educational resources are limited within the bounds of the European market for educational services;
- Education plays a crucial role in the process of forming a Eurasian Economic Union and establishing Russia's position in the Asia-Pacific region;
- The Chinese education market is developing rapidly, and it has not yet formed completely. There is a lot of free space on this market, particularly for foreign participation.

Russia has a unique advantage in its push to gain a better foothold on the Chinese education market. Its physical proximity to China, substantial educational and scientific potential in a variety of fields, and the similarity in the way the Russian and Chinese education systems are modernizing are all boons for Russia.

At this stage, the Russian government needs to play a more active role in putting together a strategy that would enhance Russia's position on the education market in the Asia-Pacific region, particularly in China. It also needs to more actively determine Russia's potential as a consumer and supplier of educational services and draft a programme of priorities (zonal, scientific fields, etc.).

According to the *Concept for the Export of Educational Services for 2011–2020*,¹¹⁶ the Ministry of Education and Science has been instructed to develop a strategy, and a unified inter-ministerial entity – a governmental commission specially created for this purpose – is charged with coordinating the work. The commission is tasked with restoring the government’s macro-regulating functions in the process of international cooperation among universities and with joining the forces of governments, universities, scientific institutes and public organizations. It will have to systematically analyse information from universities, employees at educational entities and, most importantly, scientists from various fields, including geographers. It should be noted that that Chinese education market cannot possibly be properly developed without a thorough analysis not only of the development trends in its education system, but also of the socio-political, economic and cultural context.

Russia also has a crucial need to clearly set its own goals, disciplines and specifics of mobility in the Asia-Pacific region – and in China in particular – as well as to forge a systematic approach that would allow it to work with starkly differentiated types of academic mobility. Russia’s regions need to determine their preferred proportion of incoming and outgoing mobility.

Steps aimed at exporting Russian higher education to the Chinese market need to be taken at two levels – at the government level and at individual Russian universities.

The following measures need to be adopted at a governmental level:

1. Applications should be formed for staff training at Chinese universities, and mutual exchange programmes should be coordinated based on an analysis of current and future areas of economic cooperation and exports of Russian technology to China, as well as the specifics of particular universities in China.
2. Strategies and tactics need to be thoroughly developed for interaction with the Chinese education system in the context of the *WTO*, given the significant discrepancies in the models of educational services in each country.
3. A legal, organizational, informational and advertising framework needs to be developed for exporting educational services. This includes expanding the network of information and consulting centres on the basis of several major Chinese universities.
4. Russia should participate more actively in bilateral and multilateral scientific projects in China, create international pilot academic and

¹¹⁶ Concept for Exporting Russian Educational Services in 2011–2020 // Journal of International Organizations. 2010. No. 1. P. 96–106. URL: http://www.ecsocman.hse.ru/hsedata/2011/01/18/1208078939/Concept_for_Exporting.pdf (in Russian).

- educational institutions using both budgetary and extra-budgetary funds, and reach agreements on parity co-financing.
5. The Ministry of Education and Science of the Russian Federation should lend support to schools that teach Russian language in China. That includes textbook and methodological support, courses aimed at raising the qualifications of Russian language teachers, and regularly sending Russian language teachers to Chinese universities.
 6. The website Study in Russia (EduRussia.ru) needs to be geared towards China.
 7. Russia should create financially supported educational programmes for China (on the example of *Erasmus Mundus*, *DAAD*, *TEMPUS* and *FP7*),¹¹⁷ grant foreign applicants the opportunity to compete for scholarships in Russia, and increase the number of scholarships for Chinese students.
 8. New programmes should be created to stimulate growth in academic mobility.¹¹⁸ It would be worthwhile to found an *Academic Mobility Support Fund* that in the future could cooperate with the *China Scholarship Fund* and facilitate the creation of ‘mirror’ funds in each country. For the same reason, the number of budget assignments and scholarships for Chinese students should be increased, and the Ministries of Foreign Affairs and Education and Science of the Russian Federation should promote expanding the scale of Russian university participation in global educational exhibitions in China.
 9. Degree and diploma equivalence needs to be mutually recognized.
 10. An institutional and regulatory framework should be established to create and implement joint educational institutions and programmes, and dual degree programmes with Chinese universities.
 11. A set of measures, including legal measures, should be developed to oversee the quality and quantity of Chinese educational services exported to Russia (including for university branches).
 12. *Rossotrudnichestvo* should offer targeted support for Russia to cooperate with China on an inter-ministerial level on projects aimed at modernizing higher education and science. These would be joint projects implemented by university associations, academies, SCO University, interested foundations and other organizations.
 13. Information should regularly be exchanged on each country’s accomplishments in science and education, as this would help stimulate process integration. A joint information base should be created for policy issues in education (particularly for the purpose of harmonizing state education standards, programmes, and lists of university majors). A thematic online journal should be published with the most interesting

¹¹⁷ Seventh Framework Programme for European Scientific and Technical Cooperation for 2007–2013.

¹¹⁸ For more information, see: The Results of Systematizing and Evaluating Russia’s Mechanisms of Cooperation with Foreign Countries for the Purpose of Developing Academic Mobility: Regulatory Framework, Tools, Practice. Moscow: RFPK, 2013.

articles (on the example of the bulletin published by the National Committee for BRICS Research) and jointly financed by Russian and Chinese universities and interested authorities.

The steps recommended by China to stimulate academic mobility should also be taken into account. These include measures to ensure the safety of Chinese students in Russia, create regional centres for applications to study Russian before they enter the university (jointly financed), and develop internship programmes at Russian or Chinese companies.

The following set of measures is needed at the Russian university level:

1. Each university should determine its real potential for internationalization, its geographical priorities, disciplines and its prospects for academic mobility in the Asia-Pacific region. A systematic approach should be adopted that would facilitate work with different types of mobility. Universities in the European part of Russia should probably favour agreements with European universities, while Siberian and Far Eastern universities could increase contacts with universities in China and other Asia-Pacific countries.
2. Chinese partner universities should be proactively and carefully selected on the basis of unique interests and the principle of the strong cooperating with the strong.
3. *A Sino—Russian Network for Academic Mobility Development* needs to be created, with a database of universities that already have contracts or are aiming for cooperation, as well as joint educational institutions and programmes.
4. Activities aimed at recruiting Chinese students through various channels should be improved.
5. The thematic priorities of joint research should be identified and inter-governmental resources and expert centres (platforms) should be created on the basis of universities.
6. University cooperation should shift from predominantly bilateral to multilateral, particularly in the framework of university leagues and associations. The accumulated potential of Russian—Chinese partnership can serve as the core of multilateral projects.
7. The university community should be encouraged to take interest in cooperating with its Chinese colleagues and enhance its professionalism. Courses should be offered to raise the qualifications of employees of the international relations departments of educational institutions and faculty members under the programme ‘Current Key Areas of the University’s International Activity’,¹¹⁹ which includes the peculiarities of the Asia-Pacific region.

¹¹⁹ This course was developed and taught at the People’s Friendship University of Russia.

8. The Russian language should be actively spread through free of charge preparatory classes.

These steps would help transform Chinese partner universities into bridge-heads for Russia's continual presence in China and expand its influence in the economic and political systems of the Asia-Pacific countries as a whole.

When assessing Russia's prospects on the Chinese education market, its partner should also receive an objective evaluation. It is impossible to agree with those specialists who think that the strategy for internationalizing higher education, as in Soviet times, should be built on the basis of unilateral aid to the Asia-Pacific region.¹²⁰ Today, the partnership that Russian universities and any other organizations have with China continues along this trajectory. It needs to become equal and mutually beneficial as soon as possible. With this purpose in mind, Russia needs to clearly identify its interests when creating any joint scientific and educational project in China. Finally, it must develop a mutually advantageous doctrine that would translate the tough competition between Russia and China in the educational space of the Asia-Pacific region into softer options of co-development.

¹²⁰ See: Tsvetkovoï N.A. *U.S. International Education Policy: History and Modernity*. St. Petersburg. Publication of St. Petersburg State University, 2010.

APPENDICES

APPENDIX 1

China has several national rating systems:

- The Chinese University Ranking, compiled by the Chinese Academy of Management Science;
- The Academic Ranking of World Universities (ARWU), compiled by Shanghai Jiao Tong University, one of the most important in China;
- China University Assessment – an independent rating compiled by professor W. Shulian and his team.

The rankings assigned to Chinese universities vary widely from rating to rating.

Rankings of Chinese universities in leading international ratings¹²¹

ARWU 500 best universities in the world (2011)	QS Top 500 Universities (2011)	Webometrics Ranking of World Universities (2011)	Times Higher Education World University Rankings (2011)	Performance Ranking of Scientific Papers for World Universities 500 best universities in the world (2011)
Tsinghua University (151–200)	Peking University (47)	Peking University (109)	Peking University (49)	Tsinghua University (123)
Fudan University (201–300)	Tsinghua University (54)	Shanghai Jiao Tong University (167)	Tsinghua University (71)	Peking University (127)
Nanjing University (201–300)	Fudan University (105)	Tsinghua University (197)	University of Science and Technology of China (192)	Zhejiang University (141)
Peking University (201–300)	Shanghai Jiao Tong University (SJTU) (151)	Zhejiang University (National Che Kiang University) (228)	Fudan University (226–250)	Shanghai Jiao Tong University (165)
Shanghai Jiao Tong University (201–300)	University of Science and Technology of China (154)	Fudan University (Shanghai Medical University) (259)	Nanjing University (251–275)	Fudan University (Shanghai Medical University) (205)
University of Science and Technology of China (201–300)	Nanjing University (177)	Beijing Normal University (349)	Sun Yat-sen University (276–300)	University of Science and Technology of China (213)
Zhejiang University (201–300)	Zhejiang University (218)	Nanjing University (353)	Shanghai Jiao Tong University (301–350)	Nanjing University (267)
China Agricultural University (301–400)	Tongji University (388)	Xiamen University (499)	Zhejiang University (301–350)	Sun Yat-sen University (291)
Huazhong University of Science and Technology (301–400)	Tianjin University (401–450)		Harbin Institute of Technology (351–400)	Sichuan University (337)

¹²¹ Chinese Universities / Medelle Swiss Consulting Group. URL: <http://www.educationmedelle.com/articles/universiteti-kitaya.html> (in Russian).

ARWU 500 best universities in the world (2011)	QS Top 500 Universities (2011)	Webometrics Ranking of World Universities (2011)	Times Higher Education World University Rankings (2011)	Performance Ranking of Scientific Papers for World Universities 500 best universi- ties in the world (2011)
Shandong University (301–400)	Xi'an Jiaotong University (401–450)		Wuhan Univer- sity (351–400)	Shandong University (338)
Sichuan University (301–400)				Jilin University (365)
Sun Yat-sen University (301–400)				Nankai University (367)
Beijing Normal University (401–500)				Harbin Institute of Technology (384)
Beijing University of Aeronautics and Astronautics (401–500)				Huazhong University of Science and Technology (415)
Dalian University of Technology (401–500)				Wuhan University (443)
Harbin Institute of Technology (401–500)				Dalian University of Technology (455)
Jilin University (401–500)				Xiamen University (483)

According to the ARWU rating, a whole host of universities (Nankai, Wuhan, Xiamen, Xi'an Jiaotong) have the same rankings in the 500 as they do in international ratings.

APPENDIX 2

The most popular study abroad disciplines among Chinese students:

Undergraduate:

- 50 per cent – economics, finance and management;
- 17 per cent – applied sciences;
- 11 per cent – engineering and applied technology.

Master's:

- 46 per cent – economics, finance and management;
- 17 per cent – engineering and applied technology;
- 11 per cent – the humanities and social sciences and media;
- 7 per cent – jurisprudence and political science;
- 5 per cent – computer science and IT;
- 4 per cent – applied sciences;
- 3 per cent – architecture and construction;
- 3 per cent – design;
- 2 per cent – pedagogy;
- 1 per cent – medicine and pharmacy.¹²²

¹²² URL: <http://www.znariesvet.com/content/view/341/65> (in Russian).

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