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A Comparative Study in Higher Education Goals of Certain Countries

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ARTICLE INFO ABSTRACT The aim of this study was to recognize and make a comparison of Received: 09 September 2019 Revised: 25 October 2019 the higher education goals of seven countries of China, Germany, Accepted: 21 December 2019 Iran, Japan, Russia, U.K., and U.S.A. The countries under study were Online: 25 February 2020 selected in a way that had a different geographical distribution and higher education system. This is an applied research in terms of nature, qualitative with a comparative method using documentary approach for collection of data. Researchers searched through reputable global databases such as UNESCO, the World Bank, and the Ministry of Higher Education of the target countries. Findings reveal that the most significant common goals of higher education of these seven countries are the increase of international exchange, outsourcing more of higher education activities to the private section, paying attention to availability of higher education for everyone, adapting and synchronizing higher education with job market. However, there are different ways to achieve these goals in the policy-making process of these countries. In advanced countries such as the United States, the United Kingdom and Japan, KEYWORDS the realization of a superior scientific and welfare ecosystem has Curriculum been considered important, with China's and Russia's developing **Comparative Study** education systems increasingly considering privatization and **Higher Education** internationalization. While in Germany the start of new University renovations is evident, in Iran the identification and repair of

backwardness is emphasized by higher education policymakers.

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1. Introduction

According to liabilities of Twenty-year Perspective Document and Comprehensive Scientific Map, Islamic Republic of Iran seeks to reach the first rank of science production in the region through research, planning, and developing of higher education system. Also, developing collaboration in science and technology with international scientific centers is one of the major goals of Comprehensive Scientific Map of the country (Ministry of Science, Research and Technology, 2010). World experience in recent centuries indicates that wise nations seek to learn from others in order to swiftly get rid of layers of underdevelopments. In fact, human challenges are global and common among nations, so most often common solutions can be beneficial. Educational systems are no exception to this rule. Naturally, for Iran, which still lacks a strong higher education system, developed countries' experiences are valuable.

Policy-making in Iran's higher education at national level is assigned to organizations like Islamic Parliament of Iran, Cabinet, and Supreme Council of the Cultural Revolution. The Ministry of Science, Research, and Technology and Ministry of Health and Medical Education are responsible to plan and make policy of higher education at headquarter level. Planning and management at the university level is also the duty of University Council, Specialized Faculty and School Council, and the Council of Educational Group (Abili & Babaei, 2018). From the financing viewpoint, although it is mostly done by government, private and non-governmental sections contribute more. For example, the contribution of students who pay the tuition is almost 85 percent of all students and only 15 percent experience tuition-free higher education (Dadjouy Tavakkoli, Hosseini, Niknami and Salehi 2019). In 20-Year Perspective of Iran Document, the related goals to science and technology are considered as building up the research, reaching science borders and deepening religious values, developing higher education with preserving quality and based on fairness on

availability for everyone, training experts, and strengthening the bond between university and industry (Abtahi & Torabian, 2011). Yet, in fact, Iran's higher education system has structural obstacles such as lack of independency and innovation of universities, being degree-oriented, disproportionality of university programs with job market needs, quantitative growth with disregard to qualitative criteria, presence of broad obstacles for growth and eloquence of faculty members, as well as weakness in international collaborations. Thus, the programming system of Iran's higher education, too, needs monitoring and examining "other" models and tracking and comparing higher education systems in world and pioneer universities in order to discover better solutions to pass facing crises and creating proper educational opportunities as well as increasing the quality of universities and evaluating present programs.

One of the countries of interest to Iranian higher education policy makers may be the United States, which, by numerous international assessments, has the best system of higher education in the world. Mission and perspective of American universities for developing knowledge include creating mental curiosity, building society and enabling people for life goals, services, and leadership. American universities are knowledge-based research universities where they raise the ability of discovery in ambitious students, brave leaders, scholars, innovators and active citizens. Of principal values of the U.S. higher education system are wholeness; superiority; human dignity; protection and promotion of the society; diversity; fairness; pervasive access and transcendence; freedom of expression and search for truth. Three characteristics make American higher education system distinguished from its European counterparts are 1) beneficial knowledge; 2) intimate links to local society; and 3) its link to country's economy (Stein and Malpas, 2018).

Another country with a long and distinguished track record of delivering a successful model of higher education is the United Kingdom. According to a report by British Council (2019) this

system faces to answer five fundamental questions which are: Quality assurance, response to world competition, organizational capacity, diversity of supply, and presentation in global level. To reach goals the U.K. higher education system is divided into two parts of universities and nonuniversity institutes (like colleges, institutes, etc.) where all these institutes can be both coursebased and research-based. The U.K. higher education system is not a dual system where education and research are limited to a single university or non-university (Government of UK, 2019), but they contribute in realizing the goals by interacting with each other. Given challenges facing higher education of this country in future years, the main attempt of this system is still on education in international level and promoting research quality as well as developing national and international collaborations to preserve its ranking position in world competitions (Universities UK, 2018).

German universities consists three distinguishing features: Academic independency; conjunction education and research and strict selection of faculty members. The most recent major goals of German higher education are summarized in the Goal of 2020 Higher Education Convention which includes reinforcing universities and other higher education institutes in long time. Another goal is to develop higher education in vocational section (Research in Germany, 2018). In Japan, with regard to the importance of education for future, it is believed that required development should be made via creating a society based on knowledge and intensifying competition inside and outside the country. Goals of reaching the perspective are realized through qualitative changes in higher education, clarification of various functions, monopoly and distinguishing higher education, and quality assurance (MEXT, 2019). In fact, the paradigm of changes in Japanese higher education system matches the main goals of the government: this paradigm is as the structure, hegemony, situation and basis of national universities. Moreover, Japan higher education policy-making indicates that its development should be formed within the internal educational system and fundamental structures should not be changing (Li, 2016).

China and Russia could be two more role models for Iranian higher education policy makers. China higher education has significantly contributed in economic development by aggregating human capital and developing science and technology (Ding & Zeng, 2015). However, its higher education system has changed a lot in recent years. This system, with the experience of marketization and privatization, is dependent on non-governmental and students' tuitions in order to make budget. In internationalization of higher education, too, Chinese began to make many attempts to promote their ranking in international competitions via absorbing elite international students (Jiang, 2017). Along with deepening market making of China higher education, following priorities of this country are: transformation in administrative system and management of higher education, establishing world-class universities, enhancing social cooperation of universities and internationalization of higher education (Cai, 2013). By probing international reviews, among features of China higher education system in recent years are 1) it is predicted that 67 percent of people between 25 and 34 enter the China higher education for the first time which is higher than the mean of member countries in OECD; 2) in 2017, international students of China higher education constituted 23 percent of all international students of OECD which had the most share among other member countries; 3) significant role of occupational programs for students and learners of high school in China educational system; 4) improving the quality of learning environments where they still need more improvement (OECD, 2019).

The major goals and policies of Russia higher education consist: promoting international competition capability of universities, increasing education quality, assuring the properness of job market in presented educational courses and enabling graduates. Among the objective goals of Russia higher education is to plan to position 5 top Russia universities in the first 100 world universities, planning and making attempt to absorb foreign students, the presence of independent organizations of quality assurance, joining to the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), and wide relationship and competition with European and American countries. The new system of administrative higher education of this country focuses on democratization, decentralization, and increase of independency of the higher education organizations (Babintsev, Sapryka, Serkina, & Ushamirskaya, 2016, Yachina, 2015). Given this brief explanation, the purpose of the present study is to investigate the similarities and differences between the higher education systems in the selected countries.

2. Research Method

This is an applied research in terms of nature, qualitative with a comparative method using documentary approach for collection of data. Researchers delved into official websites such as UNESCO, World Bank, OECD, Ministry of Higher Education of targeted countries, as well as books and articles of international journals to draw concepts, ideas and required data. Similarities and differences of higher education systems of countries were drawn with respect to the aim of the study.

3. Results

Obtained results of two levels of description and interpretation are presented in this section with respect to regional approach of Bereday in comparative studies:

A) Description and Interpretation

Key goals of Higher Education System

China

Chinese higher education goals are categorized into four classes of internationalization, upgrading and assuring the quality, structural modifications, and responding to local, national, and regional needs (Cai, 2013; Li, 2010; Mok & Han, 2017; Wan, 2006). Growing international competitive talents, developing programs and courses in English, improving legal and political frameworks and

through international laws (Mok & Han, 2017) and high-quality higher education to grow talents, developing programs to assess and assure the quality of universities and higher education institutes. Establishing a new mechanism in education and research among universities, increasing the attention of higher education system to meeting social and economic needs, promoting the role of universities in national and regional innovative systems, making the results of scientific research practical, and developing university corporates (Cai, 2013; Li, 2010).

Germany

Increasing international competition, increasing university population, more contribution of Federal government in financing research projects, paying attention to occupation of graduates (especially vocational colleges), developing and improving courses in higher education institutes, meeting demands of work force of the market (OECD, 2014; Project Atlas, 2013; Research in Germany, 2018).

Iran

Simultaneous attention to issues and needs of inside and outside the higher education and blending education with research and skill, reaching the first rank of science and technology in Islam world, increasing the contribution of products manufacturing and services based on local knowledge and technology, promoting Farsi's ranking among scientific international languages, aiding to progress science and technology in Islam world and reviving the pivotal and historical position of Iran in Islamic culture and civilization, developing collaborations in science and technology with international centers (Comprehensive Scientific Map of Iran, 2012).

Japan

Developing human resources to support and lead the society in the field of international higher education, assuring the education quality in universities, positioning national universities superior to others, orienting higher education towards developing and meeting the fundamental needs of the country, more contribution of private section in higher education (Dye, 2016; MEXT, 2019).

Russia

Decentralization and increasing the independency of higher education system, structural changes in supervision methods, developing the contribution of private section are main goals of Russian higher education system (Russian Federation, 2013; Smolentseva, Huisman and Froumin, 2016; WENR, 2017).

U.K

Teaching skills for occupations and vocations, presenting advanced learning methods, transmitting the culture and common citizenship standards, paying service to demands of a compatible, sustainable and based-on-knowledge economy at the local, regional, and national level, contributing in forming a democratic, civilized, and comprehensive society, knowledge progress and its understanding via scholarship, and helping to diversify the economy and culture (Universities UK, 2012; Minister of State for Universities, Science, Research and Innovation, 2018; The European Education Directory, 2018).

U.S.A.

Availability of cost-worthy higher education for all citizens, optimizing the students' success for occupation and life, creating change and improvement via innovation and investment, economic and cultural prosperity, education quality improvement and university educating progress, collaboration among universities and other organizations in different states, increasing absorbing private colleges, increasing population coverage of educated people, reinforcing marketing skills (Association of American Universities, 2013).

B) Juxtaposition and Comparison

General Status of Selected Countries

The present status of selected countries in various dimensions such as Human Development Indices, GPD per capita, quantity of universities, Scientific Function Rate, Mean Years of Schooling, Quality of Education, Skillset of Graduates, R&D, Unemployment Rate, Employment Rate) are indicated in Table (1):

Table 1: General status of selected countries

Count	Employ ment Rate	Unemploy ment Rate	R& D sha re	Skillse t of Gradu ates	Qualit y of Educa tion [Cours es]	Mean Years of School ing	Scient ific Functi on Rate	Quantit y of Univers ities	GPD per capi ta	Human Develop ment Index
The U.S.A	71.1	3.9	2.8	5.9	5.7	13.5	500	3257	531 28	0.924
The U.K.	74.9	4.0	1.7	4.8	4.7	12.7	510	280	425 14	0.922
Germ any	76.3	4.8	1.1	5.3	5.4	14.1	514	465	467 47	0.936
Russi a	59.1	4.8	1.1	4.0	4.1	10.7	489	1172	114 41	0.816
China	65.7	3.6	2.1	4.5	4.5	7.8	524	2208	732 9	0.752
Japan	77.5	2.4	3.2	4.5	5.0	12.8	545	980	485 56	0.909
Iran	53.8	12.2	0.2 5	3.5	3.7	8.0	-	607	694 6	0.798

Source: Reports of Human Developments, 2018-2019; OECD 2019

According to Table (1), the human development index in Germany is the highest one in comparison to other countries under study. In GDP index, the U.S.A. was the first and Japan was the second rank. By considering the quantity of universities, the U.S.A. is the first one due to the variety of higher education suppliers, next is China according to the high population. The most rate of scientific

function is related to Japan and China is positioned in second rank. The mean years of schooling is the most in Germany and the least in China. The highest quality of education belongs to the U.S.A. and the lowest quality belongs to Iran. Skillset of graduates in the U.S.A. is the highest in comparison to other countries. The highest percentage of expenses allocated to R&D is related to Japan and the lowest one is related to Iran. The lowest unemployment rate is for Japan and the most employment rate is also for Japan.

In Table (2), the number of top universities of each country with the ranking of under 500 is observed. This index can be expressive of higher education quality of each country (ARWU, 2018; Times, 2018; URAP, 2018; CWTS Leiden, 2018).

Table 2: Juxtaposition matrix of universities ranking for countries under study

Countries under study	The number of universities in ranking systems						
	CWTS Leiden	URAP	Times	ARWU			
Germany	50	39	43	36			
U.K.	48	34	59	39			
U.S.A.	175	114	112	139			
Japan	41	12	13	16			
Russia	2	3	4	4			
China	148	58	15	52			
Iran	23	3	1	2			

According to Table (2), the status of higher education performance in various ranking systems is different. The most number of universities is related to the U.S.A., and Iran and Russia do not have a good position in this regard. Also, in Table (3) higher education goals of countries under study are described by key goals, Time horizon, type, level, and field.

Table 3: Comparison of characteristics of higher education goals in selected countries

Country	Main Goals	Type of Goals	Time Horizon	Levels of Goal	Area of Goals
U.S.A.	Cooperation among universities and other organizations in various states; Fair access to higher education; Quality assurance of education	Fundamental	Long and Medium	International, National and Local	Education, Research, and Social Services
U.K.	Skill-driven of higher education; Diversification of financial resources	Temporary, preliminary	Long and Medium	National and Local	Education and Research
Germany	More investment in higher education; promoting higher education quality	Fundamental	Long and Medium	National and Local	Education, Research, and Social Services
Japan	Redefining the basic needs of the country in the form of university features; Quality assurance of general and higher education	Fundamental	Long and Medium	National and Local	Education, Research, and Social Services
China	Internationalization of higher education; Pay attention to world standards of higher education; privatization	Fundamental	Long and Medium	International	Education and Research
Russia	Decentralization and increasing independency of higher education; developing cooperation of private section	Fundamental	Long and Medium	National and Local	Education, Research, and Social Services
Iran	Promoting Farsi language position; Helping science and technology position of Iran in Islam world; reviving Iran's historical position in Islamic civilizations and developing international interactions	Fundamental	Long	National and International	Research and Social Services

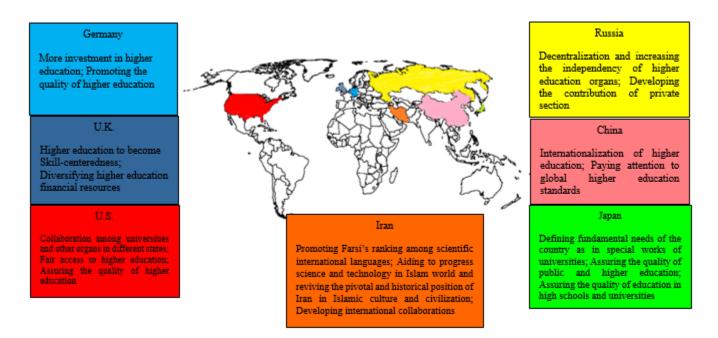
In next step, similar and different aspects of the goals in selected countries are presented.

Similarities & differences

The results show that the higher education system in all the countries under study is similar in two respects: First, the simultaneous inward and outward attention, and the second, attention to quantity and quality. In the first dimension, there seems to be a common global movement in higher education. This means that academics and policymakers are also focusing on internal issues such as increasing the number of graduates, adaptation of university programs to labor market needs and reduced role of government in both regulatory and financial aspects and have also focused on the progress of competing higher education systems. As they develop international partnerships, strive to attract the best teachers and students. In the second dimension, there are some interesting similarities between the countries. On one side, Iran and China try to extend the quantity coverage of higher education, and on the other side the U.S.A., too, despite possessing the most powerful higher education system, is attempting to develop the same opportunities for higher education in all states.

In differences section, every country seeks different goals with regard to its structure and local conditions. In Japan, emphasis is put on pre-university educations, in the U.S.A. policy-makers pay attention to practicality of higher education, promoting and developing specialist human resources, and economic growth. In Germany, in contrast to the U.S.A. which is orienting to the private section, it is making attempt to increase the public section and government share in financing higher education. In the UK, the emphasis is on nurturing the talent and personality of individuals as their primary goal. In China, emphasis is put more on internal modifications of higher education. Due to Iran's historical, Islamic and social background, the development of values and national identity is of interest to higher education policymakers and planners. In fact, the origin of these differences is related to the cultural, social, economic, and political contexts of every country whose reflection can be observed in the higher education goals.

Figure 1: Infographic summary of higher education goals in selected countries



4. Conclusion

In the present study, the goals of higher education in seven countries were extracted from international and national documents and their similarities and differences were expressed separately. Findings indicated that the most common goals of higher education in these countries are as increasing international exchanges, outsourcing more of higher education activities to private section, assuring quality, pursuing future job opportunities of graduates, paying attention to availability of higher education for everyone, adapting and synchronizing higher education with job market. Yet, a variety of policies can also be recovered. In advanced countries such as the US, UK and Japan, the creation of a superior science and education ecosystem is the key policy. Privatization and internationalization of higher education in China and Russia have been the focus of attention, though not so fast. The main policy of the Germans is to reform and rehabilitate the higher education system, while in Iran it is seeking international compensation. Interestingly, a single policy may have different goals in different countries. For example, the goal of internationalization of higher education in the US is to improve the quality and diversity of students' culture, while in China; it aims to improve the ranking of universities and their international reputation.

With regard to analyzing the goals of countries higher education and their different aspects, lessons can be useful for Iran's higher education policy-makers and planners are as following: promoting quality of higher education and its continuous monitoring and evaluation, attempt to join international organizations of quality assessment in higher education, developing a systematic collaborations among Iran's universities, developing a dynamic diplomacy of science and technology in international level, increasing international movement of Iranian faculty members and students, outsourcing higher education activities to private section, allocating more share of GDP to education and research section of universities, consistent relationship of university with industry and job market, supporting independency of universities and altering policy-making to bottom-up as well as increasing contribution of university members, altering and updating curricula by a transnational perspective, and making structural modifications in evaluation system.

References

Abtahi, S. H; Torabian, M. (2011). A Review of Realization of Higher Education Goals Based on 20-years Perspective of the Country with Analytic Hierarchy Process Method. Research in Educational Systems, 4 (8), 31-60. [In Persian]

Abili, K; Babaei, M. M. (2018). Recognizing Higher Education of Asia with a Systematic Approach: Based on Conducted Studies on Higher Education of Japan, Malaysia, and Iran, NAMA Educational Studies Journal 6(1), 62-83 [in Persian]

Principles.pdf

- ARWU (2018). *Academic Ranking of World Universities*, Available at: http://www.shanghairanking.com/
- Association of American Universities, (2013). *Academic Principles: A Brief Introduction*, Available at: https://www.aau.edu/sites/default/files/AAU%20Files/AAU%20Documents/Academic-
- Babintsev, V. P., Sapryka, V., Serkina, Y. I., & Ushamirskaya, G. F. (2016). Reform of Higher Education in Russia: Habitus Conflict. *European Journal of Contemporary Education*, 17(3), 284-294.
- British Council (2019). *Vision 2020: Forecasting international student mobility a UK perspective,* Available at: https://www.britishcouncil.org/sites/default/files/vision-2020.pdf
- Dadjouy Tavakkoli, A; Hosseini, A; Niknami, M; Salehi, M. J. (2019). Reinforcing the Contribution of Non-governmental Section in Financing Higher Education, *Modiriat Farda Journal*, 18, 17-33 [in Persian]
- Government of UK, (2012). *Education System in United Kingdom*, Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/219167/v01-2012ukes.pdf
- Cai, Y. (2013). Chinese higher education: The changes in the past two decades and reform tendencies up to 2020, In L. d. C. Ferreira & J. A. G. Albuquerque (Eds.), *China and Brazil: Challenges and Opportunities*. Campinas: Anablumme, Available at: https://www.researchgate.net/publication/236869510_Chinese_higher_education_The_changes_in_the_past_two_decades_and_reform_tendencies_up_to_2020
- CWTS Leiden Ranking (2018). CWTS Leiden Ranking, Available at : http://www.leidenranking.com/
- Ding, L., & Zeng, Y. (2015). Evaluation of Chinese higher education by TOPSIS and IEW—the case of 68 universities belonging to the Ministry of Education in China, *China Economic Review*, 36, 341-358.
- Dye, T.R (2016), Policy Public Understanding, New York: Prentice Hall College Div
- Jiang, J (2017). *Higher Education in China, Lingnan University*, Available at: https://scholars.ln.edu.hk/en/publications/higher-education-in-china
- Li, F. (2016). The Internationalization of Higher Education in China: The Role of Government. *Journal of International Education Research*, 12(1), 47-52.
- Ministry of Science, Research and Technology, (2010). *Comprehensive Scientific Map Document, Islamic Republic of Iran*, Available at: https://www.msrt.ir/file/download/page/1488284345-m01.pdf, [in Persian]

- Minister of State for Universities, Science, Research and Innovation (2018). Responsibilities, Department for Education and Department for Business, *Energy & Industrial Strategy*: https://www.gov.uk/government/ministers/minister-of-state-for-universities-science-research-and-innovation
- MEXT, (2019). Educational Vision which should be pursued over the next Ten Years, Ministry of Education, Culture, Sports, Science and Technology, Available at: http://www.mext.go.jp/en/policy/education/lawandplan/title01/detail01/sdetail01/1373 813.htm
- Mok, K. H., & Han, X. (2017). Higher Education Governance and Policy in China: Managing Decentralization and Transnationalism. *Policy and Society*, 36(1), 34-48.
- OECD (2009). *Tertiary Education in Japan Pointers for Policy Development*, Available at: https://www.oecd.org/education/skills-beyond-school/44126314.pdf
- OECD (2014). *Education Policy Outlook: Germany*: Available at: http://www.oecd.org/education/EDUCATION%20POLICY%20OUTLOOK%20GERMANY_E N.pdf
- OECD (2019). *Education at a Glance, OECD Indicators*, Available at: http://https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_CHN.pdf
- Project Atlas. (2013). *Trends and Global Data 2013*, Retrieved from http://www.iie.org/en/services/project-atlas/germany
- Research in Germany, (2018). *Higher Education Pact 2020*, Federal Ministry of Education and Research, Available at: https://www.research-in germany.org/en/research-landscape/r-and-d-policy-framework/higher-education-pact-2020.html
- Russian Federation (2013). *Education in the Russian Federation*, National Information Center on Academic Recognition and Mobility, Available at: http://www.russianenic.ru/english/rus
- Smolentseva A., Huisman J., Froumin I. (2018) Transformation of Higher Education Institutional Landscape in Post-Soviet Countries: From Soviet Model to Where?. In: Huisman J., Smolentseva A., Froumin I. (eds) 25 Years of Transformations of Higher Education Systems in Post-Soviet Countries. Palgrave Macmillan, Cham, Switzerland
- Stein, R. & Malpas, C. (2018). Toward a New Understanding of American Higher Education Institutions: Focus of Educational Offer, Mode of Provision, OCLC, University Futures, Library Futures project. Available at: https://www.oclc.org/content/dam/research/publications/2018/oclcresearch-uflf-literature-review-preview.pdf
- University Ranking by Academic Performance: URAP (2018). *University Ranking by Academic Performance*, Available at: http://www.urapcenter.org/2018/

- Universities UK, (2012). Futures for Higher Education Analyzing Trends, Available at: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2012/futuresfor-higher-education.pdf
- Universities UK, (2018) Patterns and Trends in UK Higher Education, Available at: https://www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Documents/patternsand-trends-in-uk-higher-education-2018.pdf
- Wan, Y. (2006). Expansion of Chinese higher education since 1998: Its causes and outcomes. Asia Pacific Education Review, 7(1), 19-32.
- WENR (2017). Education in the Russian Federation, Education System Profiles, June 6, Available at: https://wenr.wes.org/2017/06/education-in-the-russian-federation
- Yachina, N. (2015). The Problems of University Education in Russia, Procedia-Social and *Behavioral Sciences*, 191, 2541-2545.