Integration in Higher Education Institutions in the Global Educational System

L.A. Krokhmal\textsuperscript{1}, N.L. Simutina\textsuperscript{2}

Abstract:

Significant changes have taken place in higher education systems since B. Clark has proposed a system for classification of higher education institutions by status hierarchy.

This paper studies the trends related mainly to the globalization of the educational system and the development of information technologies. The paper focuses on the mass integration processes of higher education institutions; the types and forms of these processes are considered and classified.

A status hierarchy of higher education institutions is proposed, which takes place in the modern educational system.

It is concluded that under the influence of globalization, a change takes place in systems of higher education and status hierarchy of higher education institutions; however, the integration processes offer significant opportunities for all universities (or their majority) to take their place in the market of higher education services.

Keywords: Higher education system, higher education institutions, hierarchy, globalization, integration, education services.

JEL Classification: I20, I29.

\textsuperscript{1} Far East State Agricultural University, krokhmal_la@mail.ru
\textsuperscript{2} Far East State Agricultural University
1. Introduction

Over thirty years have passed since Burton Clark has presented to the world his famous research "The Higher Education System: Academic Organization in Cross-national Perspective" (Clark, 2011), in which the main elements of higher education system are identified and differences among them in various countries are presented. This analysis was carried out at the time when "global" perspectives were not considered a determining factor of higher education development neither from the point of view of higher education institutions nor from the point of view of national governments. Over the past decades, social, economic, political and ideological transformations have been accumulated, information communications have been improving, which has led to changes in state policy in the field of higher education (Luksha and Peskov, 2014). The researchers have proceeded to discussion of new hierarchy problems in the global educational system (Coates and Thakur, 2013). The status hierarchy identified by Clark remains an unchangeable attribute in the educational services market; however, it has been significantly modified under the influence of globalization and integration (Mok, 2010; Gorina 2016; Medvedeva et al., 2015; Sazhin and Saraikin 2016), which requires special scientific research.

2. Methodology

The research used a combination of historical and logical approaches to study the publications and statistical data together with elements of content analysis. The formalization method was applied during development of status hierarchy.

3. Results

3.1 National higher education systems’ classification by B. Clark

Based on the research of national higher education systems carried out by a group of researchers under the direction of B. Clark in 1973-1980, the phenomenon of status hierarchy was identified. It was also noted that in such form the status hierarchy is not present in any other field of public activity. Clark (2011) identified four types of status activity of higher education institutions on national and international scales, which he, as a matter of fact, related to employment opportunities of a graduate after graduation.

The first type included several higher education institutions of the national education system, which had complete or nearly complete monopoly over elitism. The universities of Great Britain and France, such as the famous Oxford, Sorbonne, Bordeaux, Birmingham and Cambridge, served as bright examples. Graduates of these universities had the highest chances of successful employment.

The second type of status hierarchy was common for American and Canadian systems. The universities did not occupy a monopolistic elitist position in the
national system; however, there was a group that had special social weight and public advantage explained by affiliation to a particular type of institution. For example, the eight universities of the Ivy League have higher status than the others. The same type was characteristic of the USSR universities. MGIMO, MSU, Maurice Thorez Institute of Foreign Languages, Bauman Moscow State Technical University and other technical universities were considered prestigious. However, during the graduate placement the student could receive an assignment both to a city in central Russia or to a distant Siberian village.

The third type did not offer differentiation between prestigious and non-prestigious universities. For example, there was virtually no division depending on the prestige level in Italy. Graduates of any university received equal employment rights and a good post after graduating from any university. University of Verona can be named as an example of public universities, and Bocconi University in Milan – as an example of private universities.

The fourth type was characterized by absence of any hierarchy between the universities, but assumed that universities had higher status than other educational establishments implementing the same education programs. It was assumed that the university education level was higher than that of colleges, for example. However, there were no status differences between the universities. This type was characteristic of German higher education system. Researchers of the German national higher education system noted that there was no competition for the best students between the universities (Clark, 2011).

Clark also believed that hidden forms of status monopolization existed, which could be manifested in different countries as forms of transition between the types. The approach implemented by B. Clark, where the status hierarchy is distinguished on the basis of evaluation of universities as participants in a complex world of relations at the global level, is considered the most productive for further research of higher education systems. Today, this allows monitoring the development of universities within the global educational system, which has evolved greatly since the author first described the relations in the cross-national perspective.

In the modern context, when state funding of universities is being reduced or discontinued, the question regarding their status has become a question regarding their place in the market of educational services, while the universities are more and more often operating within a multidimensional, multilevel and multilateral paradigm (Hazelkorn, 2017).

3.2 Educational platforms and mass open access online courses as a global trend in the educational services market

The most discussed problem concerning the future of the global educational system is the creation of a "Billion University" (meaning the number of students) and its
consequences (Luksha and Peskov, 2014). Billion universities are nowadays well known internationally; they offer quality educational programs and are cheaper than traditional universities due to implementation of educational platforms and online educational technologies (Lawton and Katsomitros, 2012). The most famous and fast-evolving platforms are created in the US by universities with special social weight and public advantage in the US — Coursera and EdX, as well as elite European universities that were earlier classified as such by B. Clark.

It is important that the development of platforms was preceded by a great effort to pool resources of the most recognizable educational services of the universities in the global market (ICEF Monitor, 2016). According to the researchers, the Billion Universities represent a new business model in the global educational system, the main characteristics of which are the absence of national borders, the use of the latest online education technologies, stable integration bonds with elite universities of the world and large business enterprises (Luksha and Peskov, 2014).

Nowadays, a global expansion of mass open online courses (MOOCs) takes place (Figure 1). Following the example of American universities, national platforms were created in Great Britain (FutureLearn), India (NPTEL), Spain (Miríada X), France (FUN), Germany (Iversity), China (Xuetangx) and the international educational platforms. From 2011 to 2016, the number of MOOCs increased several times. In 2015, 500 universities in the world offered 4200 different programs and trained 35 million students.

Figure 1. Development of mass open online courses in the world in 2011-2016

<table>
<thead>
<tr>
<th>Number of mass open online courses (MOOC) in the world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units</td>
</tr>
<tr>
<td>0 2000 4000 6000</td>
</tr>
</tbody>
</table>


There are different views on the perspectives of MOOC development; however, it is clear that in the nearest future the platforms aimed at expanding the student community mainly at the expense of foreign students can exert strong influence via educational programs not only on individual universities and national systems of higher education, but on entire countries, therefore, taking part in solving political
issues. There already exist examples when the US use American educational platforms to impose economic and political sanctions onto other countries (e.g. Sudan, Iran, Cuba) (Luksha and Peskov, 2014).

In addition, the mobilization of educational platforms has reinforced the market positions of another mass service, the so-called "staff vacuumers". "Staff vacuumers" are mass recruiting organizations, which often perform their activities as a result of mastering the educational programs based on MOOCs. The technologies used by MOOCs allow identifying and borrowing the best talents from different countries for global players of the market. This phenomenon is known as "brain drain" and was particularly discussed during the restructuration of the Russian economy, when the best skilled workers left the country. There are reasons to suppose that the advent of MOOCs significantly facilitates the task of recruiting services considering the technologies used by the platform.

The platforms are gradually evolving from a national into an international phenomenon and there is every reason to believe we are dealing with a new international hierarchy and global network, the consequences of which shall affect not only the national educational systems, but also the global positioning of the country in the world economic and political hierarchy.

3.3 New forms of integration in the educational services market

It is not accidental that a dialog has begun on the development of mechanisms for containment of the above-mentioned processes, at the center of which there is the creation of a worldwide educational and personnel organization (WEPO) aimed at regulating the rules of talents’ transfer and solving the associated issues, as well as signing of a protocol similar to the Kyoto Protocol on Climate Change (FCCC), a so-called Kyoto Protocol on Education, offering financial reimbursement to talent-producing countries from talent-receiving countries (Luksha and Peskov, 2014).

Another effective method of limiting the activity of global players, as research shows, is forming major integration structures of university education on national, regional and international levels, capable of competing in the global market of educational services. Integrative cooperation is, in our view, an essential characteristic of the modern market of educational services.

However, the forms of coordination and interaction in the market of educational services in many countries, including Russia, are often considered in a regional context and, as many researchers believe, depend on the degree of involvement of the university in regional integration and compliance of the implemented educational programs with the conditions and directions of territorial development.

A discussion is taking place in Russia concerning models of strategic interaction between the higher education institutions and the region, the relevance and
importance of which are linked to the development objectives of the country as a whole (Models of Strategic Interaction of Federal Universities and the Region, 2008). The research works often focus on the macroeconomic level and consist in detecting regional interaction between universities and enterprises through commercialization of scientific developments (Koschatzky, 2014). It is expected that such interaction can lead to formation of different university types in particular regional centers. However, there is not enough research to show how these centers shall be formed. This can be explained by the fact that most of the considered strategic processes in the national systems of higher education are still not finished or are only being developed (Kwiek, 2014).

The integration of universities with regional enterprises is only a part of a long-term process of higher education systems’ development; it involves substantial financial costs and risks. As practice shows, universities solve these problems in the best way by creating joint (inter-university) university partnerships, determining at the same time the need of the region for new knowledge (Benneworth, 2012), which enhances their contribution into the prosperity of the regions and provides broad opportunities for developing the national higher education systems in the globalization era.

The academic community has accumulated much experience of inter-university cooperation throughout its centuries-long history. The shapes of this cooperation were initially manifested in exchange of best academic practices, interaction of students and joint scientific research. Such cooperation was created on a voluntary basis between universities of individual countries, most often without participation of the state government or international organizations. The development of these relations led to involvement of governments into these processes, expansion of academic exchange practice, evolution of mobility and shift of the interaction model from cooperation to the partnership model. Researchers point out various types of university interaction not only within the national educational systems of higher education, but also at the international and global levels. The most structured approach to characteristics of integration processes in the global educational system was proposed in 2009 by a group of authors under the leadership of Professor Benneworth (Benneworth et al., 2009). The authors consider three integration levels of the university community: global, international and national/regional (Table 1).

Table 1. Interaction types of the university community by degree of participant coverage and activity specifics with examples (Benneworth et al., 2009).

<table>
<thead>
<tr>
<th>Interaction types</th>
<th>Primary interaction organization</th>
<th>Focus on full community interaction</th>
<th>Focus on one participation direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global</td>
<td>United Nations University Institute of Advanced Studies (Note 1)</td>
<td>EISD regional expert centers</td>
<td></td>
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Integration in Higher Education Institutions in the Global Educational System

United Nations University Institute of Advanced Studies established in 1975 (United Nations University) is named by the authors as an example of global integration. Many examples of international and regional cooperation are provided. For example, in 2001 the European University Association was founded, which operates successfully to the present time and includes 850 higher education institutions from 46 countries. There also exists an acknowledged university alliance for solving issues of stable development, known as the Talloires Alliance, which got its name...
from the Talloires Declaration for Stable Development signed by a group of universities in 1990. Another example is creation of international network of Living Knowledge science shops (Note 2). The modern history of science shops in Europe was initiated by university officials and students of a university in the Netherlands in the 1970s. The approach became widely popular from 1980 when science shops were established in Central and Eastern European countries. With the financial support of the European Commission (EC), the science shops were able to organize themselves across the entire Europe and take a step towards a global network called Living Knowledge.

However, in the recent past there was another objective added to the objectives of the international university integration, described by Benneworth et al. (2009), which traditionally consisted in exchange and promotion of experience in implementation of educational services, access to the best practices of scientific research. The new objective was to strengthen the positions in the international market of educational services. For example, the Southern African Regional Universities Association was established in order to pool the institutional resources in African countries to compete with integration alliances of elitist and prestigious universities of the industrialized countries moving confidently towards creation of global universities of the world. A similar association of higher education institutions has been established in South-East Asia from universities of the Asia-Pacific region.

The processes of integration also intensify within the national systems of higher education in different countries. The integration of universities, classified as elitist and prestigious by Clark, and the emergence of global players on this basis in the educational services market forces politicians, regulators and leaders of national higher education systems to create strong integrated structures within their own countries, using rigid and soft forms of integration: fusion, formation of associations, strategic alliances, unions. Such integrated structures shall possess the ability to compete with powerful integration structures formed, in particular, from universities of the first type as per Clark's classification.

According to the European University Association (EUA), recent years have seen a dramatic increase of integration processes in the national systems of higher education (Figure 2). In 1994, a large-scale association of higher education organizations was established in Norway (Frølich et al., 2016). During this period, in twenty-six states, 98 colleges which offered mainly vocational training programs were united into university colleges (Kyvik and Stensaker, 2013). 13 state research institutions and 12 universities were merged in 2007 in Denmark to form 3 state research institutes and 8 universities, respectively (Amaral, 2009). In addition, in 2008, 22 supplementary education centers were merged into 8 regional university-colleges (Finnegan, 2015; Estermann, 2016). In the Netherlands, the reforms resulted in an association of research universities and universities of applied sciences (Santiago et al., 2008). Aalto University was created in Finland in 2010 as a result of
an association of three universities. The development of interdisciplinary education and scientific research in the fields of science, economics, arts and design was chosen as the primary direction of activity. Austria and England had also made extensive use of association processes to create large multi-profile academic structures (Santiago et al., 2008). Association processes of different scale were carried out in China, USA, Singapore, Germany, SAR and other countries (Balkizova, 2017).

**Figure 2.** Number of annually formed integration structures in national higher education systems of Europe (2000-2014).

![Graph showing the number of annually formed integration structures in national higher education systems of Europe (2000-2014).](image)


In Russia, federal and research universities were created at the first stage of reforms on restructuring the network of higher education establishments. At present, since 2006 (Decree of the Government of the Russian Federation No. 1518-r, 2016), 10 federal universities (FUs) and 29 national research universities (NRUs) operate in the territory of the Russian Federation (Russian Education Federal Portal, n.d.). The second stage of the reforms implies the formation of reference universities in accordance with the Federal Targeted Program of Education Development for 2016-2020 (Federal Targeted Program of Education Development for 2016-2020, 2015). The authors have highlighted the stages of integration processes, defined their participants and integration methods, used in creating the integration structures (Table 2).

**Table 2.** Stages, participants and methods of integration.

<table>
<thead>
<tr>
<th>Integration stages</th>
<th>Integration period</th>
<th>Integration participants</th>
<th>Integration methods</th>
</tr>
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<tbody>
<tr>
<td>First stage</td>
<td>Early 20th century</td>
<td>Academic community</td>
<td>Soft</td>
</tr>
<tr>
<td>Second stage</td>
<td>Second half of the 20th century</td>
<td>International organizations, academic community</td>
<td>Soft</td>
</tr>
</tbody>
</table>
It is at the fourth stage, where the integration processes take place under the influence of market forces and with the purpose of preserving the national education systems.

4. Discussion

4.1 New status hierarchy as the result of integration

The intensification and expansion of integration have determined the formation of new hierarchy in the global educational system (Coates and Thakur, 2013). Under the influence of new technologies, the speed of changes increases significantly, and if in the late 20th and early 21st century this process could be measured in decades, nowadays such processes take less than ten years.

As a matter of fact, the successful organizers of Billion Universities hold back the development processes of national higher education systems. In many developed countries, the national systems of higher education are losing their identity, turning into integrated international systems. National barriers that used to protect the majority of universities disappear under pressure of the new international hierarchy. In such context, the researchers are increasingly predicting the dissolution of the conventional university; however, universities are extremely stable organizations, while new challenges not only threaten to destroy the market of conventional suppliers of higher education services, but also provide an opportunity for entering new markets (Boston Consulting Group, 2013).

It is expected that the new educational hierarchy will be presented not only by universities with the best brand and large-scale technological platforms, but also by universities capable of implementing flexible business models that provide an opportunity to compete in the global educational system, supported by the national political leaders ready to assist in adapting the universities to changing market conditions. The state and the universities are becoming major stakeholders of the diversification under the conditions of new educational hierarchy formation.

There are multiple views on the structure of the "new hierarchy" in the global educational space; however, they are all similar in the creation of integrated university structures, including cross-national structures, becomes an important
strategic objective for the universities. Individual researchers point at the need of university integration only at an international scale.

Vught (2012) mentions a hierarchy consisting of elite institutions, international universities, industry/specialized (niche) institutions, local and regional higher education institutions and virtual global players (Coates and Thakur, 2013). Classifications, similar in many aspects, are proposed by Barber et al. (2013), Price, and Kennie (2012). Coates et al. (2013) studied the future scenarios of higher education, proposing the following classification:

- elite universities (the highest echelon of autonomous and highly prestigious, highly resourced universities) – around 50;
- international consortia of universities offering joint and mutually approved programs based on integration of resources – around 200;
- industry (niche) institutions, specializing in several fields of research and education;
- local and regional educational establishments;
- high-tech, especially global universities for online education (Coates et al., 2013).

We share the views of the mentioned authors; however, in our view, the integrated structures are not limited to international university consortia. Integration processes based on different methods of interaction and partnership cover deeper layers and manifest themselves in various hybrid and derived institutional forms (Coates et al., 2013), which is associated with search for effective business models of university functioning. These can include universities of both national and international scale; this can be a union of accredited universities and institutions having no accreditation, such as enterprises of real economy. Unions can be created between state and commercial universities, between industry universities and regional business communities. Such structures can be integrated vertically and horizontally, initiated by governments and the academic community (Coates and Thakur, 2013; Salmi, 2009; Ilina et al., 2017).

For example, the restructuring through integration is defined as an important strategic goal for universities around the world (Mok, 2010). For example, Portnoi and Bagley (2016) point at the following strategic objectives which are to be followed by the universities in order to achieve a competitive position in the educational services market:

- establishment of world-class universities;
- integration of universities;
- priority for quality assurance of educational programs;
- internationalization of the universities;
- expansion of cross-border higher education;
- establishment of regional alliances (Portnoi and Bagley, 2016).
As can be seen in Figure 3, out of the six objectives of strategic development, five are related to integration processes. Establishing the world-class university is only accessible to elite universities which are well-recognizable in the market. Other objectives are in some way related to the pooling of resources at the national, regional or international levels. On the basis of the conducted research, the authors propose the development of Clark's ideas as a new hierarchy of universities which is present in the modern system of higher education (Figure 3).

**Figure 3. Status hierarchy of universities in the modern educational system.**

5. Conclusion

Structures are formed in the educational service market that are capable of carrying out activities in the presence of universities of special status. Industry/specialized (niche) universities (in Russia these are represented by departmental universities) that are easier to merge with each other under conditions of department coordination and create integrated structures with industrial economy actors are likely to benefit.

For universities which are not tied to a particular industrial segment, it is harder to solve the integration issues, however there are many proven coordination methods, which can provide high competitive ability in the market for educational services. We refer to this type, for example, various types of mergers, which are inevitable for preserving the viability of individual universities and the formation of alliances. The most important issue for implementation of these directions is the search for instruments capable of assessing the current condition of the universities, determining the future model and performing transition towards its implementation.
Thus, under the influence of globalization, a change takes place in systems of higher education and status hierarchy of higher education institutions; however, the integration processes offer significant opportunities for all universities (or their majority) to take their place in the market of higher education services.

Notes:

**Note 1.** The United Nations University (UNU) is an international community of scientists engaged in research and post-graduate training, distribution of knowledge, contributing to objectives of the UN in the field of peace and progress. Since 1975, when UNU began its activities, it has become a global decentralized network of institutions, consisting of the UNU Center in Tokyo, 12 research and training centers/programs and two communication offices at the United Nations Headquarters in New York and the headquarters of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris.

**Note 2.** Science shops are not "shops" in the traditional sense. These are small organizations, which conduct research in a wide range of disciplines, usually free of charge.

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