



УДК 378.1+37.014.5+140.8(100+477)

**IMPACT OF INTERNATIONALIZATION ON HIGHER EDUCATION
EFFICIENCY****ВПЛИВ ІНТЕРНАЦІОНАЛІЗАЦІЇ НА ЕФЕКТИВНІСТЬ ВИЩОЇ ОСВІТИ****Debych M.A. / Дебич М.А.***Dr Habil., Assoc. Prof., Senior Researcher / д.пед.н., доц., с.н.с.*<https://orcid.org/0000-0002-5999-3989>*Institute of Higher Education of the National Academy
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Abstract. *The article contains the data on the state and trends of higher education in the European educational and scientific area and in the world. The fact of acceleration of quantitative and qualitative development of higher levels of education – training of masters and young researchers of PhD-level in the leading countries of the European Union has been proved. The intensification of student mobility and the impact of this phenomenon on improving the quality of higher education and the efficiency of educational activities have been studied. Quantitative data on student flows within the European Higher Education Area are presented, positive and negative phenomena in the topic “mobility” for the youth of Ukraine are noted. The need to support those technologies that will determine the world economy over the next 10-15 years has been stated. The highest quality specialist is a product that has already become international and this tendency will only intensify in the future.*

Key words: *higher education, globalization and internationalization, Bologna process, student mobility, quality of training of professionals.*

Introduction

After the declaration of independency of Ukraine the citizens hoped to integrate into the European Union and achieve the standards of life as in the most developed countries of Europe. All Ukrainian leaders, who were given the opportunity to govern, were marked by great differences in worldviews and their own priorities, but in their practical actions they took few steps towards European integration.

Ukraine's participation in the Bologna Process (2005), harmonization of national education system with European standards (length and structure of education, Diploma Supplement, etc.), visa rapprochement with the European Union helped increase mobility and a number of students studying abroad. Journalists and political experts used the term “brain drain” indicating the negative aspect of mobility, but young people and the majority of the population were positive about mobility and regarded it as an opportunity to be competitive specialists on the international labour market.

At the same time, the Strategy for the Development of Higher Education for 2021-2031 points to the weak integration of higher education into the world and European educational and scientific area: “lack of a mechanism to attract foreign investment in the development of higher education; artificial barriers to participation in European research and education programs; lack of motivation and guarantees of external academic mobility of teachers; increasing the backlog of material and technical support of the higher education institutions from the best world and European universities; low level use of the potential of Ukrainian higher education



institutions for training foreign citizens; asymmetry of student migration flows; weak promotion of higher education of Ukraine in the international arena; insufficient level of access to higher education for foreign students, favorable and safe learning conditions; obstacles to the recognition of diplomas received in the Ukrainian higher education institutions (Strategy, 2020; p. 25).

To speed up integration processes, the Ministry of Education and Science leaders adopted a decision to publish research papers not in the long-established network of Ukrainian professional journals, but only in those included in the Scopus and Web of Science databases. The latter were too few in Ukraine, even for Sciences, and practically absent for Humanities. There is no affirmative answer whether this requirement has increased the world renown of Ukrainian science, but it has considerably hampered dissertation defenses.

The *aim* of the article is to analyze the main trends in higher education development and determine the impact of internationalization on the higher education efficiency.

Results of the research

The ongoing globalization of economic and political aspects has an increasing impact on higher education. Internationalization has become an important manifestation of higher education's response to opportunities and challenges of globalization. J. Knight pointed out the most important "five elements of globalization that affect the internationalization of higher education: knowledge society, information and communication technologies, market economy, trade liberalization, governance" (Knight, J. 2008; p. 5).

From the analysis of numerous manifestations of the main impacts, scientists draw reasonable conclusions that globalization causes not only internationalization within each state, but also widens education without borders. Undoubtedly, borders are very important when it comes to responsibility for the quality of education, access to it and funding of educational programs. "This is most noticeable within the various regional associations of states created to achieve economic integration, social cohesion and political security. The most successful of these are the European Union and Council of Europe programs, the creation of the European Higher Education Area (EHEA) within the Bologna Process and the European Research Area (ERA) under the Lisbon Strategy" (Gorbunova, E. & Lariomova, M. 2005; pp. 127–128).

The Bologna Process and the Lisbon Strategy are an example of the regionalization of international cooperation in Europe. The aim of the Bologna Process is to make European higher education more attractive and competitive from an international dimension. This is a good example to create various associations in other parts of the world supporting international cooperation in higher education.

In the article "Internationalization of higher education, science and production as a trigger for educating high quality professionals" the students population according to the International Standard Classification of Education (ISCED) levels was given for a great number of EHEA countries (2014/2015) (Debych, M., 2021). Taking into account the latest sources of information and data for (2016/2017) there is an opportunity to trace the dynamics of quantitative and structural changes in higher education in some countries that in 2014 had more than half a million students.



The ISCED means a system of standardized descriptions of education systems created by UNESCO staff and experts at several levels in order to compare them for national and international use. ISCED 5 is a short cycle of higher education with a clear professional orientation (Ukrainian equivalent – junior specialist); ISCED 6 – Bachelor; ISCED 7 – Master’s degree; ISCED 8 – Postgraduate studies (Doctoral studies).

Table 1 – Population and number of students in the European Higher Education Area by level of education (2014/2015 and 2016/17 academic year)

(Bologna Report 2018; Bologna Report 2021).

Country	Population (2014)	Students (total)	Number by levels of education			
			ISCED 5	ISCED 6	ISCED 7	ISCED 8
Turkey (2014/2015)	79,426	6 062 686	2 013 762	3 527 649	443 253	78 223
Turkey (2016/2017)		7 198 800	2 556 000	3 953 000	598 500	91 300
Germany (2014/2015)	80,854	2 977 781	394	1 792 434	988 753	196 200
Germany (2016/2017)		3 091 600	300	1 860 000	1 033 000	198 300
France (2014/2015)	66,554	2 424 158	495 472	991 175	868 904	68 607
France (2016/2017)		2 603 100	501 300	1 042 000	922 900	66 900
Great Britain (2014/2015)	64,088	2 330 334	272 487	1 523 902	421 145	112 800
Great Britain (2016/2017)		2 431 700	287 500	1 597 000	434 900	112 300
Ukraine (2014/2015)	44,429	1 776 190	452 292	947 210	346 657	30 031
Ukraine (2016/2015)		1 614 700	398 700	823 100	365 800	27 100
Poland (2014/2015)	38,562	1 665 305	2 721	1 104 364	514 821	43 399
Poland (2016/2017)		1 550 000	200	1 027 000	479 600	43 200

Data for 2014 and 2017 in this table allow drawing important conclusions about the main trends in higher education development.

First, in most countries there has been an increase in a number of students of university level. In Turkey, for example, almost 10% of the population receives higher education at the university level. Everyone should be amazed by the example of this country which managed to combine its cultural models with the accelerated development of innovative industries and technological advances. Modern Turkey is constructing the world’s largest bridges in 3-4 years (currently putting into operation cities across the Dardanelles, because the Bosphorus has already reached the necessary network of water and underwater connections), the airport with six lanes can become a world record holder in volume transportation.

Second, shift of all major European higher education from bachelor’s degree not only to master’s, but also to the highest PhD and doctoral. Data from table 1 prove that some countries have increased a number of master’s and PhD holders capable of independent scientific and technological research, thereby increasing the human potential of the nation and creating the conditions for peaceful and sustainable development.

Germany is the best example constantly increasing the contingents of the 7th and 8th levels of ISCED and directing young people to the development of those sciences and technologies that emerged not in the XIX but in the XXI century.



Germany has become a world leader in the production of the superconducting electric cables, a wide range of highly efficient electric motors, genetically modified bacteria and fungi that produce food, chemicals, organic plastics and even ultrapure metals without the use of means and technologies of the industrial period. This can be explained by the fact that for almost 20 years the organization of public administration in Germany has been performed by Ms. A. Merkel, who added to the very high competence in Sciences (she is a doctor of quantum chemistry) the ability to achieve economic and social success through strategically correct choices of the most progressive areas of development. All other leaders of the West were educated in Humanities or Political Sciences, so the superiority of Merkel over them in understanding the importance of modern science and technology is very noticeable.

Schengen Border Zone, Bologna Process and the EU's Erasmus+ and Horizon Europe programs have made a positive contribution to the increase of foreign students in European countries. It should be mentioned that Great Britain, Germany and France have the largest number of international students in Europe. At the same time, the requirement of "lifelong learning (LLL)" is reaching higher and higher levels. This is due to the constant change of production technologies, the demise of old mass professions and the arrival of completely new ones, which require not physical strength, but depth and efficiency of thinking.

There is a widespread perception that the mobility of students, young researchers and freelancers contributes to the quality of programs and research, and strengthens the academic and cultural internationalization of European higher education. All this is most useful not only for individual personal development, but also increases the chances of good employment, builds respect for European cultural diversity and significantly increases the ability to communicate with other peoples (Bologna Report 2009; pp. 4–5).

For example, the European Higher Education Area in 2018 provides the latest data on mobility indicators. In total, almost 2 million mobile students study in EHEA institutions: 56% (1,109,203) are from non-EHEA countries and 44% (869,701) are EHEA students studying in another EHEA country. However, these figures do not satisfy the EU leaders and they plan to attract more from the above-mentioned areas (Bologna Report 2018).

However, in this competition, EHEA members are forced to compete with many countries from around the world, which are increasingly involved in the development of mobility as an important aspect of improving the quality of their higher education through its internationalization and globalization. New data show international student mobility over the past 20 years (Education at a Glance, 2021).

These data are so convincing that they do not need any further explanation. A small share of these global successes also belongs to Ukraine, which has created smart legislation that promotes the growth of foreign students in the Ukrainian higher education institutions (the greatest success is in the sector of higher medical education). The most popular universities among foreign students are: Kharkiv National University named after V.N. Karazin, Kharkiv National Medical University, National Medical University named after O.O. Bohomolets, Odessa National Medical University, Zaporozhzhia State Medical University.

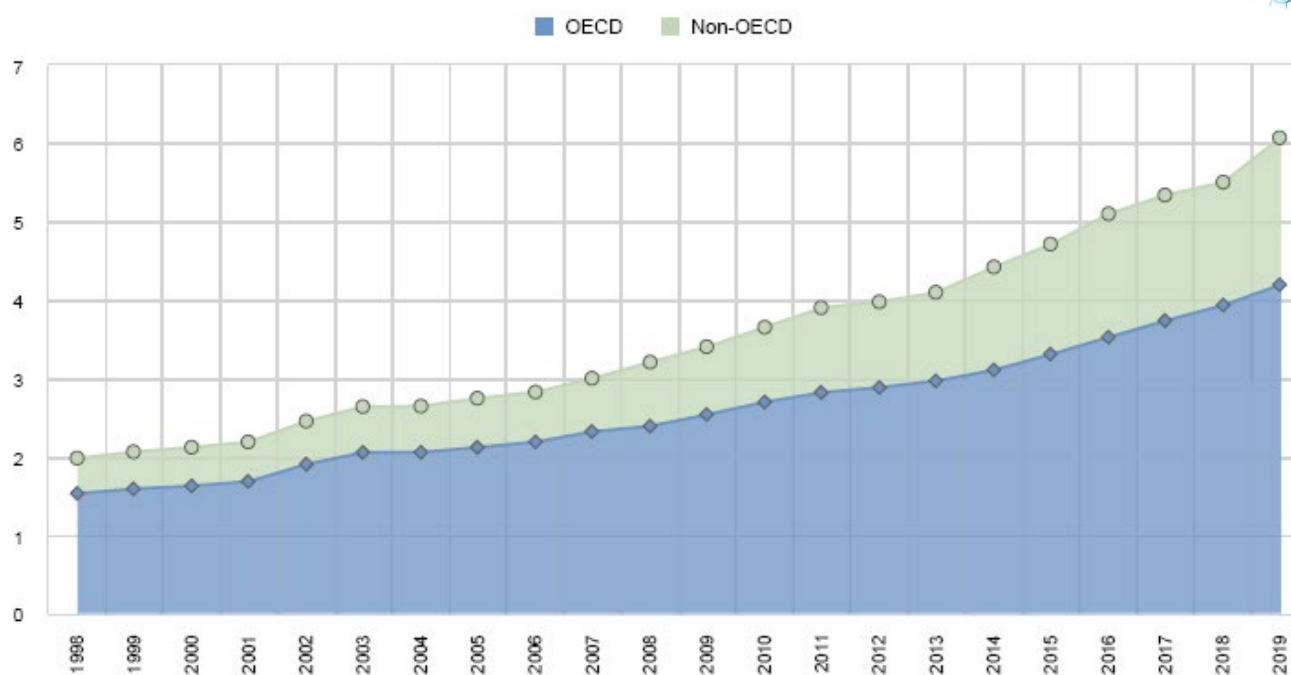


Figure – 1 Increasing the number of foreign students in higher education worldwide (from 1998 to 2019)

A number of higher education institutions in Ukraine that provided education to foreign students in 2019-2020 was 455; 2020-2021 – 394. In 2019, a number of foreign students reached 80,470; in 2020 – 76548 (from 155 countries). Most students in the Ukrainian higher education institutions are from the following countries: India (18095); Morocco (8832); Turkmenistan (5322); Azerbaijan (4628); Nigeria (4227) (Foreign students in Ukraine, 2020).

Virtually all countries recognize the importance of higher education, and the leading group is increasingly involved in a great race of brains, primarily the struggle among themselves to attract the smartest heads. There is a consensus that everyone needs new knowledge to make discoveries and innovations to ensure the growth of national economies. At the same time, universities and other higher education institutions will also play an important role in expanding national cultural and even political influence on the planet. It is sorry to say that in the most influential academic ranking of 2021, only two institutions from Kyiv and Kharkiv and universities from Lviv and Sumy were included in the 1000+ best (QS World University Rankings, 2021).

As a result of forced reflection on the conflict of civilizations and exacerbation of demographic dangers and deadly pollution of the biosphere, the organizers of previous academic ratings from the well-known agency The Times Higher Education decided to drastically change policy. The need to fulfill 2015 resolution “On 17 goals for sustainable development” lead to creation of rating on the environmental impact of universities around the world – The Times Higher Education Impact Rankings, 2020 (Impact Rankings 2020). This decision was accepted and implemented by Ukraine, which created a law at the national level (SDGs National Report UA, 2017).

The group of eco-oriented institutions of the world includes ten higher education institutions from Ukraine, 9 from China and only two from Germany. The Times



Higher Education Impact Rankings, 2021 has recently become available on the Internet, halving the number of evaluated institutions (to 1,117 from 94 states). Ukraine has 15 university-level institutions, a good figure (25th place). Let's hope that all world science and higher education will forget about past standards and focus on creating environmentally friendly industries. In the last two years, their numbers are growing very fast and soon the industrial livestock harmful to the biosphere will disappear forever.

Finally, it is necessary to draw readers' attention to one more aspect of internationalization. It consists in the formation of a global system of the most successful options for the organization of secondary education and all higher levels of ISCED. In order to obtain important products in the most efficient way, from giant planes to small smarties, which are quite perfect computers, the world's leading countries combine their resources and productive forces from the Third World, contributing to its rapid progress.

Something similar, albeit less widespread, there exist in world education, where globalization and economic competition have resulted in differentiation in the space and time of education and training at all levels, including internships and professional development. There is a slow disintegration of the practice of performing only in one state. Instead of obtaining a master's or PhD competency within one country, it becomes more profitable to have basic and specialized schooling in one place (rich families from Ukraine prefer the United States or the United Kingdom), a bachelor's or master's program in a leading country "A", postgraduate studies somewhere in "B", but the final professional development in the world's best center with an MBA or some other training in London or Harvard.

From all this the following conclusions can be made: the highest quality specialist is a product that has already become international and this tendency will only intensify in the future. But for this, it is necessary to shift scientific and educational sphere to internationalization and sustainable development of economy.

Two main trends in higher education development have been distinguished, namely an increase in a number of students of university level and shift of all major European higher education from bachelor's degree not only to master's, but also to the highest PhD and doctoral. The internationalization has a great impact on the higher education efficiency, especially contributing to internationally oriented professionals with high competence.

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Анотація. Стаття містить дані про стан і тенденції розвитку вищої освіти в Європейському освітньому і науковому просторі та у світі в контексті інтернаціоналізації. Доведено факт прискорення кількісного і якісного розвитку вищих рівнів освіти – підготовки магістрів і молодих дослідників PhD-рівня у провідних державах Європейського Союзу. Досліджено інтенсифікацію мобільності студентів і вплив цього явища на підвищення якості вищої освіти та ефективності освітньої діяльності. Наведено кількісні дані про потоки студентів усередині Європейського простору вищої освіти, відзначено позитивні і негативні явища у темі «мобільність» для молоді України. Вказано на необхідність підтримки тих технологій, що будуть визначати економіку світу через 10-15 років. Фахівець високої якості – це фахівець із міжнародним дипломом, і в майбутньому ця тенденція буде тільки посилюватися.



Ключові слова: вища освіта, глобалізація та інтернаціоналізація, Болонський процес, мобільність студентів, якість підготовки фахівців.

The article is submitted: 25.01.2022.

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