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The Role of Higher Education in Shaping Human Capital for the Growing and Evolving Needs of the Modern Economy

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4.1. Introduction

Crisis situations in the economy can be an outcome of many events. The consequences of such situations may be various types of disturbances, imbalances and destabilization of the economy. Numerous natural disasters, as well as social, military or political conflicts can often be identified as causes. Social, economic, technological or the most actual challenges related to health and military threats play an important role. Crises may also result from the dynamic economic development, they may be a consequence of risk and uncertainty appearing in the economy. Economic crises are inevitable, they can often lead to a collapse of the economic situation of even highly developed countries, economic regions or a group of countries.

We can also ask why the business environment has become so dynamic, uncertain and ambiguous and often leads to crisis situations. A combination of different factors has created the current VUCA business environment. Changes in the economic environment force the speed of adoption of technologies. The advanced technology and the need to create and implement innovations took over the world of business. This means a massive reorganizational and upskilling effort. In this context, the knowledge-based economy and the role of universities, which are largely responsible for creating the right skills in the context of the needs of the economy, are becoming increasingly important.

To prevent crisis situations, a variety of actions can be undertaken, to respond appropriately to emerging crises.

It is necessary to adapt the form and content of high schools teaching in order to achieve educational effects being the proper response to the needs of the environment. In this paper, attention will be paid to higher education and methods of responding to environmental challenges and potential crises. Another interesting issue will be to study how universities in various countries react to such situation. The purpose of the considerations is also to answer the question whether selected countries and the universities representing them react to a similar extent or whether there are differences.

4.2. The Importance of Knowledge in the Education Process

The concepts of a modern university and the current economy often underline the dominant role of knowledge-based economies. Many authors point to the great and increasing importance of knowledge for both the economy as a whole and for universities as a knowledge-providing institutions.

Market criterion, from primary education, through the secondary one, up to higher education, started to play a key role in determining discourses, scientific research and pedagogical practices. We can now see free market ideology, largely influenced by the needs of managerial staff and, consequently, new thinking about knowledge. Learning is expected to perform adaptation functions. In the current system, organized around global capital, access to scientific and technological know-how may constitute a competitive advantage and positively stimulate appropriate decisions (Biały, 2011, pp. 32–36).

It is also believed that investments in human capital, inventions and innovations, are largely responsible for contemporary concepts of economic growth. Such activities have an impact on the dissemination of knowledge, technical progress and innovation. The choice of such a direction of investment increases the research and development potential of economies, having an impact on building human capital, and consequently leading to sustainable and competitive economic growth. We will find such assumptions and approach in the so-called knowledge-based economy. Its most important features include (Niklewicz-Pijaczyńska, 2011, p. 443):

- establishing new companies and employment growth in knowledge-based sectors,
- high share of the service sector in employment and GDP,
- increasing investment in research and development,
- increased importance of exports and international links,
- growing importance of formal and informal networks.

It has been pointed out that in recent years in the global economy some directions of change could have been observed, starting from an industrial economy (based on economies of scale) to a free market economy in which technological potential and a high level of

human capital play a key role. Countries that make better use of these factors gain a competitive advantage due to the key role of knowledge and innovation in the economic growth rate. Such dependence causes that in some countries, especially highly developed ones, the search for sources of new knowledge and ways of developing an innovative economy becomes a priority and leads to building a knowledge-based economy (Dworak, 2014, pp. 13, 14). This author also quotes a Japanese economist Kodama, who indicates the need to comply with a principle that allows a company to qualify as a knowledge-generating company, which in the next step transforms into innovation. This is the moment when investments in R&D are greater than investments in fixed capital.

The question can be asked how the above regularity can be applied to the functioning of enterprises. According to Łobos and Puciato, important are intangible determinants of enterprise competitiveness. These authors believe that competitiveness issues are determined by the enterprise management process, which should take into account both activities aimed at shaping the company's internal potential, and constant analysis of the environment and quick response to changes occurring in it. This means that an increasingly important group of factors of competitiveness understood in this way are intangible resources related to broadly understood intellectual capital. (Łobos & Puciato, 2013, p. 89).

With regard to knowledge itself as a resource, the authors point to its important features such as dominance over other resources, hence given priority over them. An important feature of knowledge is also its inexhaustibility, which means that knowledge resources do not run out as they are used (Łobos & Puciato, 2013, pp. 97, 104). With such a great importance of knowledge as a valuable resource for enterprises, its value and use can be associated with the development of knowledge-based economies and societies.

The authors of the report *Democratizing Knowledge for Global Development* even discern some addiction of economic development on knowledge. The relationship between knowledge and development has become very close, and the next steps in development seem driven by knowledge. The authors also base on reports from the World Bank, according to which the current knowledge driven society will depend on knowledge in most areas of its operation. They note that currently the concept of a knowledge-based economy, mainly taking place in developed economies, in the area of so-called Global North, does not exhaust the area where this concept can be observed. The knowledge-based economy model and its development are increasingly visible in some developing countries in Asia and Latin America (Aarts, 2011, p. 12).

From this statement it can be concluded that also in other developing economies certain models and values that have been introduced and do work well in developed countries, may have a wider application. In turn, benchmarking can answer whether individual countries similarly use education as a response to the environment, including the economic situation.

4.3. Higher Schools in Shaping Human Capital for the Modern Economy

In the context of the growing importance of knowledge, one can look for the answer to the question what role universities should play in this respect, in what direction to evolve, to what extent they should take into account changes in organization and approach to their mission, bearing in mind a number of contemporary challenges, such as globalization, and the need to build a competitive advantage based on intangible assets.

The question can also be asked what should be the role of the university as a knowledge broker, how should the role and activity of universities be defined in the modern market, whether the current model of knowledge transfer is adequate to the socio-economic challenges. It has been pointed out that there is no other, more predisposed institution to play the role of a knowledge broker than a university, but to achieve success and improve knowledge management, the university should know how to effectively implement three key processes involving knowledge: its creation, codification, and transfer (Mierzejewska & Płoszajski, 2005, pp. 105, 106).

Creating the right knowledge and its subsequent transfer can be a big challenge for universities, especially at a time when the labour market, the dynamics of business development, and economic transformations are characterized by constant changes to overcome crisis situations. The expectations for an appropriate resource of knowledge change adequately.

The reason for the failure may be the mismatch of the educational offer to the current needs of the labour market. The problem can be multiplied if changes in employers' needs are not coordinated with the education system. Forward-looking activities and forecasting the development of the labour market are therefore important. Failure to do so may result in structural mismatches and discrepancies between employee qualifications and employers' needs and expectations. Poland and other European countries, in parallel with integration and globalization processes in Europe and in the world, should adapt education systems to the knowledge-based economy (Trych, 2011, pp. 45–54).

The role attributed to higher schools is particular from the point of view of creating a knowledge-based economy, because it gives opportunities for countries and economies wanting to enter the path of long-term growth. The knowledge-based economy concept introduces a new development paradigm to economic theory and economic realities, a new quality in which knowledge and innovation play a key role. Adequate human capital is the provider of knowledge-based values for the whole economy and single enterprises. In this context, the role of universities is particularly important, because universities have an impact on the process of creating human capital and investing in it (Jakubowska & Rosa, 2011, pp. 64, 65).

The authors of the report *Analysis of strategies, models of operation and evolution paths of leading universities in the world* are of a similar opinion. They believe that the creation

of knowledge by universities is closely related to the creation of human capital. This is the result of a correlation between research activities and educational ones, understood as improving the quality of education, which is based on research and obtained results (Olechnicka et al., 2010, pp. 21, 22).

The contemporary stage of socio-economic development, with the priorities given to knowledge resources and development of human capital, results in the need to determine the role of higher education in this process, the role of universities in shaping human capital and competences.

4.4. The Specificity of Expected Competences and the Direction of University Development

Being aware of the role of knowledge in the society and in the economy, the specificity of competences expected in the labour market, now and in the future, should be taken into account. This area can show the dynamics of changes in the area of education – a key function of higher schools to which universities should adapt.

Parallel with technological changes, social changes occur, leading to different understanding of human work and its importance. This means that society must face an unpredictable future. Increasing importance gain not only the skills closely related to a particular profession, but universal, transferable competences, applicable to various situations and changes (Woźnicki, 2019, p. 7). Attention is also drawn to key fields of education that will answer the question „how to educate for the future?“ They can be described as follows (Chmielecka, 2019, pp. 17, 18):

- skills and knowledge made as durable as possible, maintaining their relevance in the face of change.
- building awareness among graduates, having to face change and adapt to cope with change.
- paying more attention to social competences.

The ability to accurately predict the specifics and needs of the economy in the future can help in shaping specific competences to meet these needs. According to Piotrowska and Saryusz-Wolski the slogan “competence of the 21st century” has become an important topic of discussion of contemporary universities and the model of their functioning under the influence of the environment. The authors point out that according to analyses in this area there is a gap between holistic and generic competences. They also note that the most innovative universities pay great attention to shaping students’ ability to perform complex tasks, solve problems, communicate and cooperate. An appropriate attitude of response to change, based on such features as cognitive initiative, perseverance, flexibility and leadership, becomes a key competence (Piotrowska & Saryusz-Wolski, 2019, p. 55).

In turn, attention is drawn to the possibility to forecast the directions of civilization changes, based on the analysis of the dynamics of development of selected technical and technology changes from the last decade. However, this task can be planned for a period of several years, longer time perspective is not very realistic due to the dynamics of changes. On this basis, the opportunity appears to make research on the competences that will be needed in the future. Successful forecasts and lower risk of errors will be possible when assuming linear socio-economic development, while failures may occur with abrupt development jumps (Kwiatkowski, 2018, pp. 23–25).

Table 4.1. Key skills in 2015 and 2020

No.	2015	No.	2020
1	Solve complex problems	1	Solve complex problems
2	Coordination of tasks in the team	2	Critical thinking
3	Managing people	3	Creativity
4	Critical thinking	4	Managing people
5	Conducting negotiations	5	Coordination of tasks in the team
6	Quality control	6	Emotional intelligence
7	Service orientation	7	Assessment and decision making
8	Assessment and decision making	8	Service orientation
9	Active listening	9	Conducting negotiations
10	Creativity	10	Cognitive flexibility

Source: (Pater, 2019, p. 96).

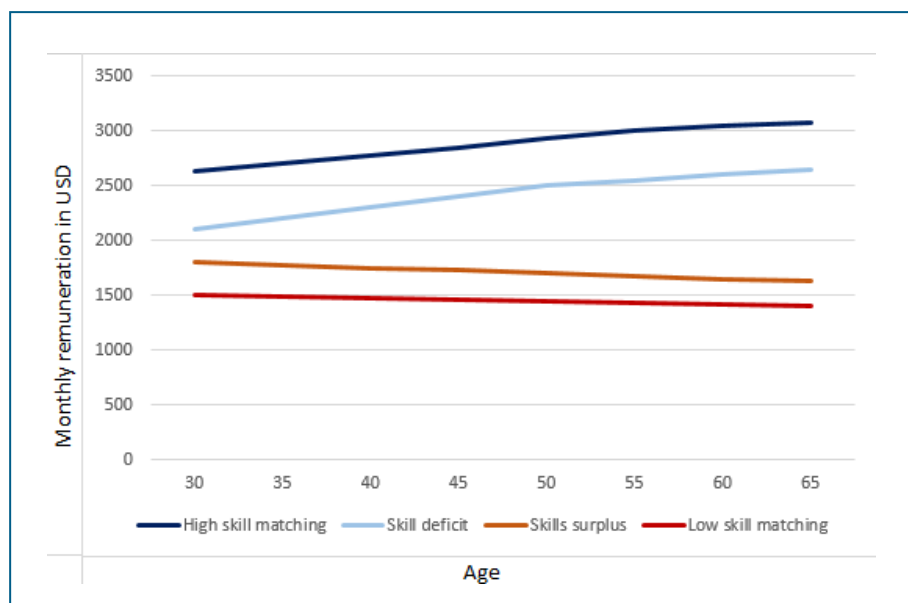


Figure 4.1. Relationship between skills mismatches and earnings

Source: (OECD, 2012, p. 20).

Pater, referring to the data of the World Economic Forum, shows the dynamics of changes in the relatively short period of five years (Table 4.1). The change in the nature of skills is mainly caused by modern technologies and related implications for the labour market. The pace of change in relation to expected competences may lead to a situation that they do not fully respond to the needs of the labour market. Mismatch may vary in nature, and differences may arise at various stages of professional development.

The dependencies presented in Figure 4.1 can bring important information for universities – how to properly build *curricula* from the point of view of achieving appropriate learning outcomes. The analysis of competences in relation to the specifics of the labour market may be one of the dimensions of the education process, showing the need for continuous changes and adaptation work.

Contemporary universities, struggling with the dynamics of changes that are taking place in their surroundings, should set in their missions and visions the goals such as the ability to anticipate and meet current trends, ability to redefine one's own role in modern society, ability to transform and go beyond the position currently 'designated' for higher schools, ability to create value for the client, innovation, ability to compete, and even setting trends on the educational services market (Maliszewski, 2019, p. 29).

4.5. Globalization as a Determinant of the Development of Higher Education

Higher education and its specificity are determined by particular needs of the environment, including the economic environment. Given the fact that the number of international interdependencies in the economy increases, it is worth considering education in connection with the specificity of globalization. The nature of education systems in the world is largely the consequence of globalization processes, while changes in the socio-economic sphere determine the needs of changes in education.

The emergence of modern technologies supporting communication processes is recognized as the most important stage of globalization. This in turn has a positive impact on increasing the scale and form of global exchange, travels and other types of interaction. It is believed that the nature of education systems is a derivative of globalization processes, and civilization changes set the direction for thinking about the needs of changes in education (Kojs, 2014, pp. 15–19). The author notes that education has always been determined by the specific needs and interests of individuals, playing a supportive role in relation to social interests expressed through specific ideas, ideologies and strategies. The question is raised: what goals for education are formulated by globalization processes? He further argues that the premises of education are within the framework of specific globalization strategies, they are an expression of globalizing economies, and to a lesser extent an expression of national and cultural values.

Another view refers to the globalization process in the context of the challenges for education. The author claims that the pressure associated with progressive globalization processes creates the need to analyse the functioning of educational institutions. It is important to link the specificity of higher education with transformations in the entire public sector. An important element is the fact that the global context will require not only understanding that some change is needed. The need for a thorough understanding of the needs and aspirations of citizens, and the role that universities can play in this process, will become increasingly important. It is further emphasized that the main driving forces behind changes in education are of global character (Furmanek, 2014, pp. 137–144).

An interesting view regarding globalization is presented by Czaplińska, who believes that together with the increasing complexity of the world, interpenetrating different worldviews, differences in culture and the level of socio-economic development, global education and the development of appropriate competences become important. Raising awareness of global changes and obtaining appropriate knowledge increases development opportunities (Czaplińska, 2010, p. 487).

It can therefore be stated that we are dealing with growing awareness in the understanding of the key values of the modern world, its problems and relationships. This attitude can, as a consequence, provide a good basis for building ever stronger relationships between the economy and education. So, there is a need to look for the optimal form of education. However, there are difficulties in finding and applying an ideal model to shape social capital being adequate in relation to the direction of economic development.

4.6. Economy Evolution and the Role and Adaptation of Education

In the practice of social-economic life solutions should be used to maximize social benefits and minimize costs. Managing the relationship between the economy and education should not be included only into the ideologies of the free market. It is important to conduct diagnostic and planning activities at the level of state institutions that would allow to correlate priority areas of the economy with educational activities (Lewowicki, 2014, pp. 48, 49).

It is worth asking a question what should be the nowadays the strategic goal. Will it be to optimize educational activity in relation to economic specificity, not only on a national scale, but also with regard to international solutions? In the study on global economic space, the impact of globalization processes on education and the economy, the economic potential and diversified development of individual regions of the world has been taken into account (Zioło, 2014, pp. 208–210). The author assumes that civilization development generates changes that have their expression in the area of socio-economic evolution in each individual stage of evolution. It involves the transition from an industrial society, with the dominant role of industry in the economy, through the post-industrial phase, with the predominant role of services, up to the phase of the information society, where the economic

base is science, and the economy is based on knowledge. The role of the state and its strategy in creating intellectual resources is important in this process, which has an impact on accelerating or delaying economic, social and cultural development.

The diagram of the relationship between globalization and education as well as the place and nature of education in the context of economic development, is presented in Figure 4.2. It seems important to search for factors that determine the optimization of education, in the context of a given specificity of the economy, and on this basis to maximize the interrelation indicated in Figure 4.2. From the analysis of similar situations in history, and on the basis of available data, it seems reasonable to state that it would be very difficult to achieve 100% effectiveness when striving to maximize the indicated relationship.

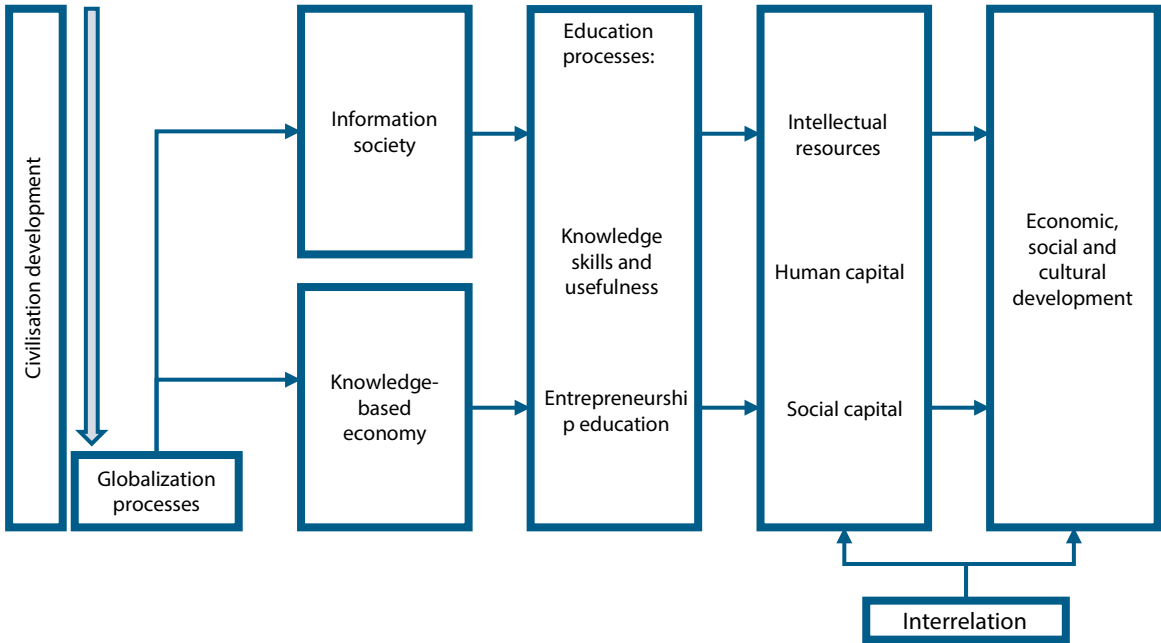


Figure 4.2. The relationship of globalization with education and civilization development

Source: own study based on (Zioło, 2014, pp. 208–210).

One can look for an answer to the question: why it is so difficult to keep appropriate pace when acquiring knowledge in the conditions of ongoing globalization processes, including those emerging in crisis situations. Based on the literature on the subject and the author’s own experience, it may be reasonable to state that finding an optimal, effective and sustainable education model, especially in relation to the international perspective, unpredictable turbulences in the economy, can become difficult. Considerable importance can be attributed in such circumstances to high-quality educational offer, its continuous evolution and responding to emerging needs of labour market.

4.7. Quality and Efficiency in the Functioning of the University

With regard to the fact that in the process of modernizing higher education quality becomes an important element of change, it is worth referring to the point of view of the authors of the study on the directions of pro-quality and pro-efficiency activities of higher education in Europe (Wiśniewska, Grudowski, Plura, & Nenadal, 2016). The authors believe that quality issues in the higher education sector have become particularly important over the past two decades, and individual countries are working on improving quality in accordance with the guidelines developed by ENQA (European Association for Quality Assurance in Higher Education), but at the same time promote their own solutions for assessing and improving quality in higher education. The effectiveness of education is always important throughout the process, and is measured by the degree of adaptation to socio-economic life.

Introducing quality priorities into higher education development policies in the long run is important. On the example of Poland, it is worth paying attention to which areas are covered by a pro-qualitative approach in the field of modernization of higher education in the period up to 2030. The program for the development of higher education and science is a response to the social, economic and civilization challenges facing Poland. It is setting goals and indicates appropriate actions to improve the condition of science and the higher education system, as well as proposals for changes. The program has four goals (Ministerstwo Nauki i Szkolnictwa Wyższego, 2015, pp. 4–32):

- increasing the quality of education while adapting it to social and economic needs,
- increasing the quality of research,
- improving the functioning of the system by implementing changes in the area of organization, management and financing,
- strengthening the impact on the social, economic and international environment – the undertaken activities should lead to greater interest of enterprises in cooperation with universities, popularizing knowledge, building environmental trust, which will allow higher education to have a greater impact on the economy.

The above example of Poland shows a multitude of areas in which the promotion and application of pro-quality solutions plays an important role in the development of universities. In each of these four goals proposed changes are based on increased quality.

In the transformation of universities, from the Humboldt model to the entrepreneurial one, their relationship with the environment is emphasized. They are increasingly becoming participants of the market game, and they must respond to the situation in their surroundings. This results in the need to improve both quality and efficiency of university functioning. In the context of the market oriented higher education, the university's offer relates to some defined target market. This requires careful analysis and understanding of customer expectations and then meeting these needs (Pabian, 2016, pp. 87, 88). It has also been emphasised that market competition forces pro-client thinking, which results in the focus on quality and thinking in terms of effectiveness of activities (Goranczewski, 2011, p. 339).

It seems reasonable to claim that the implemented solutions of high quality and efficiency are inventive and innovative activities that can help, by offering appropriate competences to students, in responding to the demanding specific economy situations, including unpredictable emerging crises.

Promoting high-quality activities at the university, including the methods and tools applied, may determine the competitive position of the university on the market. It can be assumed that the university's task is to create and implement educational services in an innovative form, and this can be done by defining a key distinguishing feature that will bring new, competitive quality to the market. Therefore, such a goal should be included in the university's development strategy that will favour the creation of a new quality of educational service, while also responding to the market demand. This orientation of university development will contribute to being socially responsible to external stakeholders (Geryk, 2012, p. 291). A socially responsible university should be a stimulus for pro-innovative activities in the environment. The pursuit of creating and implementing innovation is the driving force of the economy – that is, it responds to the needs of the environment. The implementation of innovative solutions requires a specific goal to be formulated by the university, that will make adequate response to the diagnosed needs of the organization and the environment.

In relation to innovative activities in universities and the way of thinking about the strategy of the educational service, Wójcik-Augustyniak indicates the need to develop an innovation strategy for the value of the educational service. According to the author, in the face of increased competitive pressure, the strategy should be understood as choosing priority projects for the future, at the expense of other, less significant university activities. A detailed analysis of individual areas of the university activities may allow for hierarchy, where in the foreground there will be activities that have the greatest impact on shaping the future of the organization. An important stage in the selection process is the creation of so-called value curves, and identifying factors that are important for stakeholders. Examples of factors considered key ones may be: (1) prestige, (2) innovation, (3) scientific strength/effectiveness, (4) conditions of studying, (5) internationalization (Wójcik-Augustyniak, 2017, pp. 222–224).

In the context of the above, one can look for a way to distinguish specific factors that the university may consider valuable in relation to individual areas of functioning. They should be possible to implement, and adequately fit to the expectations of the environment and university stakeholders. Different approaches can be found in the literature concerning the methods of selecting activities being relevant to the development of the university.

Bearing in mind the variability of the environment, the use of management concept that focuses on the most important priority areas is recommended. Such a concept includes Priorities Management, according to which organizations should focus on selected activities that are important due to the possibility of taking advantage of emerging opportunities in the environment and avoiding strategic threats. This concept is particularly applicable in the

shorter period, usually one year (Łobos & Puciato, 2013, pp. 190, 191). It can therefore be concluded that the focus on the relevance of the university's assets refers to the continuity of the modernization processes in higher education, their improvement, while the pursuit of market convergence refers to the dynamics of changes in the university's environment, emerging crisis situations and the need to cope with them. It is worth paying attention to the concept of creating key success factors when building a strong competitive position of the university and choosing crucial areas of its activity.

Attention is also drawn to the very essence of using the method of defining key success factors as a basis for creating a competitive advantage. Such information can help in determining the strategic potential of the enterprise, including also any university, and thus building a competitive advantage.

Key success factors are the result of transforming resources, processes and skills into tools that allow you to study competitive advantage. Not all resources at the organization's disposal are a source of advantage; some may be in this aspect completely useless, because their role is only to ensure the duration of the organization (Maliszewski, 2015, p. 148).

It is important to assess them from the point of view of suitability in supporting the development and success of a given organization.

The method of key success factors allows to analyse the trends in the development of higher education systems in relation to changes in the environment and in relation to the future, as they are included into the strategy, which refers to activities over the next years. Researches in the area of universities competitiveness show that it is difficult to find universal success factors, they can also change over time and varying specificity of the environment.

The justification for the pro-qualitative and pro-efficiency orientation of higher education development can also be found in the report *The Avalanche Is Coming*. The authors point to a large increase in the number of universities in the 20th century and their standardized nature, where in the face of hard competition in student acquisition, and consequently funds, a strong competitive position will be maintained by the most prestigious, elite universities. Other universities must work out an offer that will make them differentiate from competitors. The way to develop a unique offer can be to find and ensure high quality in a selected area of university operation. Standard course content does not have to be a decisive factor for the success of the university. The distinction of some given area may obviously relate to the quality of the education offer, a given module, but also to the quality of mentoring, the relationship of the university with its city or region, the nature of the dialogue between students (this may be even global), paths from universities to the labour market, or global partnership with study opportunities abroad. Innovation fields appear in these areas, and universities can undertake them (Barber et al., 2013, pp. 49–51).

The above considerations may lead to a broader analysis of the selected area of university operation. Considering the success factors selected for a given organization as a priority and including them into the strategy may be limited to the need to check the real value of some selected areas of university operation, e.g., internationalization.

4.8. Internationalization as One of the Areas of University Functioning

When considering key success factors for any university, some selected area of its functioning can be subjected to a broader analysis. Bearing in mind the need to provide graduates with appropriate qualifications, what is the most important goal for universities, the educational one, one can focus on the role of internationalization. Universities that want to educate and prepare students for life in the world of globalization, pay attention to the quality of the internationalization process, support them in social and academic integration, create a multicultural campus, thus helping to develop the skills of global graduates who are sought after by employers (I-graduate, n.d.).

Globalization is widely recognized as the main driving force of higher education internationalization, and is also a key element of the environment in which higher education institutions operate and to which they must adapt. As it results from previous considerations, globalization is both a series of development opportunities for the economy, but includes also periods of stagnation and crisis moments. The scope of globalization had a great impact on higher education, and internationalization has become the main response to this phenomenon. It seems that the international dimension in higher education will remain and probably continue to gain importance in the programs of individual institutions and national/regional higher education systems around the world.

The university internationalization aspect appears in many rankings, which may indicate its importance for universities, acknowledging this area as one of the key factors of the university's success. Individual rankings often give weights to any given indicator, and the most frequently assigned value for the internationalization is between 5 and 15%.

It is also worth paying attention to the achievements of selected universities, which took the highest position in Times Higher Education World University Ranking (in 2015, as an example). The results of study (Figure 4.3) presented for selected group of universities, i.e., two top-ranked universities in the world, in Europe, and in Central and Eastern Europe, can be helpful. A visible difference can be seen between the achievements of the best universities in the world, those from Europe, and from Central-Eastern Europe. These differences concern also international achievements.

With regard to the above-presented analysis of justifications for the need for internationalization of universities, one cannot omit the important fact that the reasons for internationalization can vary for different countries. The reasons for internationalization may vary for different countries. For example, the authors of the *The EAIE Barometer* report have noted significant differences between countries and regions such as Great Britain, the United States, Western Europe, Central and Eastern Europe, in which various reasons for internationalization appear. Different value can be assigned to selected features and international ventures, they can be treated commercially, or as a means of diplomacy and building prestige, there may also be other premises for implementing mobility or internationalizing curricula (Engel et al., 2015, p. 3).

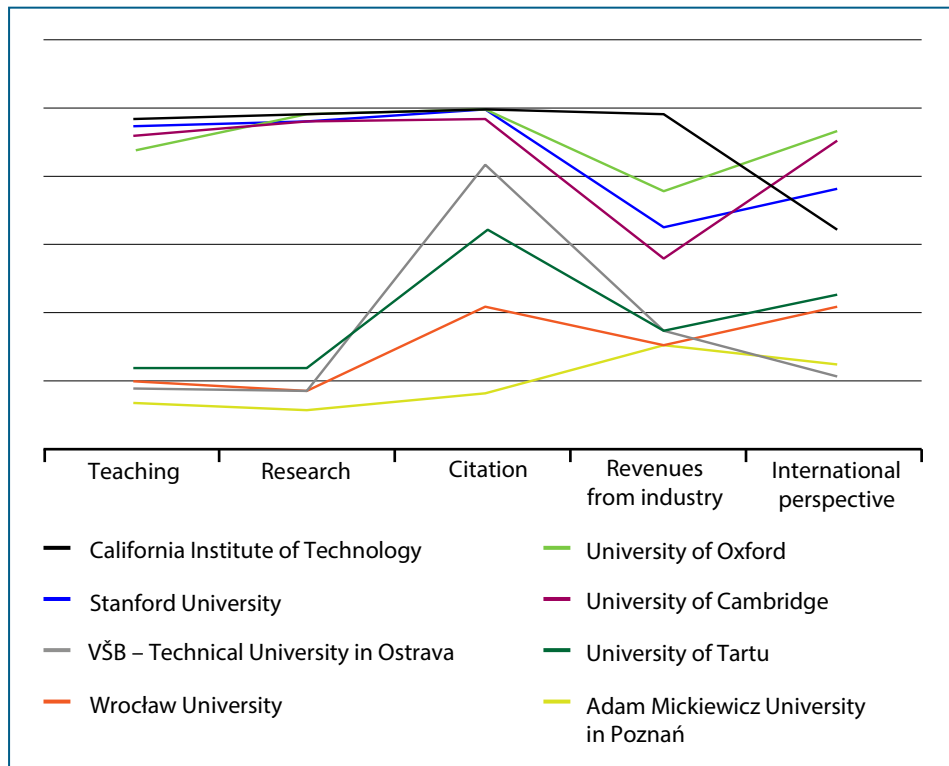


Figure 4.3. Basics of higher education strategies, according to Times Higher Education World University Rankings 2015–2016

Source: (Wójcik-Augustyniak, 2017, p. 195).

To sum up – the importance and legitimacy of internationalization in the higher education development is visible all over the world. This phenomenon affects individual institutions and higher education systems. The impact of internationalization on higher education can be seen in the way in which the basic activity of the university has changed in recent years, it concerns in particular teaching and research. The requirements of a global knowledge-based society have put pressure on higher education. World business trends emphasize the education of young professionals with specific skills (Sandström & Hudson, 2018, p. 11).

4.9. Goals and Activities in the Internationalization of Higher Education

Given the importance of internationalization as an area of university functioning, the importance of this concept should be brought closer and attention should be paid to achieving what goals internationalization of the university should lead. It is widely accepted that internationalization leads to many potential benefits for students, institutions and

society as a whole. To achieve them, universities should understand their surroundings and then develop a strategic approach, define goals and optimize the implementation of internationalization, as well as monitor and evaluate this process.

An interesting approach analyses the university motivations to implement and develop internationalization. They may vary depending on the region, country and institutions, and result from various reasons. Most often universities have a number of goals, which include (Green, 2012):

- preparing students for „global citizenship” and for work around the world,
- improving the quality of teaching and research,
- increasing prestige and visibility,
- generating revenues,
- contributing to local or regional economic development,
- creating knowledge about global issues and solving global problems,
- increasing international understanding and promoting peace.

The question arises whether it is possible to find a common trend – motives and goals for all universities. The results of the research carried out in 2018, in which universities were asked about the most important goals of internationalization, are presented in Figure 4.4.

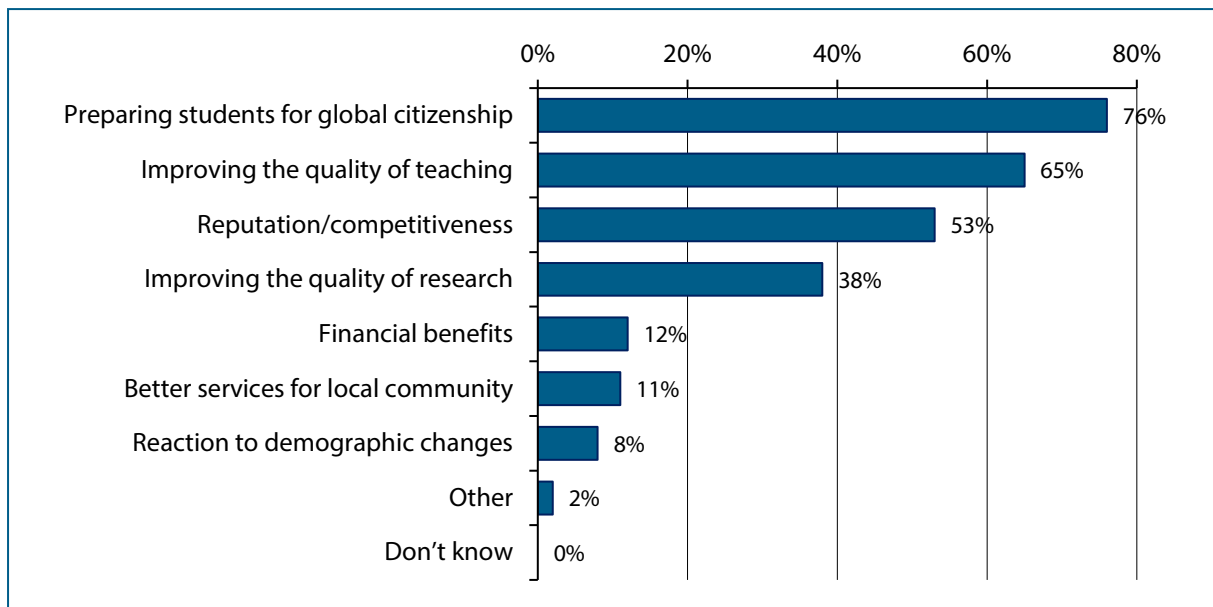


Figure 4.4. Main goals of internationalization, 2018 (n = 2317)

Source: (Sandström & Hudson, 2018, p. 12).

These results show that there are some trends in defining goals, but there are also differences that may result from the specificity of a given country and its strategy towards higher education, type of university, their location. When analysing the results of the

EAIE Barometer, it is clear that, for example, preparing students for life in the global world is becoming one of the most important goals of internationalization. In turn, when the adopted goals are achieved, the measurable impact of higher education on the environment, including also the economic one, is proved.

4.10. Efficiency and Quality as Variables in the Internationalization Process

Given that internationalization can contribute to achieving goals in terms of improving the global labour market, including the impact on the level of economic development, it is important to show how internationalization is measured. Referring to the previous argument about the essence of applying qualitative and quantitative measures to the entire university, it is also justified to use them to measure internationalization.

In the opinion of the authors of The EAIE Barometer, internationalization is an increasingly complex phenomenon, and higher education institutions are multi-faceted organizations that are constantly evolving. Analysis of both quantitative and qualitative indicators can be an ideal tool to assessing the full range of dynamics and internationalization effects (Sandström & Hudson, 2019, p. 4).

When seeking justification for the use of efficiency and quality measures discussed above, one can refer to the role of the environment, external factors, which determine the functioning of universities, and the goals formulated on this basis for internationalization. Success in their implementation may result for universities in responding more effectively to changes in the environment and the economy, both during its periods of growth and decline, including also crisis situations.

Important environmental factors are the growing requirements of university stakeholders, students, parents, employers, which in turn forces the university to meet emerging needs. In the face of strong competition, including international competition, universities must achieve their goals, i.e., look for the best way to achieve high efficiency. It is important to analyse the degree of implementation of the internationalization objectives and their outcomes (Hudzik & Stohl, 2009, pp. 11–17). It should also be noted that rankings and accreditation agencies of higher education institutions, in relation to their responsibility towards the environment, encourage universities to assess the effectiveness of their internationalization. Methods for implementing the appropriate internationalization model and methods of how to accurately measure results in this area are sought (LeBeau, 2018, p. 1).

When analysing the relationship between quality and efficiency, it is worth considering the interpretation of efficiency, primarily as the high quality of educational services. In general, efficiency related to the university sector should be considered in conjunction with the quality of all implemented activities (Piasecka, 2013, p. 266). It has been stated that the activities of universities are usually based on quantitative analyses of selected parameters, however, in assessments intended to affect the shape of the university's functioning,

qualitative methods should also be used, based on 'soft' data, so that you can take into account the full situational context (Jabłeczka, 1995, p. 34).

Another view is that the use of efficiency measures should be carried out taking into account qualitative and substantive assessments (Julkowski, 2014, p. 34).

Higher education, subject to increasing internationalization, operates according to universally recognized standards, which in turn forces competition within this sector. In consequence, by adopting a global perspective of action and development and thus strengthening the role of internationalization, the need appears to strengthen in university development the excellence and quality of education (Hryniewicka-Filipkowska, 2017, pp. 64, 65).

When considering both the efficiency and quality of internationalization, it is important to note what the relationship between them is, and whether we can achieve more valuable results by including these two aspects into research. It is believed that quality-oriented strategy is becoming a necessity for the university. In turn, quality of international activities is regarded as support in achieving the intended goals and results of internationalization. Quality testing in international cooperation projects can assess the level of given activity. Quality control includes monitoring progress, maintaining focus on the satisfaction and motivation of all partners, documenting conclusions drawn, and identifying potential threats before they become problems (Bischof & Punco, 2015, p. 69).

The need for quality is combined with global challenges and trends, such as privatization, reduction of government funding, new technologies of teaching, learning and research, globalization, knowledge-based economy, and increased competition. To respond appropriately to such challenges, evaluation and quality assurance is considered as a means of improving the adequacy, efficiency and effectiveness of the institution or program. Another reason is the growing emphasis on a results-based approach to education. This trend is related to the consumer movement, in which the student is perceived as a customer, as a buyer who wants to obtain the best value for the money invested. This relationship applies to higher education in general, but is also important for internationalization. As the importance, commitment and investment in internationalization increase, expectations for the quality of ventures and value added to higher education are growing (Knight, 2008, p. 42).

4.11. Conclusions

It is worth referring to the concepts and results of research carried out by Tomaszewski. The author refers to the definition of internationalization, in which internationalization is most often defined as the process of integrating the international, intercultural and global dimension into the goals, functions and method of providing an educational service. Internationalization defined by Knight is a process and reflects a set of activities that universities formulate in response to the environment, including the specifics of the

economy, especially in the era of globalization. Universities can carry out these activities at a different level of quality, both within a given country and abroad, hence there is a need to measure quality and the possibility of conducting comparative tests (Tomaszewski, 2022).

This approach to internationalization allows international activities to be considered in terms of value, changes, purposeful and planned results. "As a consequence, this has implications for controlling the achievement of the objectives adopted in the field of activities with an international dimension, of which an important element should be a measurement enabling the assessment of effectiveness" (Dymyt, 2018, p. 196).

In some part of the Tomaszewski's doctoral dissertation the research was targeted to the three countries studied, i.e., Poland, Great Britain, and Ukraine. The economic aspect that differentiated them was the level of economic development. To this end, the university's results were analysed in terms of efficiency and quality of internationalization and correlated with the GDP *per capita* indicator. The ranking of this indicator for the last three years was: Great Britain, Poland, Ukraine. In those countries, where the average GDP *per capita* ratio was higher, the university's share in terms of both efficiency and quality among the highest-classified universities is higher. Among the top ten in terms of efficiency there were as many as 60% of universities from Great Britain, 17.6% of universities from Poland and only 6.3% of universities from Ukraine. In turn, in terms of quality, 30% of universities from Great Britain, 23.5% of universities from Poland and 18.8% of universities from Ukraine. The obtained results confirm that the level of economic development translates into the achieved results (Tomaszewski, 2022).

Consequently, it can be concluded that through appropriately designed education and its selected tools, we can prevent and mitigate potential crisis situations in the economy and the enterprises operating in it.

Additionally, the history shows that companies that are able to implement innovations through a crisis outperform peers during recovery in their operations and businesses can gain long-term advantages. The implementation of innovations in turn may be a consequence of the knowledge capital built which is the responsibility of the education.

To sum up these considerations it can be concluded that internationalization is one of the key areas of university operation. Activities based on appropriately shaped international strategy and its development can contribute to the success of the university in reaching the adopted goals, and thus have also an impact on the situation in the national economy, it is the way to respond to emerging crisis periods. The issue of higher education functioning is of particular importance under pressure from the environment. Universities try to meet the requirements, addressing numerous challenges that arise in particular from the international nature of the economy.

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