

THE STRATEGY OF THE DEVELOPMENT OF THE HIGHER EDUCATION IN POLAND ON THE WARSAW UNIVERSITY OF TECHNOLOGY EXAMPLE

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Abstract: The education is the main factor increasing human capital. It has undoubtedly changed over time and exactly these changes have affected the development of the higher education and its strategies. Both public and private universities orient their activities to improve the quality of the education. The purpose of this paper is to discuss the strategy for the development of the higher education in Poland. The article presents several external conditions of the functioning of the Polish universities and the important factors for the development of the higher education and its strategies. Eventually, it also illustrates the two-way nature of the links between the university and its environment and discusses the Warsaw University of Technology Development Strategy for 2020.

Key words: higher education, higher education in Poland, higher education development, higher education development strategies, environment of the universities

Introduction

“Higher education, just like the education in general, is a particular interest generally having characteristics both of the private and the public good. Generally, however, it has features of the mixed good called substance good. It consists in the fact that even if it is delivered privately through the market, the state supports its delivery and its use through the tax system, subsidies or appropriate regulations, because of the positive externalities of these good. (...) The education is the main factor increasing human capital, which, in turn, is the most important factor in the economic development. The education has also autotelic value, moreover, it strengthens social cohesion, promotes the development of democracy and has many other positive effects.” [9., p.81] Nowadays, the higher education ceases to be an elite good. Both public and private universities orient their activities, inter alia, to improve the quality of the education. The competition for extra-budgetary funds (that share in the revenue structure of universities increases) increases and the public university management can be compared with the large company management. [10, p.15] “For thirty years, because of the public sector reform in the OECD’s countries, the changes in the management of this sector entities have been happening, including the public universities (universities). The changes of the universities management system have intensified in the nineties of the last century, after the Bologna Charter announcement in 1999. The European universities have been facing major reforms in the education area (teaching), the researches, and at the same time dealing with their activities and the better use of resources necessity and achieving greater efficiency.”

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[7, p.25]. The rising expectations for the higher education are not only related to the Bologna Declaration, the purpose of which was to create the European Higher Education Area for 2010., but also with the Copenhagen Declaration of 2002. and the Lisbon Strategy of 2000. [6., p.180] To withstand the challenges posed in front of the higher education it is necessary to achieve such a level of the higher education quality that stand the test of the international comparisons. It also becomes necessary to improve the management, increase the rank of the responsibility of the university, as well as to increase the funding and to differentiate the financing sources and guarantee of the higher education stable funding. [15.] In the view of the rapid development and the competitive realities of higher education, the necessity of modernization and demographic decline that has been ongoing for several years, taking the issue of the universities development strategies in Poland, finds its rationalization.

The university and its environment

“In the XXIst century the education is becoming an important factor for social and economic society purposes. The dynamics of the globalization, the creation of a "knowledge-based economy" and the European educational space require the higher education and the shape of the higher education institutions (HEIs) modernization, focusing on the needs of their consumers and to diversify the funding sources, increase competitiveness both between universities in the education market and graduates in the labor market.” [2., p.282] Nowadays, the education is not only a preparation for an adult life, but also a way to cope with the growing requirements of the labor market, rising competition and skilful coping with a wide stream of information surrounding the man. In the era of globalization the tasks of the higher education revolve around preparing students for participation in a democratic society and meeting the demands of the environment. [1., p.204-206]

The environment of the university can be understood in three worlds. These dimensions are: the authority, the market and the knowledge. [3, p.59] The main goal of the environmental analysis is to realize its key position that the organization should occupy in. The universities that are open to the environment undoubtedly become the driving force for a local development, because they increase the residential attractiveness of the area and contribute to the human and social capital increase in the immediate environment. The universities are the institutions that directly affect the overall quality of life in the place of functioning. Their availability and the level of services they offer are the key ingredients that build the quality of a determined space, actively influencing its formation. [16]

The article 7 of the UNESCO declaration says that in the constantly changing economy, based on knowledge, as well as its intended purposes, the extensive use of messages, it is befitted to strengthen both existing and future ties with universities and the labor market. It can be achieved, inter alia,

by increasing the scale of teaching, employees training and by inviting practice people to drive lessons as well. [8, p71]

The attention should be paid to the fact that, nowadays, the university which is indifferent to its surroundings and all of the demands and needs imposed by – is like a dead institution. The both parties commitment to the implementation of the common needs and the expectations of the local environment have a result in a deepening of the relationships and linkages, thus leading to the human capital and social environment development . It is extremely important to the university to interpret the signals that flow from its environment in skillfully way. [16] The figure below presents the two-way nature of the links between the university and its environment.

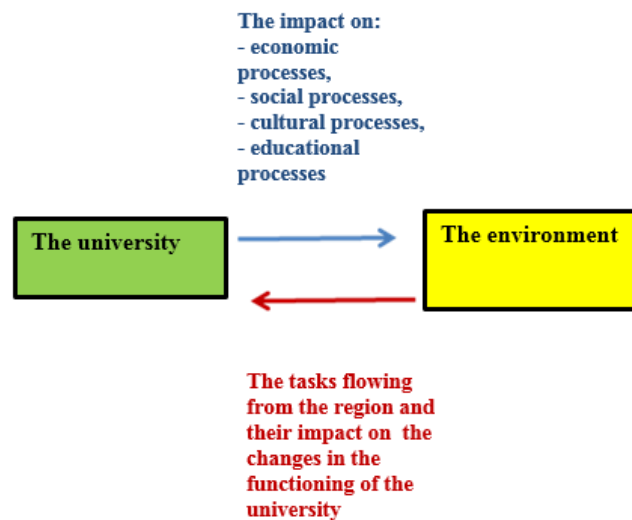


Figure 1. The bilateral nature of the relations between the university and its environment

Source: Own work based on: [16.]

Analyzing this figure, one can notice that the bilateral nature of the relations between the university and its environment becomes more and more noticeable.

On the one hand, the impact of activities carried out by the universities on their environment (economic processes, social, economic, cultural, educational) can be seen, on the other hand the influence of the environment and the local environment on the functioning of the university can be observed. The realization of these tasks taken by both parties is an expression of concern both of the universities and the environment for their common development. The main directions and the areas of cooperation between the university and the local community are the activities related to the democratizing and the culture role of universities in the environment of their functioning, the participation in the carrying the human resources policy on at the next area, the stimulation

and optimization of the socio-economic conditions affecting the development of the next local environment and the region, building the respect for the cultural heritage of the region and participation in its' multiplication. [16]

The example of the Warsaw University of Technology

The economic transformation, which results not only from the rapid development of innovative technologies, but is also connected with the globalization of market processes, has a strong impact on economic events on the national and regional labor markets and on the internal organization of companies' work around the world. [4, p.443] The evolution that takes place in the modern world is forcing organizations, including the universities, to make number of changes and directly affecting their functioning. "The awareness of the necessity of changes in the Polish higher education, which are a result of the international regulations, concern with the quality of the education, the specificity of non-public sector - its role in the overall process of education and upbringing, as well as to determine the relationships to the public sector - to the ongoing work on the National Qualifications Framework, in a sense of the co-responsibility for the academic education of the Polish people, the Conference of Rectors of Polish Vocational Schools carrying out their statutory duties started to cooperate with the Conference of Rectors of Polish Academic Schools and Polish Rectors Foundation, the evidence of which were the relevant strategic agreements signed at the beginning of 2009.

The cooperation realization, in which the persons delegated by the consortium of members were involved, led to the creation of the document in two volumes, which is entitled "Strategy for the development of the higher education: 2010-2020. The environmental project", the presentation of which was held at the beginning of December 2009.

A vision of the Polish higher education presented in the Strategy, as a basis for corrective actions and the direction of the further changes, is a result of the environmental effort, both of the higher education sectors, harmoniously elaborated positions and statements.

It should be accentuated that the scale and the nature of the all of the suggestions the Strategy contains, opens up for the Polish higher education completely new horizons for development and international advancement opportunities. This document provides a set of ordering indications, including those that are most general, which open the possibility of the specific actions to each sector, ensuring of their constitutive interests arising from the ownership forms and aimed at leveling the differences in access to the financial resources and development opportunities. "[5, p .43-44]

The Strategy for the development of the higher education takes into account external conditions of the functioning of the Polish universities, and these, inter alia, include:

- demographic factors: the number of students decrease is predicted (for about 25-30% by 2020);
- imbalance of the public finances persisting even when there is an economic growth and greatly limiting the budget expenditures for the science and higher education financing;
- Poland involvement in the EU initiatives and programs concerning the science sector and the higher education.

The overriding goal of the Strategy for the development of the higher education in Poland is to improve the quality of the education in general, to improve the quality of the researches and the relationships between the universities and the social and economic environment. This aim will be achieved by the implementation of six strategic objectives:

1. The universities and study programs variety

It is suggested to differentiate the following groups of universities, which are characterized by different functions:

- academic colleges (unknown in the current system), which will offer a multidisciplinary I degree studies;
- professional universities, which will have in its offers I and II degree studies, and will prepare for a particular profession;
- academic universities, which will research and lead I, II and III degree studies in their researches areas;
- research universities, which will be a subgroup of the academic universities.

The requirements will be adjusted according to the characteristics of the university, according to which the academic colleges and professional universities will not be required to research, whereas the academic and research universities will have to have documented the results of its research activities.

Part-time studies in its current form will be lifted. The teaching programs for working students will be the same in terms of the content, as for students teaching in the standard mode. The difference will depend on the extended duration of studies (so-called extended mode) and on a flexible schedule. The new system will be also characterized by a stronger role for the accrediting and assessing units.

2. The universities' openness to the social and economic environment

The universities will be encouraged to develop such study programs that will meet the market and the environment needs and expectations. It will be possible to create cooperative programs implemented at the request of and in the cooperation with the employers. The Partnership for the Knowledge Transfer (PTW) will be initiated. The purpose of this program will be the promotion and easier knowledge and innovations flow between the universities and the economy.

3. The mobility of the academic staff and students

The principle conducting to the mobility of the academic staff is that persons who have PhD at the university could take a job at that university after a two-years internship in another research center. A period of time that will be required from professors is three-years work experience outside the home university.

The National Agency for Academic Exchange Service will be created, which will lead to the promotion of Poland as a place of study and will support visits of students and post-doctoral trainees to Poland.

4. The higher education system competition

The financing of the universities activities from the public funds will play still the main role. The new financial system will be characterized by an increasing share of the percentage of funds that will be allocated to universities on a competitive basis. The greater access to the public funds will have private universities. The new system of the higher education financing will provide for, inter alia, the abolition of the current stationary subsidy and the subsidy for the statutory activities, the founding of teaching in the form of a contract, the financing of researches conducted by the universities in the form of calls for proposals, awarding to the public universities the stabilization subsidy to maintainance the research and teaching infrastructure.

5. The efficiency of resource use by the universities

The changes of the salary system will be the condition for the effective use of teaching staff. These changes will compare the level of the salary to the degree and the quality of the implementation of the teaching and researches tasks. A complementary holiday semester will be introduced. The integrated information systems supporting the management of the university and the procedures for strategic and financial controlling will be introduced in the public universities.

6. The clarity of the university functioning

The public university system will be reformed. In all of the public universities there will arise the trustee councils appointed by the minister responsible for the higher education, and they will suit the statutes of the university and will refer the executive authorities of the university relied by a competition way of choice. The nationwide register of students and system of their recruitment will be introduced. The rules of the human resources policy will become more transparent and give to the universities bigger autonomy in defining requirements for specific employment positions.

The Strategy for the development of the higher education in Poland is to implement three overriding conditions, which include: to contribute to the goals and challenges that our country facing to, to take into account external factors and to contribute to the development of the higher education and to tackle its current problems. [12, p.5-11]

The Warsaw University of Technology was chosen as an example of the university, which introduces a number of changes to its development strategy. The purpose of the strategic management is to ensure the survival and development of the organization in the long term. The primary tool of the strategic management is a strategy which key elements are the strategic objectives. The strategy is usually an element of the strategic planning, which - in addition to the definition of objectives - includes tactical plans that enable their achievement. There is an interpretation of the concept of the strategy, worked

out in the draft of the strategy for the higher education in Poland development, made by the Polish Rectors Foundation, adopted in the Warsaw University of Technology Development Strategy for 2020. [13.]

The Warsaw University of Technology Development Strategy for 2020 is the most important document adopted by the Senate – immediately after the Articles of Association and the Mission of that university. It contains a longstanding policy of the university in the all areas of its activities and formulates the goals and objectives, which, due to the time range, beyond the current term of the university authorities. The main assumptions of that strategy are presented below:

- “The ideological foundation of the Strategy is the Mission of Warsaw University of Technology adopted by the Senate on 13 December 2000.
- The Strategy takes into account the directions of the University, as defined in the "Guidelines for the Warsaw University of Technology Development Strategy for 2015", attached to the Senate of the University Resolution No. 132/XLV/2004 on June 23, 2004, and the other documents adopted by the Warsaw University of Technology Senate.
- Warsaw University of Technology aims to obtain the status of a world-class university, as a technical university, developing researches, educating at the same time undergraduate and graduate students at the highest level and transferring the researches results to the economy.
- The challenge of the development of the University is the ability to use the changes of the environment and to influence these changes.
- The Strategy includes all the areas of the University functioning and is designed in accordance with good practice for this type of documents.

There are the following policy areas for the purposes of diagnosis:

Area 1. The education;

Area 2. The researches and the commercialization of the researches' results;

Area 3. The interaction with the environment of the University;

Area 4. The academic community of the University;

Area 5. The tangible and intangible resources;

Area 6. The management and the finance." [14, p.3-4]

The vision, mission and its functional areas are synthetically presented in the form of so-called Strategic House, which is "covered" with a vision, embedded on a mission. There are divided four main functional areas of the higher education, including three missions: educational activities, scientific activities and research and development activities, and the interaction of the university with its environment. The higher education system is the foundation for the mission in all of these areas of the university functioning. [12, p.100]

The Figure 2 below presents a Model of the Warsaw University of Technology Development Strategy taking into account the key areas of the strategy. The Model of this strategy is illustrated in the form of the aforementioned Strategic House.

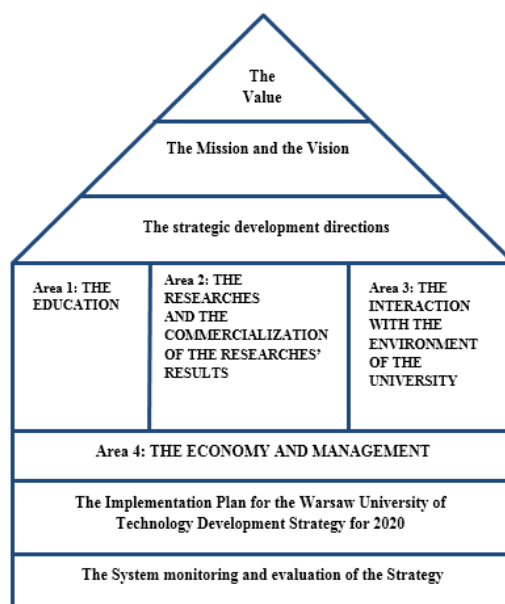


Figure 2. Model of the Warsaw University of Technology Development Strategy

Source:[14., p. 5]

As a primary objective of the development of the Warsaw University of Technology for 2020 is to maintain the status of a leading technical university in Poland and to achieve a significant position in the international arena in term of scientific research at the global level. The realization of the vision of the university will be achieved by achieved and well-defined strategic objectives. These objectives have to be widely accepted by the academic community and must be extracted in every single area of the Warsaw University of Technology Development Strategy presented in the Figure 2. Table 1 below presents a summary of the main objectives in the extracted areas of the strategy.

Table 1. A summary of the main objectives in the extracted areas of the strategy

Area	Objective
Area 1: THE EDUCATION	<ul style="list-style-type: none"> - To modernize and rationalize the study offers - To improve the relevance of the graduates' competences to the economic and social development needs - To align the program requirements to the international standards - To establish a system of exclusive education related to researches
Area 2: THE RESEARCHES AND THE COMMERCIALIZATION OF THE RESEARCHES' RESULTS	<ul style="list-style-type: none"> - To identify and promote the priority researches' areas - To create an universitywide monitoring and evaluation of researches' quality system - To improve researches' conditions - To expand the scope of the introduction of the researches' results into economic practice

Area 3: THE INTERACTION WITH THE ENVIRONMENT OF THE UNIVERSITY	-To strengthen the foundations of the partner international cooperation - Too strengthen the bonds with the graduates - To increase the effectiveness of marketing activities for the University
Area 4: THE ECONOMY AND MANAGEMENT	- To adapting the organization of the University to the changing tasks

Source: Own work based on: [14. p. 37-38]

There is a wide range of activities to achieve these goals. These activities are aimed at improving the quality of education and achieving the main objective which is to maintain the status of a leading technical university in Poland and achieve a significant position in the international arena in term of scientific research at the global level. The list above includes only some of the objectives that were set out in the Warsaw University of Technology Development Strategy for 2020. A wide range of the activities focused within these priority objectives demonstrates the complexity of the issue, which is a contemporary development of the universities and their collaboration with the environment.

Summary

The purpose of this paper was to discuss the strategy for the development of the higher education in Poland. Several external conditions of the functioning of the Polish universities were presented in this article. The important factors for the development of the higher education and its strategies were analyzed and the Warsaw University of Technology Development Strategy for 2020 was discussed. The two-way nature of the links between the university and its environment was discussed and a model of the Warsaw University of Technology Development Strategy illustrated in the form of the Strategic House was presented in this article.

The demographic decline, which is struggling Polish higher education, should be an opportunity for its development. If the appropriate changes in the systemic and institutional transformation will be done, than the low number of students can be a stimulus for changes in the higher education area. These changes should relate primarily to the quality of education and strengthen the position of the Polish higher education in the international arena. In the view of the low demographic that has already touched Polish universities, there is a rising option to reduce the number of the universities as a result of their consolidation and elimination of the market institutions these, which are devoid of their own resources and have a small number of students. The higher education missions should be more varied. As a result, the universities could better adapt its offers to the growing demands of the environment. [11, p.101] The Strategy for the development of the higher education in Poland for 2020 gives a hope for the development of Polish higher education. It shows the opportunities and reveals new directions for the development and functioning of the higher education and

becomes a kind of foundation on which each university can base their business plan for the nearest years. The higher education development is synonymous with the development of the whole knowledge sector and directly translates into accelerated development of the country. Changes in the Polish higher education need to concerted work - not just the universities'. The education has changed over time and exactly these changes have affected the development of the higher education and its strategies. The extremely important factors for the development of the higher education and its strategies are: the universities and the environment cooperation and the government, the parliament and the academic and scientific communities cooperation. Everything that is new - is of interest to people. Something that is new, may also sometimes raise some concerns, sometimes it may give a hope.

The Strategy for the development of the higher education in Poland for 2020 is a blend of these feelings. It is undoubtedly an ambitious plan, but if the Polish universities will treat it as a guide to build their long-term strategies, it has a chance to contribute to a large positive changes in the area of the higher education, and thus - in the entire knowledge sector.

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STRATEGIA ROZWOJU SZKOLNICTWA WYŻSZEGO W POLSCE NA PRZYKŁADZIE POLITECHNIKI WARSZAWSKIEJ

Streszczenie: Edukacja jest głównym czynnikiem zwiększającym kapitał ludzki. Niewątpliwie zmieniła się ona w czasie i dokładnie te zmiany wpłynęły na rozwój szkolnictwa wyższego i jego strategii. Zarówno uczelnie publiczne, jak i prywatne ukierunkowują swoje działania w celu poprawy jakości edukacji. Celem niniejszego artykułu jest omówienie strategii na rzecz rozwoju szkolnictwa wyższego w Polsce. W artykule przedstawiono szereg warunków zewnętrznych funkcjonowania polskich uczelni i ważnych czynników dla rozwoju szkolnictwa wyższego i jego strategii. Ostatecznie, artykuł ilustruje również dwukierunkowy charakter powiązań między uczelnią a jej otoczeniem i omawia Strategię Rozwoju Politechniki Warszawskiej na rok 2020.

Słowa kluczowe: wykształcenie wyższe, wykształcenie wyższe w Polsce, rozwój szkolnictwa wyższego, strategii rozwoju szkolnictwa wyższego, środowisko szkół wyższych.

高等教育在波兰华沙技术大学为例的发展战略

摘要： 教育是提高人力资本它无疑改变了随着时间的推移和确切地变化，影响到高等教育和其战略发展的主要因素。公立和私立大学东方其活动，以提高教育的质量。本文件的目的是讨论在波兰高等教育的发展战略。本文介绍几种外部条件的运作的波兰的大学和高等教育和其战略发展的重要因素。最终，它还阐释了双向性质的大学和环境之间的联系，并讨论 2020 年的华沙技术大学发展战略。

关键词： 高等教育、 高等教育在波兰， 高等教育的发展， 高等教育发展战略， 大学的环境。