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## THE IMPACT OF UNIVERSITY COOPERATION WITH THE SOCIO-ECONOMIC ENVIRONMENT IN THE CONTEXT OF QUALITY ASSURANCE IN HIGHER EDUCATION

### ABSTRACT

**Purpose:** Verification of the models of cooperation between entities in the higher education sector and representatives of the socio-economic environment.

**Methodology/approach:** As a part of the conducted research, 100 randomly selected reports of the Polish Accreditation Committee were analyzed in the context of the assessment of criterion 6 regarding cooperation with the socio-economic environment in the process of educating students, considering public and private entities. A desk research analysis was also conducted to attempt to verify the impact of the internationalization aspect on the level of cooperation between representatives of the world of science and business.

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**Findings:** Different types of Polish universities cooperate with the socio-economic environment to a different extent. Public universities care less about cooperation with the socio-economic environment than non-public universities.

**Originality/value:** The topics discussed in this paper allow to fill the research gap related to the impact of cooperation with the socio-economic environment on the quality assurance both in the national and European context. Recommendations presented by the authors can be implemented both in Polish and European universities as signposts aimed at improving the quality and intensity of cooperation with the socio-economic environment.

**Keywords:** cooperation, higher education, quality assurance, socio-economic environment

## 1. INTRODUCTION

The University's cooperation with the socio-economic environment is crucial for ensuring high quality assurance for students and PhD students. This is recognized by institutions evaluating the quality assurance at Polish universities. While conducting evaluation, the Polish Accreditation Committee (PKA) considers several different areas such as the curriculum, verification of learning outcomes, strategic directions of development, teaching staff, infrastructure, support for students and academics, internationalization, quality assurance of education, implementation of professional practice, as well as cooperation with the socio-economic environment. This paper discusses the results of research on cooperation between different types of universities and representatives of the socio-economic environment. The legal comparative research also presents institutions that care about the quality assurance in higher education in different countries. In connection with the research, the following research hypotheses were set: 1) different types of Polish universities cooperate with the socio-economic environment to a different extent, 2) public universities care less about cooperation with the socio-economic environment than non-public universities. The research aim set by the authors referred to the verification of differences in models of cooperation with the socio-economic environment depending on the type of university.

## 2. LITERATURE REVIEW

### 2.1. ASSESSING THE QUALITY ASSURANCE IN HIGHER EDUCATION IN EUROPE

Quality assurance in higher education assessment is carried out in many European countries, including Poland. Very important for quality assurance in higher education in Europe was the introduction of the European Higher Education Area (EHA) (Kristoffersen, 2010). The entity that brings together higher education quality assurance agencies based in the EHA is the European Association for Quality Assurance in Higher Education (ENQA). The literature indicates that since its establishment in 2000 ENQA has made significant contributions to the further development of quality assurance in higher education (Chaparro, 2016). This entity was entrusted by the Conference of Ministers of Higher Education in Berlin with activities related to coordinating educational quality assurance systems in Europe (Gołaś et al., 2012). As noted on the official website, "ENQA was first established as the European Network

for Quality Assurance in Higher Education to promote European cooperation in the field of quality assurance in higher education. In 2004, it became the European Association for Quality Assurance in Higher Education with the aim to contribute to the maintenance and enhancement of the quality of European higher education, and to act as a major driving force for the development of quality assurance across all the Bologna Process signatory countries” (ENQA 2023). ENQA associates many entities, very commonly several from a single country. The only Polish educational quality institution affiliated with this organization is the Polish Accreditation Committee (PKA).

Within ENQA, members and affiliates are distinguished. As reported on the organization’s website, “all members have the right to attend and vote at the bi-annual General Assembly meetings and give input to matters related to the strategic development of the Association.” (ENQA 2023). In turn, “Affiliates are not permitted to vote in the General Assembly or be part of statutory bodies such as the Board, Agency Review Committee and Appeals and Complaints Committee. However, affiliates do have the right to attend and speak at the bi-annual General Assembly meetings, thereby giving input to matters related to the strategic development of the Association” (ENQA 2023). Currently, there are 50 affiliates and 56 members. Members include entities from the following countries: Spain (10), Germany (8), Kazakhstan (3), the United Kingdom (3), Belgium (2), France (2), the Netherlands (2), Portugal, Switzerland, Denmark, Latvia, Armenia, Italy, Austria, Romania, Croatia, the Holy See, Cyprus, Finland, Greece, Estonia, Hungary, Georgia, Bulgaria, Norway, Poland, Ireland, Lithuania, Slovenia, Turkey, Sweden, and 2 European-wide entities – the European Association of Establishments for Veterinary Education and the Institutional Evaluation Program. The activities of these institutions are analyzed from various aspects (such as Janssens et al., 2021). Experts are also analyzing what influences quality assurance in higher education (such as Seyfried & Pohlenz 2018; Lucander & Christersson, 2020). However, there is still an apparent research gap in the context of the impact of collaboration with the socio-economic environment on education quality.

## **2.2. ASSESSMENT OF THE QUALITY ASSURANCE IN HIGHER EDUCATION IN POLAND – ANALYSIS OF DOCTRINAL VIEWS AND LEGAL ACTS**

As indicated, the quality assurance in Polish universities in Poland is subject to evaluation, which is carried out by PKA. It is an authority working independently of the Ministry of Education and Science to improve the quality assurance in higher education in Poland. The Committee’s activities are subject to external review, which is at least once every 5 years. Its independence was confirmed as a result of an external evaluation conducted in 2008, 2013 and 2018 in accordance with the European Standards and Guidelines for Quality Assurance in the European Higher Education Area by ENQA (Jakubowski, 2023; Mrozowska, 2019; PKA, 2023). Also in 2023, an ENQA assessment was conducted.

It is emphasized that evaluation is carried out by PKA at all levels, profiles, and forms of studies (Mrozowska, 2019; Izdebski, 2021). In Poland, studies can be conducted as part of a general academic or practical profile (Godecki & Hausner, 2023). Within the framework of studies with a practical profile, half of the European Credit Transfer System (ECTS) are assigned to classes forming practical skills, and the curriculum of studies with a practical profile provides for professional practice of at least 6 months – in the case of first-cycle programmes and long-cycle programmes and 3 months – in the case of second-cycle programmes. In

terms of studies with a general academic profile, the implementation of professional practice is not required by the legislator.

Pursuant to the statutory authorization, a regulation on program evaluation criteria was issued. According to this legal act, the criteria for programme evaluation are relations with the socio-economic environment in relation to the curriculum. Detailed criteria for program evaluation are specified in the appendix to the PKA Statute. As part of the final report, cooperation with the socio-economic environment in the construction, implementation and improvement of the curriculum is evaluated, as well as its impact on the development of the faculty under evaluation. In terms of both the practical and general academic profile, the experts assess whether the type, scope and range of activities of institutions of the socio-economic environment, including employers, with which the university cooperates in the design and implementation of the curriculum is consistent with the concept and objectives of education and the resulting areas of professional or economic activity and the professional labor market appropriate to the field of study. In addition, it is taken into account whether the cooperation with institutions of the social and economic environment, including employers is of a permanent nature and takes diverse forms adequate to the educational objectives and needs arising from the implementation of the curriculum of studies and the achievement of learning outcomes by students. In connection with the coronavirus pandemic, it is also important whether the participation of external stakeholders, including employers in various forms of cooperation with the socio-economic environment in the construction, implementation and improvement of the curriculum is ensured in conditions of their absence due to the temporary limitation of the operation of the university. It is also important in conditions of their absence due to the temporary limitation of the operation of the university. As indicated, it is also important to evaluate the ongoing cooperation with the socio-economic environment. Therefore, it is verified whether periodic reviews of cooperation with the socio-economic environment, including employers, are conducted. They should be conducted in relation to the curriculum, including an assessment of the correctness of the cooperating institutions selection, the effectiveness of the forms of cooperation and the impact of its results on the curriculum and the improvement of its implementation, the achievement of student learning outcomes and the fate of graduates. The results of these reviews should be used to develop and improve the cooperation and the curriculum.

### 3. METHODOLOGY

As a part of the research conducted, an analysis of 100 reports of Polska Komisja Akredytacyjna (Eng. Polish Accreditation Committee) was performed. The analysis was conducted on criterion 6 of PKA, which refers to the cooperation of universities with the social and economic environment and its involvement in the educational process. The reports taken for analysis were no older than 2020. Reports with a positive opinion from the experts of the Polish Accreditation Commission were analyzed. Only practical majors at Polish universities, both public and private, were analyzed. Public universities, accounting for 70%, were analyzed, divided into: Classical Universities 18%, Technical Universities 21%, Public Vocational Schools 17%, Other Universities which included Economic Universities, Medical Universities, University of Life Sciences 14%. And non-public universities account for 30%.

## 4. RESULTS AND DISCUSSION

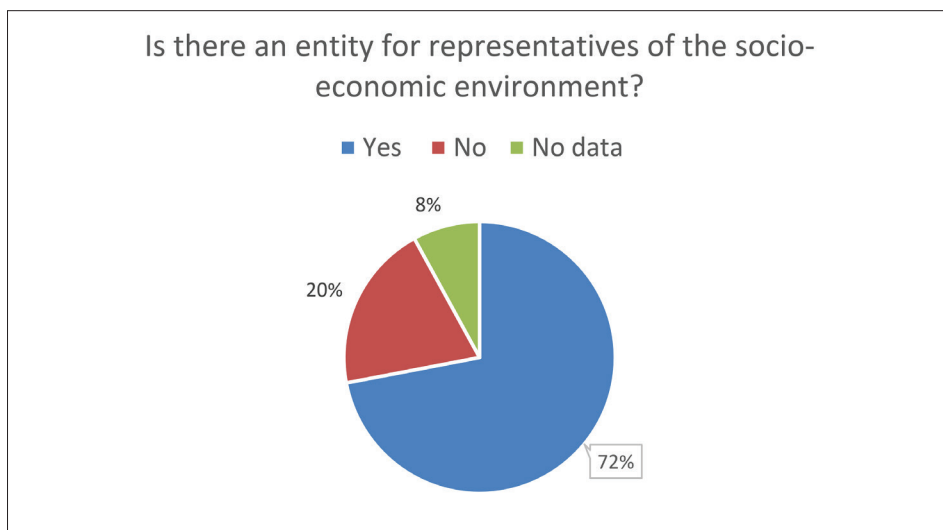
The study conducted using content analysis of PKA reports under criterion 6, allowed verification of the hypothesis, the premise of which is to verify the importance of the influence of the socio-economic environment on the functioning of Higher Education Institutions (HEIs) depending on the type of HEI.

### 4.1. IS THERE AN ENTITY FOR REPRESENTATIVES OF THE SOCIO-ECONOMIC ENVIRONMENT?

As a part of the analyses conducted, it was found that the majority of the surveyed HEIs have a body of representatives of the socio-economic environment (72%) (Fig 1.). The most frequent occurrence of this body is in technical universities (81%), while the least frequent occurrence of this body is in units classified as other universities (57.4%). The discrepancy in occurrence may be due to the fact that cooperation between universities and the socio-economic environment is inherently associated with the development of new technologies, research and development projects, implementation work, which are the domain of technical universities. Certainly, the establishment of such bodies is crucial, due to the fact that it is a source of inspiration and provides an opportunity to confront the activities implemented and to consult on matters relating to student education (Mikołajczyk & Kurczewska, 2014). In the case of the United States, advisory bodies may include, in addition to industry representatives, representatives from NGOs, alumni, local/national governments, faculty from other universities, or representatives from the arts and culture. This is how the socio-economic environment is viewed (Bennetot & Esterman, 2018). Their activity can take a variety of forms from the creation of sites for the implementation of professional internships and tests to the creation of a strategy for the direction and improvement of the study program.

**Figure 1**

*An entity for representatives of the socio-economic environment*

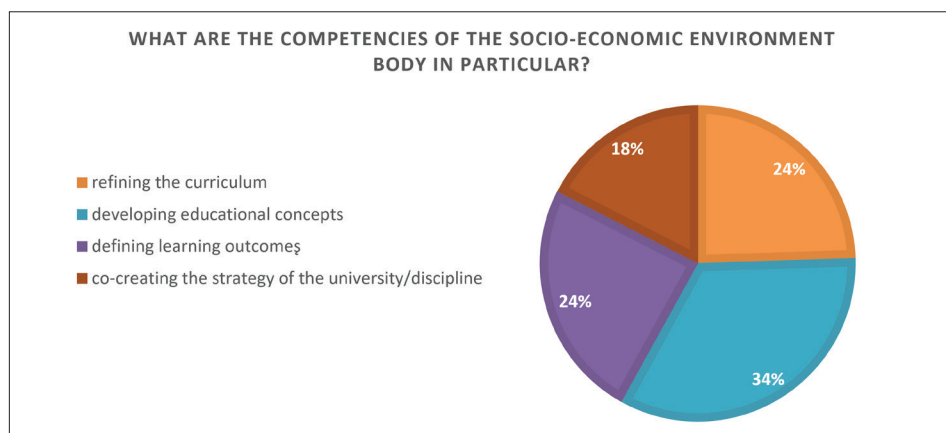


#### 4.2. WHAT ARE THE COMPETENCIES OF THE SOCIO-ECONOMIC ENVIRONMENT BODY IN PARTICULAR?

Although the reports are ambiguous about what competencies the described body has, the main areas of activity are: 1. refining the curriculum (64 responses) 2. developing educational concepts (48 responses) 3. defining learning outcomes (35 responses) 4. co-creating the strategy of the university/discipline (25 responses). The analysis of the actual situation shows that very important in the functioning of such a body is the university itself, or more precisely its representatives responsible for cooperation with the socio-economic environment. Their involvement very often translates into good and direct relations with representatives of the business world (Falqueto et al., 2019)

**Figure 2**

*The competencies of the socio-economic environment body in particular*

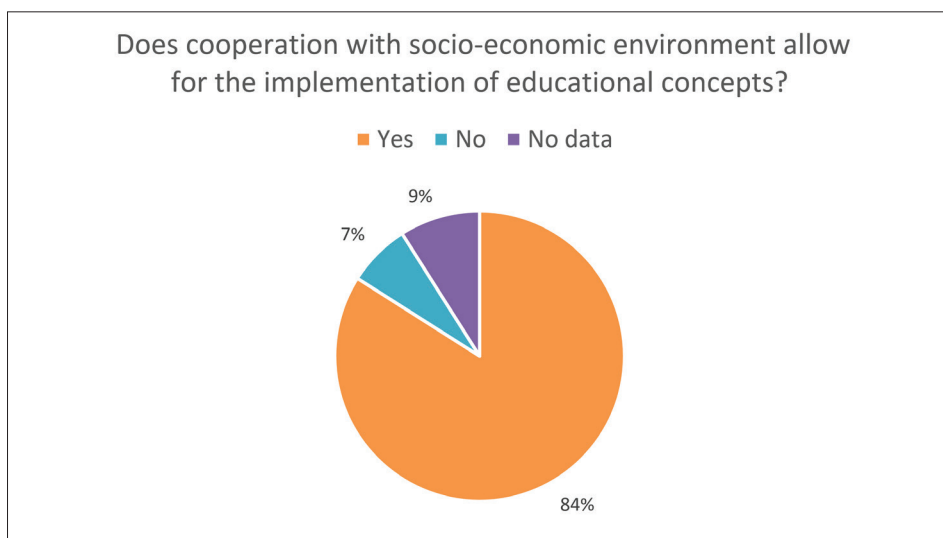


### 4.3. DOES COOPERATION WITH SOCIO-ECONOMIC ENVIRONMENT ALLOW FOR THE IMPLEMENTATION OF EDUCATIONAL CONCEPTS?

An analysis of PKA's reports made it possible to conclude that in the case of 84% of entities, cooperation with the socio-economic environment allows the implementation of the educational concept. 9% of the analyzed reports did not indicate this issue. In the case of 7 analyzed reports, it was found that cooperation with the socio-economic environment does not allow the realization of the educational concept for the analyzed majors. The realization of the concept of education is realized in 94.12% of cases in the Public Vocational Schools, which is a premise for the conclusion that units of this type have the strongest cooperation with the socio-economic environment. Moreover, the voice of this environment has a significant impact on the concept of education. This may be due to the fact that universities of this type are very much embedded in local realities, and their mission is to educate local students who do not go to larger cities for further education (Anielska, 2019). These units also very often educate employees of companies in the region by creating tailored and dedicated study programs for their needs, which are a response to their real needs and expectations.

**Figure 3**

*The implementation of educational concepts*

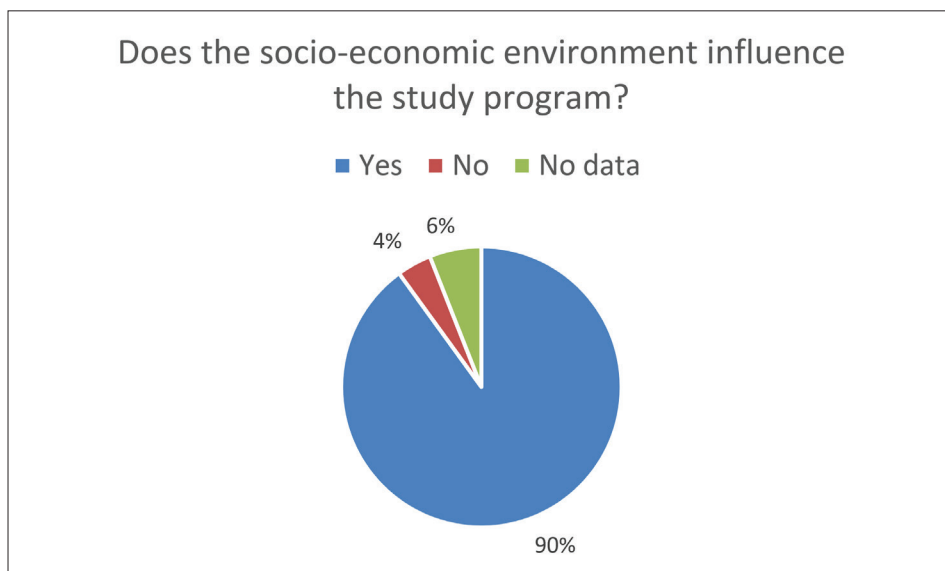


#### 4.4. DOES THE SOCIO-ECONOMIC ENVIRONMENT INFLUENCE THE STUDY PROGRAM?

An analysis of the reports indicated that in the case of 90% of majors, the socio-economic environment influences the curriculum. In particular, the following were indicated as influencing the curriculum: the possibility of making changes to the curriculum, influencing the core curriculum, recommending changes in subjects, interfering with the length of specific subjects (both the possibility of reducing and increasing the time), proposing elective optional subjects (which were often conducted by representatives of the socio-economic environment) and others. In the case of 6% of reports, it was impossible to clearly state whether the socio-economic environment influences the curriculum. For 4% of reports, no such possibility was indicated. The results indicate that classical universities involve the socio-economic environment to the greatest extent in constructing and modifying the study program (100%), in addition, they also have 100% influence on the content of the curriculum. The above may be due to the fact that classical universities place a very high emphasis on ensuring the quality of education with the needs of the socio-economic environment in mind (Bugaj & Budzanowska-Drzewiecka, 2022).

**Figure 4**

*The socio-economic environment influences the study program*



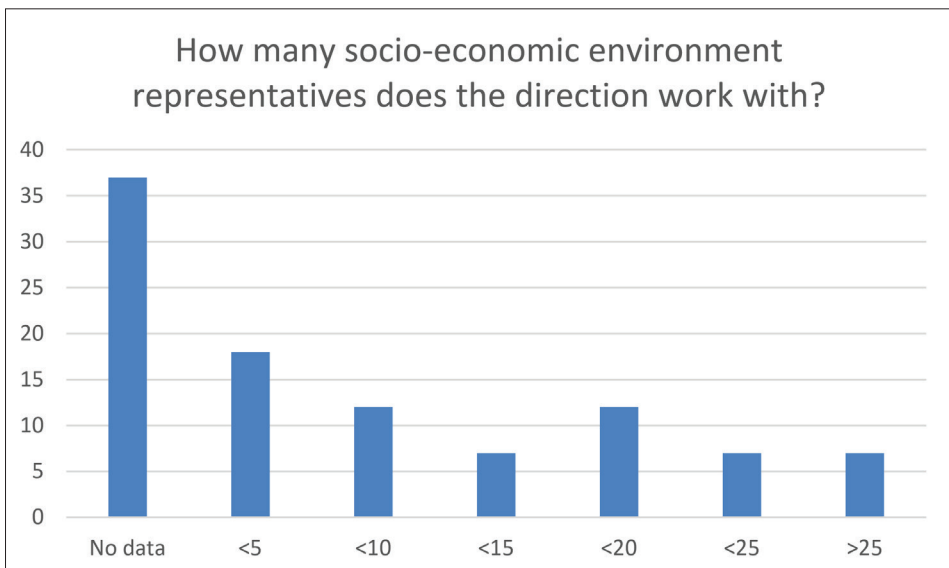


#### 4.5. HOW MANY SOCIO-ECONOMIC ENVIRONMENT REPRESENTATIVES DOES THE DIRECTION WORK WITH?

As a part of the ongoing analysis of PKA reports, it was also verified whether the number of entities with which the academic unit cooperates was explicitly stated. Providing such information in the final report is not required of experts who are representatives of employers. On the other hand, indicating information on the number of cooperating entities, allows one to outline the scale of cooperation and thus infer the importance of socio-economic environment representatives in the creation of the direction. In 37 reports examined, the number of entities was not indicated. In the case of the remaining analyzed reports, the number of entities was indicated, which in the case of most oscillated between 1 and 24 (56%). Only 7% of the surveyed reports indicated that there were more than 24 entities cooperating with universities. It should be taken into account that very often formal cooperation is not only about one direction, but about general cooperation. Moreover, private universities that educate locally have many cooperation agreements signed with local representatives of the socio-economic environment, while larger state universities sign agreements with larger entities.

**Figure 5**

*The number of socio-economic environment representatives with direction work*

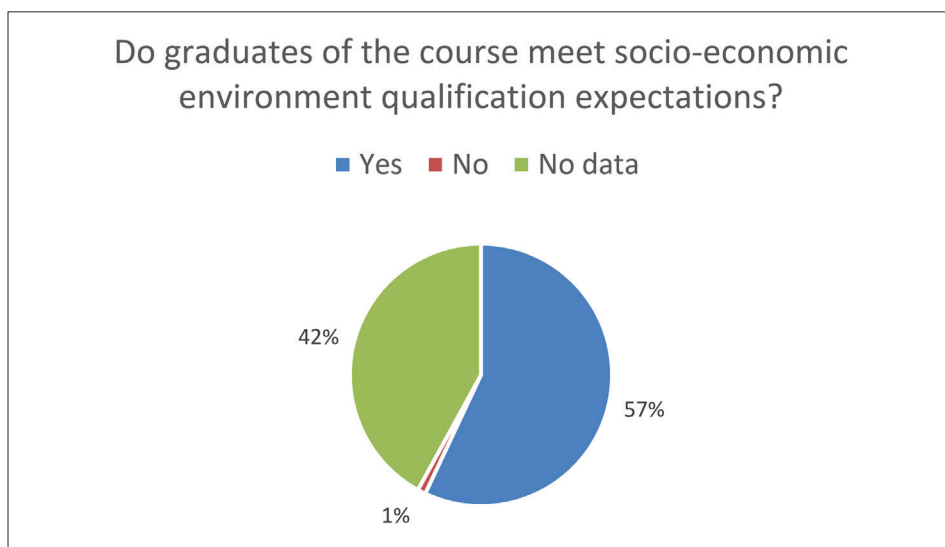


#### 4.6. DO GRADUATES OF THE COURSE MEET SOCIO-ECONOMIC ENVIRONMENT QUALIFICATION EXPECTATIONS?

Given the transformation (especially in innovation and entrepreneurship) of scientific units to the so-called third generation, it is crucial to adapt to the needs of the socio-economic environment. Therefore, it is crucial from the perspective of future employers (representatives of the socio-economic environment) that graduates of the fields of study meet the expectations of the market, have the appropriate competencies, knowledge, and skills. According to the reports analyzed, in the case of 57% it was found that graduates meet the expectations of employers. In the case of 42%, it was not possible to verify the information on the studied issue. Only in one report it was indicated that the graduates of the faculty insufficiently meet the expectations of representatives of the socio-economic environment. Meeting the expectations of employers by universities is important for the economic development of the state and its sustainable development. Fulfilling expectations of external stakeholders (e.g., entrepreneurs) and internal stakeholders (students) additionally brings social and environmental benefits (Žalėnienė & Pereira, 2021).

**Figure 6**

*Graduates of the course meet socio-economic environment qualification expectations*

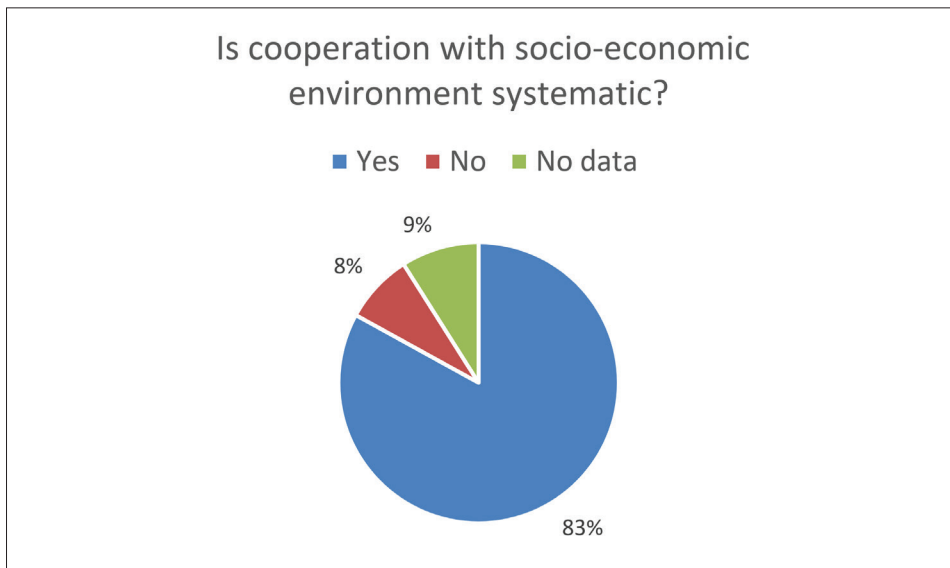


#### 4.7. IS THE COOPERATION WITH SOCIO-ECONOMIC ENVIRONMENT SYSTEMATIC?

Systematicity of the cooperation between the authorities of an entity with the socio-economic environment can be expressed in various ways, for example, by holding regular meetings with representatives of the socio-economic environment, conducting a dialogue that can result in agreements in various areas such as the implementation of internships and others. The results of the analysis of the reports indicate that 83% of the major's care about the regularity of cooperation with the socio-economic environment. 9% of the reports lacked indication of information about the fact of systematic cooperation. 8% of the reports indicated a lack of systematic cooperation activities with the socio-economic environment. The cross-analysis indicated that all the Public Vocational Schools have systematic cooperation with the socio-economic environment. The least systematic activities are shown by classical universities, which involve external stakeholders to the greatest extent in the process of constructing and modifying the study program. Polish universities have a significant collegiality (strong academic collegial bodies) but compared to Europe, Poland has one of the lowest levels of influence of external stakeholders (Kwiek, 2015). And the level of academic entrepreneurship is related to a managerial and not collegial style of management.

**Figure 7**

*Systematicity of cooperation with socio-economic environment*

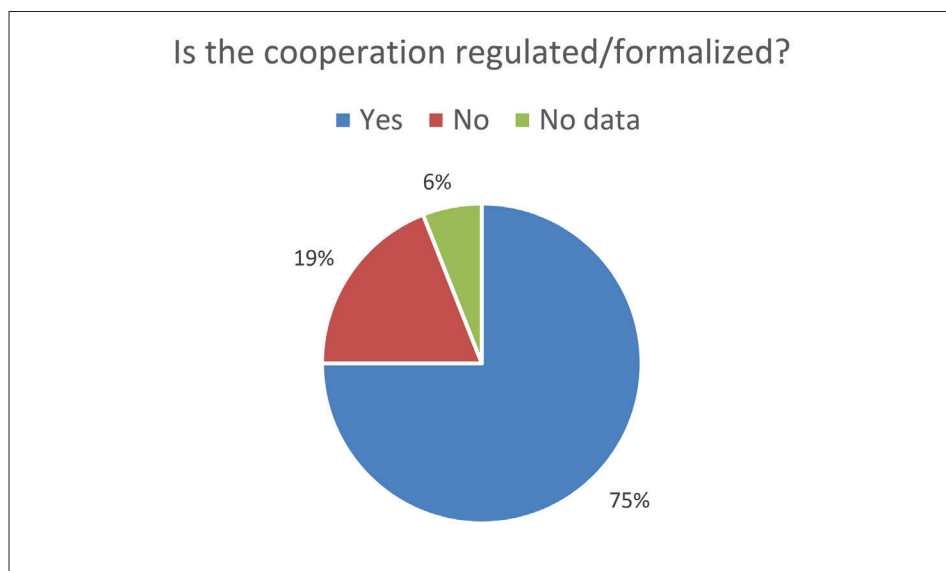


#### 4.8. IS THE COOPERATION REGULATED/FORMALIZED?

In addition to systematic activities, a key element for cooperation to prosper is its regulation. The proper prospering of cooperation between the university and the socio-economic environment does not require a formalized character, resulting, for example, from a contract between the parties. However, as the analysis of the reports shows, 75% of the units aim to formalize/regulate cooperation through various types of agreements or regulations stemming from the university's internal documents. In 19% of the reports analyzed, there was no formal nature of cooperation between the academic unit and the socio-economic environment, which is not synonymous with the absence of cooperation. Cooperation can be informal. In 6% of the reports there was no regulation information on cooperation. The field of study received a positive assessment by PKA experts, even if this cooperation was not completely formalized and only involved some of the companies. It should be pointed out that the reports do not allow to state explicitly what percentage of representatives of the socio-economic environment have formalized cooperation. Nevertheless, it should be noted that formalized cooperation occurs most often in the case of the implementation of professional internships by students with representatives of the socio-economic environment. The pursuit of formalization is least in the domain of classical universities (66.67%) and other universities (57.14%). The lack of willingness to formalize cooperation, as indicated by publication reports, results from the reluctance to change, in particular on the part of the scientific community (Sułkowski & Seliga, 2019).

**Figure 8**

*Regulated/formalizes cooperation*

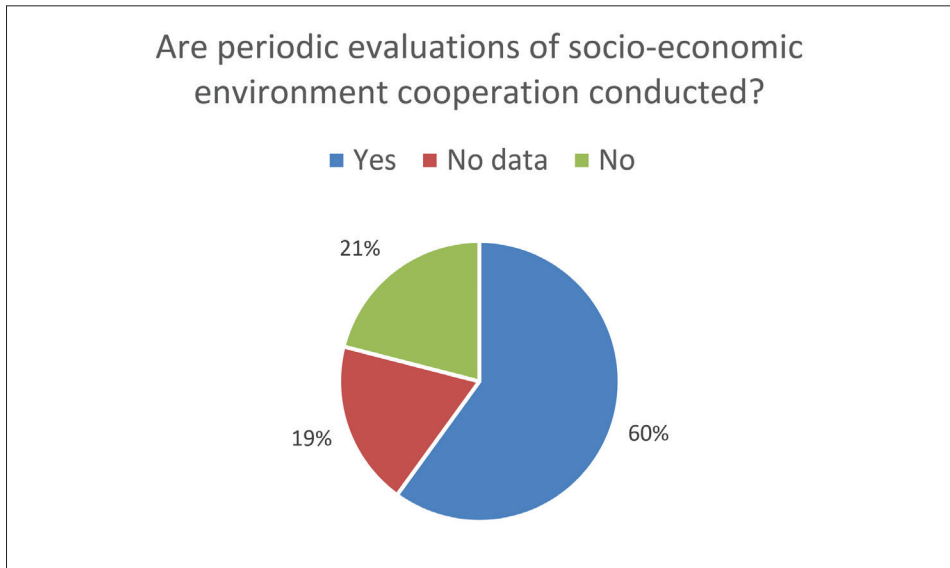


#### 4.9. ARE PERIODIC EVALUATIONS OF SOCIO-ECONOMIC ENVIRONMENT COOPERATION CONDUCTED?

Periodic evaluation of cooperation with the socio-economic environment allows universities to verify the real involvement of external entities in the process of faculty/faculty/university development. The results of the analysis show that 60% of the reports confirm that there is a regular periodic evaluation of cooperation between the socio-economic environment and the university. Nineteen reports found no information. 21% of the reports noted that no periodic evaluation of cooperation with the socio-economic environment is conducted. The analysis found that the most frequent reviews of cooperation are carried out by Public Vocational Schools (88.24%), which is all units, of this type, where information was indicated. Classical universities (44.44%) and technical universities (42.86%) are the least likely to make an assessment. Periodic evaluation of the university's cooperation with the socio-economic environment makes it possible to verify the involvement of individual partners. Public Vocational Schools, by virtue of the fact of functioning in the local community, very often base these reviews on informal and personal contacts between university representatives and representatives of local business (Gianiodis & Meek, 2020).

**Figure 9**

*Periodic evaluation of socio-economic environment cooperation*

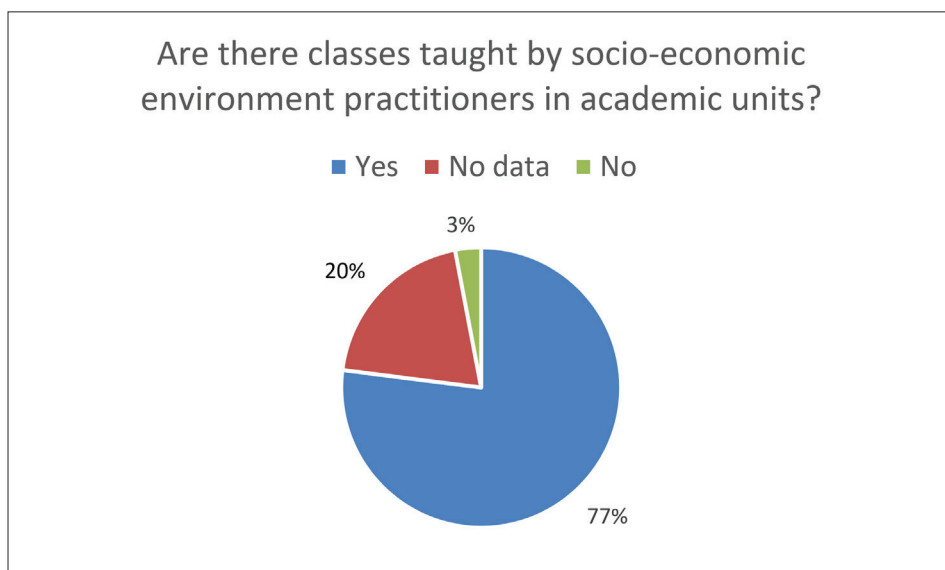


#### 4.10. ARE THERE CLASSES TAUGHT BY SOCIO-ECONOMIC ENVIRONMENT PRACTITIONERS IN ACADEMIC UNITS?

Representatives of the socio-economic environment can cooperate with the direction in various ways. One of the elements in which representatives of the socio-economic environment are involved is teaching classes, which are often conducted by representatives. Teaching can be related to the direction's subjects as well as elective courses. In addition, it should be noted that the time dimension of classes taught by representatives of the socio-economic environment can vary greatly. The analysis showed that 77% of the surveyed reports confirm that representatives of the socio-economic environment teach classes in academic units for the studied course. The analysis also indicated that 20% of the reports do not raise this issue. 3% of the reports noted the lack of involvement of representatives of the socio-economic environment in teaching. This state of affairs indicates that the Polish education system is highly aware of the involvement of the socio-economic environment. Research conducted in the USA (Hayter et al., 2017; Gianiodis & Meek, 2020) shows that improving business competences and the possibility of constant contact with representatives of external stakeholders is conducive to the development of students and thus stimulates the emergence of entrepreneurial initiatives such as setting up start-ups.

**Figure 10**

*Classes taught by socio-economic environment practitioners in academic units*



#### 4.11. DISCUSSION

According to the concept of society 5.0 and industry 5.0, people are the central point of innovation (Carayannis & Morawska-Jancelewicz, 2022). Sustainable development is key to social transformation, which also affects the transformation of universities and poses numerous challenges (Chankseliani & McCowan, 2021; Heleta & Bagus, 2021; Meseguer-Sanchez et al., 2020). Universities are called to create practical knowledge that can be applied in the framework of new technologies and social innovations. If we look at this broad development strategy, it will be crucial to better understand the stakeholders and beneficiaries of the university, i.e., representatives of the socio-economic environment who define the needs of the global market in the 21st century (Pinheiro et al., 2015). As research shows it is necessary to understand and respond to the needs of the local market, which will translate into thorough economic growth and increase competitiveness (Lehmann et al., 2020; Audretsch et al., 2015). High quality of education, which is a real response to the needs of external stakeholders, which is the result of the reversal of the global trend in which universities are centrally controlled for autonomy (Meseguer-Sanchez, 2020; Levy, 2012). Universities care much more about social, economic and environmental aspects, especially in the regional aspect. Similar to the European trend, we observe such a relationship in Poland. In accordance with the Act of 20 July 2018, the Law on Higher Education and Science, the autonomy of the university has been increased. An interesting trend observed in Poland is also the increase in the number of private universities, which is in line with the European standard of education (Standards and Guidelines for Quality Assurance in the European Higher Education Area, ESG). It should be noted here that, according to the univrank database, in 2023 there were 760 non-public universities in Europe (“Universities in Europe Higher Education in Europe”, 2023) out of a total of 2706 universities. This means that 28.1% of universities belong to the private sector. This situation is not consistent with what we can observe on other continents, such as Asia, North America, Africa or South America, where over 50% of universities are private. Poland in the context of private universities is a kind of sensation, because 216 (RADON) universities out of all defined universities are Polish scientific units, where in countries such as France (133), Germany (114), Italy (22), Spain (31) this number is lower or much lower. This significant disproportion may be puzzling, especially since no Polish private university has been included in the Shanghai Ranking (“ShanghaiRanking’s Academic Ranking of World Universities 2022 Press Release”, 2022). This situation may be the basis for a discussion on whether the university should be elitist or egalitarian.

Most Polish private universities educate in practical fields (1915 practical, 626 general academic) (RADON) and it is often smaller private units that see a greater need for cooperation with the socio-economic environment, because according to the analyzed reports, universities/faculties are created due to real need of employers (social and economic environment). Research conducted by Brzezicki (2020) indicates that private institutions achieved a higher level of efficiency in terms of graduate earnings than the number of graduates, while public institutions showed the opposite effect. Such a statement stimulates further development of education in private universities, but the question arises, what the profile of people studying at private universities is. Most of them are people with much richer professional experience than people studying at public universities. It should also be noted that private universities put much more emphasis on the needs of the individual, which is in line with the concept of society 5.0, which was mentioned at the beginning of the chapter. Nevertheless, for the

proper functioning of private entities, it is necessary to conduct regular quality checks, such as those performed by PKA.

When considering the issue of cooperation between universities and the socio-economic environment, it seems crucial to compare this issue between countries. Unfortunately, due to the different forms of assessing the quality of education in different countries and the lack of data that clearly characterize the cooperation between universities and the social environment (Godecki & Hausner, 2023), it is difficult to make a detailed comparative analysis. However, the data collected in the publication of Churski et al. (2023), in which expenses for vocational education were taken as an indicator, indicate that only in Germany (among the analyzed countries) is funding from the socio-economic environment more involved in financing vocational education. The analysis of PKA reports showed that the cooperation of universities with the socio-economic environment is visible, unfortunately, as indicated by the analyzes (desk research), the assessment of the quality of education at Polish universities is deteriorating (Godecki & Hausner, 2023).

In the context of cooperation of scientific units with external stakeholders, apart from the obvious entrepreneurs, we should talk about entire cities or regions. The analysis of the cooperation of universities with the socio-economic environment generally understood as a city/region and especially as enterprises, public benefit organizations, local self-government, etc., carried out in 45 countries, allows us to conclude that it is necessary to strive for sustainable development (Leal Filho et al., 2022). Sustainable development can take place through bilateral exchange of employees of the socio-economic environment and the university, establishing formal cooperation between entities or defining development directions (Leal Filho et al., 2022).

## 5. CONCLUSIONS

The research of the reports conducted by the authors of this article allowed to confirm the theses stated at the beginning: 1) different types of Polish universities cooperate with the socio-economic environment to a different extent, 2) public universities care less about cooperation with the socio-economic environment than non-public universities. The authors have attempted to verify the impact of the internationalization aspect on the level of cooperation between representatives of the higher education sector and the socio-economic environment, but due to the diverse forms of assessment it is difficult to carry out. Nevertheless, the analysis of PKA reports allowed to prepare a few recommendations, the implementation of which should bring measurable results at Polish and European universities.

1. Representatives of the socio-economic environment should be able to cooperate with the university as a part of a business council or other entity.
2. Representatives of the socio-economic environment should be able to influence the curriculum, the concept of education and the profile of the graduate. It is also worth engaging them in conducting exercises or laboratory classes to pass on their practical experience, especially in the case of studies with a practical profile.
3. Cooperation with representatives of the socio-economic environment should take place systematically and be based on formal cooperation.
4. Universities should conduct cyclical reviews of cooperation to verify the involvement of individual partners, as well as the forms of cooperation they undertake.



The results of these assessments should serve to improve the quality of this cooperation. In the future, qualitative research should be carried out to identify the impact of cooperation between business and science on factors important from the point of view of both the higher education sector (quality of education, research conducted, commercialization of research results) and the socio-economic environment (financial results, brand perception, development).

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