



# **TAIKOMIEJI TYRIMAI STUDIJOSE IR PRAKTIKOJE**

## **APPLIED RESEARCH IN STUDIES AND PRACTICE**

**Nr. 13**  
**No. 13**

V Tarptautinės mokslinės konferencijos  
„Mokslo ir studijų tendencijos globalizacijos sąlygomis“  
Moksliniai straipsniai

V International Scientific Conference  
“Science and Education in Globalization”  
Scientific Articles

Panevėžys, 2017

**TAIKOMIEJI TYRIMAI STUDIJOSE IR PRAKTIKOJE**  
**APPLIED RESEARCH IN STUDIES AND PRACTICE**

Leidžiamas nuo 2008 metų  
Published since 2008

**EDITORIAL BOARD**

Executive Editor  
Dr. **Donatas BAKŠYS**, Panevėžys University of Applied Sciences, Lithuania

Assoc. Prof. Dr. **Daiva BERŽINSKIENĖ-JUOZAINIENĖ**, Panevėžys University of Applied Sciences, Lithuania

Prof. Habil. Dr. **Andreas AHRENS**, Vismar University, German

Prof. Dr. **Rasa BACEVIČIENĖ**, Panevėžys University of Applied Sciences, Lithuania

Prof. Dr. **Nelija BOGDANOVA**, Daugavpils University, Latvia

Assoc. Prof. Dr. **Rasa GLINSKIENĖ**, Panevėžys University of Applied Sciences, Lithuania

Prof. Dr. **Marina GUNARE**, Baltic Academy, Latvia

Assoc. Prof. Dr. **Sultan KIYMAZ**, Ahi Evran University, Turkey

Assoc. Prof. Dr. **Ričardas KLIMINSKAS**, Panevėžys University of Applied Sciences, Lithuania

Assoc. Prof. Dr. **Jurgita LIEPONIENĖ**, Panevėžys University of Applied Sciences, Lithuania

Assoc. Prof. Dr. **Zita MALCIENĖ**, Panevėžys University of Applied Sciences, Lithuania

Prof. Dr. **Ala RASTRYGINA**, Volodymyr Vynnycheno Kirovograd State Pedagogical University, Ukraine

Assoc. Prof. Dr. **Gediminas SARGŪNAS**, Panevėžys University of Applied Sciences, Lithuania

Assoc. Prof. Dr. **Dalia SUSNIENĖ**, Kaunas Technology University, Lithuania

Assoc. Prof. Dr. **Ingrīda VEIKŠA**, Turība University, Latvija

Assoc. Prof. Dr. **Artur ZIMNY**, Konin State University of Applied Sciences, Poland

**REDAKCIJOS KOLEGIJA**

Atsakingas redaktorius  
Dr. **Donatas BAKŠYS**, Panevėžio kolegija, Lietuva

Doc. dr. **Daiva BERŽINSKIENĖ-JUOZAINIENĖ**, Panevėžio kolegija, Lietuva

Prof. habil. dr. **Andreas AHRENS**, Vismaro Universitetas, Vokietija

Prof. dr. **Rasa BACEVIČIENĖ**, Panevėžio kolegija, Lietuva

Prof. dr. **Nelija BOGDANOVA**, Daugpilio Universitetas, Latvia

Doc. dr. **Rasa GLINSKIENĖ**, Panevėžio kolegija, Lietuva

Prof. dr. **Marina GUNARE**, Baltijos akademija, Latvia

Doc. dr. **Sultan KIYMAZ**, Ahi Evran universitetas, Turkija

Doc. dr. **Ričardas KLIMINSKAS**, Panevėžio kolegija, Lietuva

Doc. dr. **Jurgita LIEPONIENĖ**, Panevėžio kolegija, Lietuva

Doc. dr. **Zita MALCIENĖ**, Panevėžio kolegija, Lietuva

Prof. dr. **Ala RASTRYGINA**, Vladimiras Viničenko Kirovogrado valstybinis pedagoginis universitetas, Ukraina

Doc. dr. **Gediminas SARGŪNAS**, Panevėžio kolegija, Lietuva

Doc. dr. **Dalia SUSNIENĖ**, Kauno technologijos universitetas, Lietuva

Doc. dr. **Ingrīda VEIKŠA**, Turība universitetas, Latvija

Doc. dr. **Artur ZIMNY**, Konin valstybinė aukštoji mokykla, Lenkija

Editorial office:

**Panevėžys University of Applied Sciences**  
Laisvės sq. 23, LT35200, Panevėžys, Lithuania

E-mail: mtt@panko.lt

ISSN 2029-1280

Redakcinės kolegijos adresas:

**Panevėžio kolegija**  
Laisvės a. 23, LT35200, Panevėžys

El.paštas: mtt@panko.lt

© Panevėžio kolegija, 2017

## TURINYS CONTENTS

1	<b>Dalia SUSNIENĖ Gediminas SARGŪNAS</b>	APPLICATION MODEL OF ISO QUALITY STANDARDS IN A COMPANY	5
2	<b>Artur ZIMNY</b>	COOPERATION OF PUBLIC HIGHER VOCATIONAL SCHOOLS WITH SOCIO-ECONOMIC ENVIRONMENT IN THE CONTEXT OF BUILDING SOCIAL CAPITAL	13
3	<b>Rūta MEIŠTĖ Ernestas ŠIDLAUSKAS</b>	THE PECULIARITIES OF LEXICAL TRANSLATION TRANSFORMATIONS IN BUSINESS JOURNALS	21
4	<b>Nikolajs OZOLIŅŠ</b>	EFFECTIVENESS OF PUBLIC PRIVATE PARTNERSHIP AGREEMENT	28
5	<b>Sultan KIYMAZ Ufuk KARADAVUT Adnan EVSEN</b>	ASSESSMENT OF GROUNDWATER QUALITY AND ITS SUITABILITY FOR AGRICULTURAL PURPOSES IN THE LAKE SEYFE BASIN, TURKEY	38
6	<b>Zita MALCIENĖ Laima SKAURONĖ</b>	PROJECT METHOD MANAGEMENT ORGANIZING CULTURAL EVENTS	48
7	<b>Elena VALIONIENĖ Gabrielė JANKAUSKAITĖ Kristina STATKUTĖ</b>	EVALUATION OF THE INFLUENCE OF MARITIME TRANSPORT ON ECONOMICS CHANGES AT EASTERN COAST OF THE BALTIC SEA	55
8	<b>Asta BUTKUVIENĖ Neringa MAŽYLYTĖ Birutė ŽIURLIENĖ</b>	NATŪRALAUS KŪDIKIŲ MAITINIMO TENDENCIJOS PANEVĖŽIO MIESTE	65
9	<b>Gražina ŠNIEPIENĖ Simona KAMINSKAITĖ Kristina LETKAUSKAITĖ</b>	KOSMETOLOGŲ/GROŽIO TERAPEUTŲ VEIKLA KLIENTĖS NĖŠTUMO IR ŽINDYMO LAIKOTARPIU	72
10	<b>Rasa GLINSKIENĖ Reda JONUŠAUSKIENĖ Dalia URBONIENĖ</b>	GYVENTOJŲ PASITENKINIMAS GYVENIMO KOKYBE	85
11	<b>Jurgita LIEPONIENĖ</b>	SQL UŽKLAUSŲ OPTIMIZAVIMO TYRIMAS	94
12	<b>Rima ADOMAITIENĖ Santa MIEŽINIENĖ</b>	VITAMINŲ VARTOJIMO SVARBA GYDANT DANTENŲ LIGAS	102
13	<b>Vida ELIJOŠAITIENĖ Žygimantas SKUKAUSKAS Ligita ŠERYTĖ</b>	SAVIGYDA ANTIBIOTIKAIS PANEVĖŽIO REGIONE	110

14	<b>Rima STRELČIŪNIENĖ</b>	ELEKTRONINIŲ SCHEMŲ PROJEKTAVIMO PROGRAMOS	117
15	<b>Dalė MIKNEVIČIŪTĖ</b> <b>Asta VALACKIENĖ</b>	POKYČIŲ VALDYMO ORGANIZACIJOSE PROCESAI GLOBALIZACIJOS SĄLYGOMIS: TEORINĖS ĮŽVALGOS	123
16	<b>Donatas AVIŽA</b> <b>Rita BALTUŠNIKIENĖ</b> <b>Jovita KAUPIENĖ</b>	MAŽAENERGIO PASTATO SIENOS-PAMATO ILGINIO ŠILUMINIO TILTELIO EFEKTYVUMO TYRIMAS	130
17	<b>Danguolė PLUNGYTĖ</b> <b>Ričardas PLUNGĖ</b>	LIETUVOS PIRMŲJŲ GELEŽINKELIŲ TIESYBA IR INŽINIERIAUS S. KERBEDŽIO INDĖLIS, VYKDANT PIRMAŠIAS STATYBAS	137
	Informacija apie straipsnių autorius Information about the authors		143

# COOPERATION OF PUBLIC HIGHER VOCATIONAL SCHOOLS WITH SOCIO-ECONOMIC ENVIRONMENT IN THE CONTEXT OF BUILDING SOCIAL CAPITAL

*Artur Zimny*

*State University of Applied Sciences in Konin, Poland*

---

**Annotation.** The aim of the paper is to present and analyze the level, forms and effects of cooperation of public higher vocational schools operating in Poland with the socio-economic environment, more specifically, with territorial self-government units and with employers running business in the area of operating of the analysed higher vocational schools. The results of the survey allow the conclusion that public higher vocational schools, to the largest extent, cooperate with public institutions and municipalities, while to the least with voivodship self-governments.

**Keywords:** public higher vocational schools; socio-economic environment; cooperation; social capital.

---

## INTRODUCTION

Together with the two traditional missions of higher vocational schools, that is educational mission (educating students) and scientific mission (conducting research), there appears a third one, defined as social mission. It involves serving the community, developing cooperation and mutual relations with stakeholders, and, as a result, influencing through higher schools the socio-economic development (Woźnicki, 2013, p. 89). Although the elements of this mission are integrated in educational and scientific activity of higher schools, there appear watchwords characteristic of it and increasingly significant for the functioning of contemporary societies. Among other things, there should be mentioned: culturally active and educational role of higher schools; integrating influence on regional and local community; mediatorial role in solving social problems; creating and promoting social standards and behaviours; promoting scientific discoveries, disseminating technological advances and innovation; animating and active promotion of continuous education; commercialization of scientific research results; participation in regional and local initiatives aiming to raise competitiveness and attractiveness of cities and regions; cooperation with employers with the aim to adapt study programmes to the demands of labour market; participation of practitioners outside universities in the educational process and scientific research (Błażejowski, 2013; Koj 2013).

The aim of the paper is to present and analyze the level, forms and effects of cooperation of public higher vocational schools operating in Poland with the socio-economic environment, more specifically, with territorial self-government units (cities, districts, voivodships), on whose territory these universities operate, and with employers (public institutions, private enterprises, non-governmental organizations) running business in the area of operating of the analysed higher vocational schools. The paper presents the hypothesis that cooperation between public higher vocational schools and socio-economic environment contributes to building social capital in the areas where the universities operate. The hypothesis was verified based on the results of conducted survey, by means of induction and deduction method, as well as on observation and experience gained within nearly 20 years of operating of one of the state higher vocational schools. The paper demonstrates the necessity of building by higher schools adequate relationship with the community which should not be reduced to short-term and sporadic activities targeted at gaining temporary benefits but it should be complex and long-lasting.

## IMPORTANCE AND INDICATIONS OF BUILDING SOCIAL CAPITAL

Great contribution to promoting the concept of social capital had works by: P. Bourdieu, J. Coleman, R. Putnam and F. Fukuyama. Each of them defines this capital in a different way, emphasizing different aspects. According to P. Bordieu, social capital is a set of tangible and potential resources which are related to having a permanent network of more or less institutionalized relationships, based on mutual recognition and appreciation (Bordieu, 1986). In J. Coleman's opinion, the discussed capital is the ability to cooperate interpersonally within groups and organizations with the aim to pursue common interests. He

emphasizes that if social capital is not renewed and strengthened, it wears away and disappears with time (Coleman, 1990, p. 318). According to R. Putman, social capital is constituted by the features of social organizations, such as networks (systems) of individuals or households, and related to them norms and values which create external effects for the whole community (Putman, 1995, p. 258). The fullest definition seems to be the one proposed by F. Fukuyama, who claims that it is a set of informal ethical values and norms common for the members of a particular group and enabling them to cooperate effectively (Fukuyama, 2003, p. 169). In the light of the aforementioned formulations, it can be stated that social capital refers to such features as: social trust, ability to cooperate, values and norms of behaviour, networking and the sense of community, solidarity, being future-oriented, which can significantly affect the growth of social and economic activity of people. At the same time it must be stressed that, despite the definitional differences, nearly all researchers of social capital agree to the fact that it is shaped by the cooperation between different entities.

Social capital is different from other forms of capital in that it does not have a price because it is not an object of trade. It is also not a result of purposeful investing activity but is a side-effect of other activities (Fukuyama, 1997), and, most importantly, the aforementioned cooperation. Bearing in mind the fact that social capital is treated as an economic category, it must be expected that it will generate benefits not only in the social sphere but also the economic sphere. Theoretical considerations and empirical analyses conducted by various researchers confirm that there are links between social capital and economic sphere, and the aforementioned benefits are actually generated (Kostro, 2005). The intermediate function of social capital consists in completing the shortages of other forms of capital (financial, material, human) and in facilitating the creation of them (Raczkowska, 2014), and, as a result, it constitutes a key to the solution of its influence on economic development (Działek, 2011; Serageldin & Grootaert, 2000). High level of social capital occurs when people get on well with other members of the community, put trust in one another and work together or individually with the aim to improve the living conditions. People provided with high social capital more eagerly undertake economic activities which may generate income growth. It is not insignificant that in the conditions of poorly developed institutions, especially formal, high social capital in the form of strong and broad social networks can serve as a substitute of these institutions (Poskrobko, 2012). Generally speaking, the analyzed capital starts to be growingly regarded as a key to the explanation of the developmental differences between regions similarly provided with different forms of capital – it is becoming a missing link explaining fast development of some countries and regions and underdevelopment of others (Kostro, 2005).

In the economic sphere the main benefit from the existence of high social capital is reducing transaction costs, that is costs connected with getting information, entering into agreements, monitoring and other formal activities. Furthermore, social capital: boosts economic growth; facilitates decentralization of tasks and bottom-up creation of economic enterprises on a large scale, reduces the costs of employee recruitment; limits the „stowaway” syndrome; improves the use of available resources; raises the standard of living of households; fosters investments in children and treating them as additional supplementary pension; facilitates borrowing financial means from friends, neighbours and mutual assistance societies (Theiss, 2007). Furthermore, in the social sphere the main benefit from the existence of high social capital is functioning of civil society and creating groups constituting a kind of a filler between a state and a family (Sierocińska, 2011). Besides, high social capital: facilitates job search, especially in case of people from lower social classes, and in case of positions which do not require high qualifications, it facilitates promotion; it affects the quality of living and health in a positive way; it is a source of social support and informal care; it reduces social inequalities; facilitates passing knowledge, gaining skills and patterns of action; supports maintaining democratic social order; solidifies citizenship, integrates with the wider community; facilitates cooperation and increases engagement in solving social problems; develops social solidarity and helpfulness; increases the control of public administration; fosters inspiring the legislative process; increases the effectiveness of institutions; allows better diagnosis and meeting social needs (Theiss, 2007; Fukuyama, 2003).

## SCOPE AND METHODOLOGY OF RESEARCH

In order to diagnose the level, forms and effects of the cooperation between public higher vocational schools and socio-economic environment, a survey was carried out among university authorities, territorial self-government units authorities (cities, districts, voivodships), in whose regions these universities operate and employers (public institutions, private enterprises, non -governmental organizations) running

business in the regions of operating of the analyzed higher schools. Respondents' opinions were obtained by means of questionnaires consisting of several questions – mainly closed, which, as a rule were assigned responses in five-level Likert scale. It must be emphasized here, that the way of designing the questionnaires addressed to particular groups of respondents was similar which allowed comparing their attitudes and opinions. Questions formulated in the questionnaires largely concentrated on issues related to building social capital as a result of cooperation between public higher vocational schools and socio-economic environment.

The survey was conducted from September 2016 to February 2017<sup>1</sup>. The university and local authorities were sent a questionnaire in conventional form (on paper), with the university authorities being handed the questionnaires (36 copies) largely personally<sup>2</sup>, while local authorities, were sent the questionnaires – 87 copies – (15 for the voivodships authorities, 36 for districts authorities and 36 for cities authorities) by post. Employers were provided with the questionnaires by means of electronic forms (internet version), which were prepared and placed on ProfiTest Platform<sup>3</sup>. The invitation to fill in the online questionnaire was sent to 13.4 thousand employers<sup>4</sup> – entities located in the region of operating of public higher vocational schools, and particularly to public institutions (except self-government authorities)<sup>5</sup>, private enterprises and non-governmental organizations – mostly the ones whose subject of activity is consistent with the degree courses run presently by particular higher schools<sup>6</sup>. Email addresses of the aforementioned entities were obtained from their websites, business directories<sup>7</sup> and directories of foundations and associations<sup>8</sup>. The effect of the carried out survey was obtaining 36 questionnaires filled in by university authorities (return 100%), and mainly by rectors and vice-rectors, 75 questionnaires filled in by local authorities (return 86%), and particularly by people in charge of departments and faculties relevant to regional and educational issues and 370 questionnaires filled in by employers<sup>9</sup> (return 3.1%)<sup>10</sup>. High return

<sup>1</sup> Actual surveys were preceded by pilot studies in particular groups of respondents, which were carried out in August and September 2016. The pilot studies allowed making small corrections in the questionnaires.

<sup>2</sup> It took place during the XXV Plenary Assembly of Conference of Rectors of Public Vocational Schools (KrePSZ), which was held from 14 to 16 September 2016 in PWSZ in Elbląg.

<sup>3</sup> The questionnaire addressed to employers was accessible at <http://profitest.pl/s/5606/5Mo4SiIXas4OZF0e#>

<sup>4</sup> Sending off the invitations to several thousand addressees resulted from the assumption made during taking decisions about conducting the survey in electronic form. Firstly, it was assumed that for technical reasons, some part of the emails with the invitations will not reach their addressees. Secondly, low return of online questionnaires was expected. Therefore, wanting to obtain several hundred filled in questionnaires, the author decided to send the aforementioned invitations to several thousand employers, that is several hundred entities located in the region of operating of each of the 36 public higher vocational schools. It must be stressed here that the invitation was sent only once at each of the obtained email addresses.

<sup>5</sup> The public institutions which were sent the invitations to fill in the questionnaires were among others.: Fire Departments, police headquarters, Army Recruiting Commands, municipal police units, Revenue Agencies, customs, employment agencies, hospitals, social welfare centres, family support centres, libraries, sports and leisure centres, sanitary-epidemiological stations, courts, psychological and pedagogical counselling institutions, teacher training centres, education offices, kindergartens, elementary schools, lower secondary schools, upper secondary schools etc.

<sup>6</sup> Among 13.4 thousand invitations sent off to employers, 78% were addressed to private companies, 14% to public institutions, and 8% was sent to non-governmental organizations. It must be emphasized here that the invitation to fill in the questionnaire was also sent to business environment institutions whose task is to support regional and local development, namely to chambers of commerce, chambers of commerce and industry and regional development agencies.

<sup>7</sup> Business Navigator, <http://www.baza-firm.com.pl>; Panorama Firm, <http://panoramafirm.pl>

<sup>8</sup> Directory of non-governmental organizations, offices and institutions, <http://bazy.ngo.pl>

<sup>9</sup> It must be notified here that the invitation to participation in the survey was accepted in all by 502 employers, who attempted to fill in the questionnaires online. Unfortunately, 132 of them filled in the questionnaire partly which made it impossible to take these questionnaires into account in the conducted analysis.

<sup>10</sup> The actual return was calculated as a relation between questionnaires fully filled in and the number of subjects whom the invitation to participation in the survey most likely reached (from the statistics conducted by the author it results that due do various technical reasons over 1.6 thousand of the sent invitations (approximately 12% of 13.4 thousand) did not reach the addressees and the problem to a greater extent concerned private enterprises and non-governmental organizations than public institutions. Return was

in the first two groups of respondents was undoubtedly determined by the fact that the survey was organized with the organizational support of the Conference of Rectors of Public Vocational Schools (it was also not insignificant that the questionnaires were relatively short, which allowed the respondents to fill them in within several minutes). Relatively low return in the group of employers was caused largely by the fact that the survey was carried out in electronic form. Nevertheless, expecting the low return and at the same time wanting to get several hundred of filled in questionnaires, invitations were sent to several thousand employers<sup>11</sup>.

## **LEVEL AND FORMS OF COOPERATION OF UNIVERSITIES WITH SELF-GOVERNMENTS AND EMPLOYERS**

The results of the survey carried out among university authorities let us state that public higher vocational schools cooperate with many entities of socio-economic environment. Nearly 42% of the people filling in the questionnaire indicated cooperation with over 100 entities, while 1/3 of respondents claimed that their universities cooperate with 51-100 entities. Only every fourth person showed cooperation with a smaller number of entities of socio-economic environment (from 10 to 50). Analyzed universities cooperate to the greatest extent with public institutions and municipalities, while to the smallest extent with voivodship self-governments. Opinions of university authorities on close cooperation with public institutions and municipalities confirm to a large extent the results of the survey carried out among self-government authorities and employers (see Figure 1). Definitely closer cooperation with cities than with voivodships seems to be natural. It results from the fact that public higher vocational schools have a limited range of spatial influence. Next, close cooperation with public institutions is largely determined by the type of conducted degree courses. Many higher schools run studies: nursing, pedagogy, administration, internal security etc., which require cooperation with relevant public institutions (hospitals, schools, offices, fire departments, police headquarters, etc.).

Proceeding to the forms of cooperation between higher vocational schools and socio-economic environment, it must be emphasized that university authorities and local government authorities as well as employers most often indicate providing practice placements for students, organizing joint conferences, seminars, festivals of science, concerts, debates and discussion forums and consulting study programmes, including practice placement programmes for particular degree courses. The least frequently undertaken forms of cooperation with local governments, public institutions, private enterprises and non-governmental organizations are: conducting dual studies, conducting business incubator, technology park, trade cluster, etc and undertaking practical placement by academic staff in the aforementioned entities. The fact that there is a close cooperation between public higher vocational schools and entities of socio-economic environment in organizing student practice placement and consulting study programmes does not require any further comment. The necessity of cooperation in this scope results from mandatory legal provisions which oblige analyzed schools to run practical profile studies with all the consequences. When it comes to organizing joint scientific and cultural events, that is, the form of cooperation which, as it results from the responses provided by university authorities, plays a significant role, it must be emphasized, that this form of cooperation is relatively the least time-consuming and the least expensive. Definitely more difficult is cooperation based on conducting dual studies, combining education in higher school and being employed in a workplace, and on conducting jointly organizationally separate entities (business incubator, technology transfer centre, technology park, trade cluster, etc.). The forms of cooperation listed here are relatively the least frequently undertaken by public higher vocational schools. Very rare are also practical placements undertaken by academic staff in the entities of socio-economic environment.

The forms of cooperation with public higher vocational schools specified by local governments authorities and employers allow a conclusion that analyzed schools are entities initiating and implementing many various enterprises on regional and local level, engaging with stakeholders representing different fields of activity, integrating in this way regional and local community.

---

definitely higher in case of public institutions (almost 9%) than in case of non-governmental organizations (over 4%) and private enterprises (less than 2%).

<sup>11</sup> It must be stressed here that respondents-employers came from different parts of the country. From each region where the public higher schools operate, there were obtained several questionnaires. Thereby, the respondents represented spatially all the places where public higher vocational schools operate.



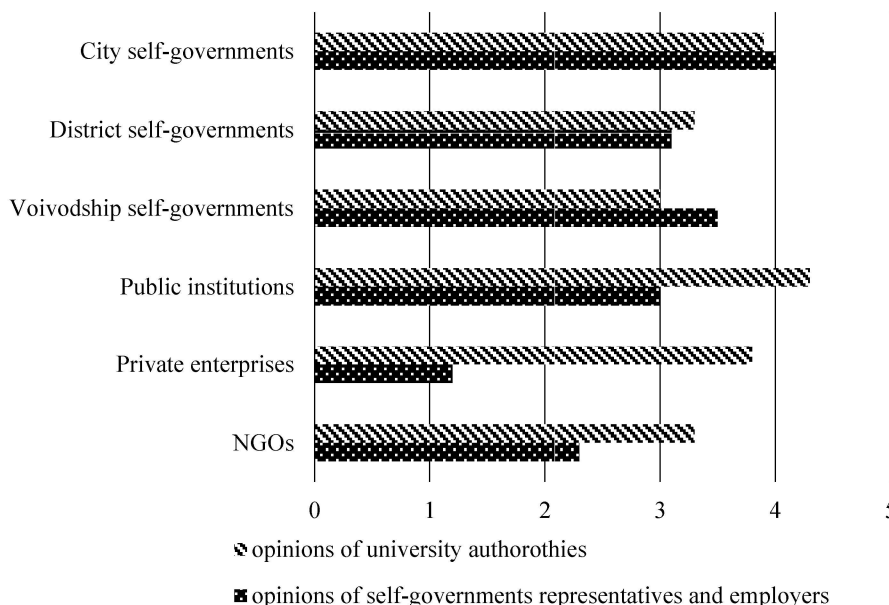


Figure 1. **Level of cooperation of public higher vocational schools with socio-economic environment<sup>12</sup>**

Source: Own elaboration based on the results of the survey carried out among university authorities (N=36), self-government authorities (N<sub>csg</sub>=31; N<sub>dsg</sub>=30; N<sub>vsg</sub>=14) and employers (N<sub>pi</sub>=165; N<sub>pe</sub>=160; N<sub>NGO</sub>=45).

At the same time, they are entities participating in the process of the EU Funds absorption and taking part in creating the vision of development of territorial self-government units. Another fact which requires attention is that most respondents (94% of the representatives of cities, 79% of representatives of voivodships, 75% of representatives of districts, 65% of representatives of non-governmental organizations and 51% of the representatives of public institutions) indicated that current cooperation with public higher vocational schools was multifaceted, which means that apart from the schools there were also other entities engaged.

### **EFFECTS OF COOPERATION OF HIGHER VOCATIONAL SCHOOLS WITH SELF-GOVERNMENTS AND EMPLOYERS**

In the opinion of university authorities, cooperation with self-governments, public institutions, private enterprises and non-governmental organizations contributes significantly to building partnership and mutual trust, building sense of community in regional/local environment, inspiring and stimulating regional and local social activity, and it also influences shaping positive behaviours and attitudes towards cooperation. The less frequent effect of this cooperation is modification of norms and rules of conduct of universities and facilitation and improvement of effective operating of higher vocational schools. Very similar opinions are expressed by representatives of self-governments (especially municipalities) and employers (especially of public institutions), confirming in this way rectors' and vice-rectors' point of view. The analysis of the opinions of university authorities, self-governments representatives and employers on effects of cooperation with socio-economic environment, among which positive opinions prevail (responses "rather yes" and "definitely yes"), shows that this cooperation to some extent contributes to creating institutional links and social capital as well as mutual learning in the regions where the public higher vocational schools operate.

<sup>12</sup> The level of cooperation was presented by means of mean average calculated with prior assigning the respondents' particular responses relevant numeric values, that is, lack of cooperation – 0; very low level of cooperation – 1; low level of cooperation – 2; average level of cooperation – 3; high level of cooperation – 4, very high level of cooperation – 5.

Table 1

### Assessment of effects of cooperation of public higher vocational schools with socio-economic environment<sup>13</sup>

Effects of cooperation*	Assessment of effects of cooperation in the opinion of:						
	university authorities	representatives of					
		city self-governments	district self-governments	voivodship self-governments	public institutions	private enterprises	NGOs
Including universities in the network of entities working together for regional/local environment	4.0	4.3	3.8	3.9	3.7	2.8	3.7
Building partnership and mutual trust in dealing with ESEE/university	4.2	4.6	4.1	4.3	4.1	3.6	3.8
Sharing organisational experience with ESEE/university	3.8	3.9	3.5	3.5	3.6	3.0	3.5
Shaping positive behaviours and attitudes towards the issue of cooperation	4.1	4.5	4.0	4.1	4.0	3.5	3.9
Building the sense of community in regional/local environment	4.1	4.5	3.9	3.9	3.9	3.2	3.7
Inspiring and stimulating regional/local social activity	4.1	4.1	3.9	3.6	3.7	3.0	3.9
Integrating regional/local community	4.0	4.0	3.6	3.6	3.7	2.9	3.5
Being future-oriented and solving regional/local problems	3.9	4.1	3.8	3.9	3.6	3.0	3.4
Modifying values and institutional culture of schools/ESEE	3.7	3.7	3.5	3.4	3.1	2.6	2.9
Modifying norms and rules of conduct of schools/ESEE	3.4	3.4	3.0	3.0	2.8	2.7	2.7
Facilitating and improvement of effectiveness and operating of schools/ESEE	3.6	3.1	3.0	2.9	3.0	2.8	2.8

\* The abbreviation ESEE used in the table stands for entities of socio-economic environment.

Źródło: Own elaboration based on the results of the survey carried out among university authorities (N=36), self-government authorities (N<sub>cs</sub>=31; N<sub>ds</sub>=30; N<sub>vs</sub>=14) and employers (N<sub>pi</sub>=165; N<sub>pe</sub>=160; N<sub>NGO</sub>=45).

## CONCLUSIONS

The process of building by public higher vocational schools adequate relationships with socio-economic environment should be complex and long-lasting. It should be one of the main goals of the development strategy of universities, and not reduce to short-term and temporary activities targeted at gaining immediate profit. Higher schools activities should be directed towards raising the quality of education, effective training of future employees and employers which in result will translate into the growth of competitiveness of the schools and their graduates on national and international labour market (Zimny, 2013), and, essentially, should contribute to building social capital in the regions where the schools operate. The activities should be implemented in a multifaceted way. They require engagement from both higher schools and from entities of socio-economic environment.

Summing up the results of the survey carried out among university authorities and local authorities and employers it is worth paying attention to two key questions. Firstly, public higher vocational schools cooperate with many entities of socio-economic environment – especially with public institutions and municipalities. Close cooperation with these entities is, to a large extent, associated with the limited territorial scope of the influence of the analyzed schools, and, at the same time, with the type of conducted degree courses, which require close cooperation with relevant public institutions. Secondly, in the respondents' opinion, cooperation of public higher vocational schools with entities of socio-economic environment contributes above all to building partnership and mutual trust, shaping positive behaviours and

<sup>13</sup> The assessment of effects of cooperation was presented by means of mean average calculated with prior assigning the respondents' opinions relevant numeric values, that is, definitely not – 1; rather not – 2; I have no opinion – 3; rather yes – 4; definitely yes – 5.

attitudes towards cooperation, and it also influences building the sense of community in regional/local environment. It leads to verify positively the hypothesis proposed in the article.

## REFERENCES

- Błażejowski, J. (2013). Mission and Message of Polish Higher Schools at the Beginning of the 21st Century. In: J. Woźnicki (ed.), *Mission and Servitude of University in the 21st Century*. Warsaw: *Institute of Knowledge Society, Polish Rectors Foundation*.
- Bordieu, P. (1986). The Forms of Capital. In: J.G. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*. New York: *Greenwood Press*.
- Coleman, J. S. (1990). *Foundation of Social Theory*. Cambridge: *The Belknap Press*.
- Działek, J. (2011). Social Capital – Theoretical Framing and Research Practice. *Regional and Local Studies*, 3, 100-118.
- Fukuyama, F. (2003). Social Capital. In: L. E. Harrison & S. P. Huntington (ed.), *Culture Matters*. Poznań: *Zysk and S-ka Publishing*.
- Fukuyama, F. (1997). Trust. Social Capital and the Way to Prosperity. Warsaw: *Polish Scientific Publishers PWN, Warsaw*.
- Koj, A. (2013). Evolution of University Ideas and Missions. In: J. Woźnicki (ed.), *Mission and Servitude of University in the 21st Century*. Warsaw: *Institute of Knowledge Society, Polish Rectors Foundation*.
- Kostro, K. (2005). Social Capital in Economic Theory. *National Economy*, 7-8, 1-28.
- Poskrobko, T. (2012). New Concepts and Theories of Development in Economy. In: S. Czaja, A. Becla, J. Włodarczyk & T. Poskrobko (ed.), (2012). *Challenges of Contemporary Economy. Chosen Issues*. Warsaw: *Difin Publishing*.
- Putnam, R. D., R. Leonardi, R. & Nanetti, R. (1995). Democracy in Action. Civic Traditions in Contemporary Italy. Cracow-Warsaw: *The Znak Social Publishing Institute, Stefan Batory Foundation*.
- Raczkowska, M. (2014). Defining Social Capital and its Measurment. *Society and Economy*, 2, 135-146.
- Serageldin, I. & Grootaert, C. (2000). Defining Social Capital. An Integrating View. In: P. Dasgupta & I. Serageldin (ed.), *Social Capital. A Multifaceted Perspective*. Washington D. C.: *World Bank*.
- Sierocińska, K. (2011). Social Capital. Defining, Measurement and Types. *Economic Studies*, 1, 69-86.
- Theiss, M. (2007). Relatives – Acquaintances – Citizens. *Social Capital and Local Social Policy*. Toruń: *Adam Marszałek Publishing*.
- Woźnicki, J. (2013). Reflection on the Importance of Mission in Institutional Culture of University. In: J. Woźnicki (ed.), *Mission and Servitude of University in the 21st Century*. Warsaw: *Institute of Knowledge Society, Polish Rectors Foundation*.
- Zimny, A. (2013). Cooperation of Universities with Entrepreneurs as an Expression of a New Approach to Higher School Management. *Pragmata Tes Oikonomias*, VII, 163-171.

## Summary

### Cooperation of public higher vocational schools with socio-economic environment in the context of building social capital

The relationship with socio-economic environment is becoming an increasingly significant aspect of operating of public higher vocational schools. It is doubtless that these schools cannot function like islands isolated from their environment. Cooperation with the environment are relations with enterprises, government and self-government institutions, non-governmental organisations, the media and inhabitants of cities and regions where these schools are located. Particularly significant is regional dimension of this relationship, associated with the aforementioned location of schools. The model of regional development in Europe is transforming into one where regions are becoming increasingly interdependent and they can rely less and less on traditional, compensatory or

matching, functions and funds of the State. Therefore, they must compete with one another even fiercer. The key factor within this competition is social capital shaped by universities located in particular regions.

The article presented and showed the analysis of the level, forms and effects of cooperation of public higher vocational schools operating in Poland with their socio-economic environment, and, more specifically, with territorial self-government units (cities, districts, voivodships), in whose region these schools operate and with employers (public institutions, private enterprises, non-governmental organizations) running business in the region of operating of the analyzed higher schools. Appropriate information was obtained during the survey which was carried out among university authorities, local authorities and employers from September 2016 to February 2017, by means of questionnaires consisting of several questions focused on the issues related to building social capital as a result of cooperation of higher schools with socio-economic environment.

The results of the survey allow the conclusion that public higher vocational schools, to the largest extent, cooperate with public institutions and municipalities, while to the least with voivodship self-governments. When it comes to forms of cooperation of the analyzed schools with socio-economic environment, the most frequent are organizing practice placement for students, organizing joint conferences, seminars, science festivals, concerts, debates and discussion forums as well as consulting study programmes, including practice placement programmes for particular degree courses. The least frequently undertaken forms of cooperation are: conducting dual studies, conducting business incubator, technology transfer centre, technology park, trade cluster etc. and undertaking practical placement by academic staff in the aforementioned entities.

In the respondents' opinion, cooperation of public higher vocational schools with self-governments, public institutions, private enterprises and non-governmental organizations contributes significantly to building partnership and mutual trust, shaping positive behaviours and attitudes towards cooperation, and it also influences building the sense of community in regional/local environment. It leads to a conclusion that this cooperation contributes to creating institutional links and social capital and to mutual learning, and in this way positively verifies the hypothesis adopted in the article, in the light of which, cooperation of public higher vocational schools with socio-economic environment contributes to building social capital in the regions where these schools operate.