# Youth Employment Policy and Career Guidance of Schoolchildren in North-western Lithuania

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### Abstract

The interest of academic society in analysing professional youth expectations and comparing them with labour market demand is natural since the role of universities in the creation of knowledge society as well as the initiation and implementation of regional changes is growing. Such researches help to determine youth career counselling and advice, and marketing orientations in institutions of higher education as the lack of prognosis of long-term situation in labour market is felt.

The article presents the survey dealing with the schoolchildren's from higher grades in secondary schools as well as gymnasiums in North-western Lithuania interest in areas of studies. 2957 children from higher grades in 83 schools were interviewed in autumn 2010 – spring 2011. The results indicate that the effect on the children's interest is made by the type of school, class or, in sporadic cases, the region.

*Keywords:* youth employment policy, career counselling, career guidance, career information.

# Introduction

Analysis of various EU publications (documents of the European Commission, UK Government reports, publications in "Forbes" in 2009-2010, Top-10 specialities) concerning future career enables to predict that the next decade shall face the growth of the need for creative and innovatively working people having deep knowledge in exact sciences and competences gained during interdisciplinary studies and ready to act in changing situations. The research<sup>1</sup> ordered by the Ministry of Education and Science and the Lithuanian Social Research Centre and carried out in 2011 indicates that the need for specialists in physical and technological sciences will increase in the upcoming years. This prognosis does not correspond to career expectations of Lithuanian youth, because the majority of them give priority to studies within the area of social sciences (over 50% of entrants choose these as their first priority).

<sup>1</sup> Specialistų ir kompetencijų esamos pasiūlos ir paklausos atitikimo analizė. The Survey Report. Lithuanian Social Research Centre, Vilnius, 2011. Available online at http://www.smm.lt/ svietimo\_bukle/docs/SMM%20EKSPERT%20ANALIZE%202 011%20BALANDIS.pdf

Analysing the situation, Lithuanian scientists indicate various causes of the current situation. It is suggested that career guidance (career information, career counselling, education for career, career inclusion) starts too late at schools (Pukelis, Garniene, 2004; Mokymosi krypties pasirinkimo galimybiu didinimas, 2007). Children are not offered quality services of career guidance, because there is a lack of specialists competent in career planning (Mokymosi krypties pasirinkimo galimybiu didinimas, 2007), professional qualification of a career counsellor is not legalised in educational institutions. There is a lack of clear labour market development forecasts for the next ten years, issued by the Ministry of Economy of the Republic of Lithuania and easily understandable for children. There are other affecting factors: the prestige of the profession in society, the decreasing interest in European studies, requiring higher intellectual endeavours, etc.

Striving to ensure the development of economy of the Republic of Lithuania as well as its regions, institutions of higher education get involved in the process of career guidance of children in order to compensate for the lack of information on important issues as well as to motivate children to express interest in future perspectives of the professions being offered. Currently, the lack of researches indicating changes in career expectations of children depending on their age, selected profile at school, reasons for selecting specialities with similar titles existing in Lithuania and offered abroad is observed. Due to the peculiarity of activities, institutions of higher education have possibilities to carry out researches on the effect of educational policy implemented during the recent years on career plans of children as well as can prognosticate relevant tendencies.

The **aim** of the applied diagnostic research presented in the article is to define the factors affecting changes in career selection of children after analysis of interest in separate areas of science of schoolchildren from higher grades in North-western Lithuania.

The **object** of the research is career guidance of schoolchildren in higher grades.

The **methods** of the research are analysis of national documents, statistical analysis, interview, descriptive statistics, Pearson Chi-Square criterion.

# **Theoretical Background of the Research**

European Commission, supporting the rapid increase in youth employment in Europe, identifies the increase in the percentage of youth studying in higher education or equivalent institutions as one of the most important ways for the youth to learn economics based on the competitors' knowledge and to stimulate innovations. High quality education and teaching as well as high quality services of career planning, professional services, development of skills necessary for international mobility are emphasized as these are the factors facilitating integration of youth into the labour market under conditions of the growing competitiveness (Judus jaunimas, 2010). The need for highly qualified employees has been constantly growing in the European labour market; the growth is forecasted for future, especially in spheres of advanced technologies, creation and implementation of innovations; therefore the increased attention of the European Commission to the youth striving for science is very reasonable (Kleibrink, 2011).

In Lithuania the Government is responsible for the implementation of the youth politics on the national level, meanwhile on the local level the responsibility is on the municipality administrations or other administrative institutions. The Ministry of Social Security and Labour of the Republic of Lithuania together with other ministries as well as other institutions and municipalities take care of the implementation of the youth employment policy. Institutions of higher education contribute to the youth employment increase by preparing highly qualified specialists for the labour market. During the last year, with the growing competition among institutions of higher education related to students and after assessment of the youth interest in studies that can ensure more rapid development of European science, institutions of higher education activate the mission of the public career education and information together. Higher educational institutions perform the marketing activities and career guidance spontaneously, fragmentarily, because there is a lack of funding as well as competences. The offered information about the variety of study programmes and competences acquired do not always reach children, especially those who lack experience in career planning or the more clear perspectives of the economic development of the Republic of Lithuania as well as the European Union.

Pukelis and Garniene (2004) say that "Career guidance and counselling services are important for the educational system, labour market in order to improve the interrelation between them. They are recognised as being the most important element for the strategy of the life-long learning; moreover it is one of the priorities in the Memorandum on Lifelong Learning by European Commission. In many countries around the world, the career counselling services are started to be offered for children of the pre-school age. Career counselling is especially important in the school age, because schoolchildren in comprehensive, secondary schools and gymnasiums must choose the learning profile, must link their choice with the future profession. Schools still do not have possibilities for offering services to help children in preparation for the future career". Scientists in Vytautas Magnus University (further - VMU) have been creating and developing the science of career planning, have been seeking to link it with the policy of the Republic of Lithuania on all levels in the sphere of science and education; they start with explanation of conceptions (according to Sokolova and Stanisauskiene (2007), career guidance system covers career information, counselling, planning and professional inclusion), description of forms and methods of counselling services and lead to the creation of policies to develop the inclusive system in the Republic of Lithuania, because the changing labour market requires career planning specialists constantly raising their qualification.

The aim of career guidance is to help a person (to enable him / her) to manage the personal career at any stage of life: after assessment of own interests, tendencies, and skills to make decisions regarding learning, studies or work. Currently, theoreticians and practicians in VMU have been involved in the discussion on status quo of the profession of career consultants in the global context, because specialists have already been prepared, though their competence and preparation for activity is not properly used due to the lack of profession in the Republic of Lithuania (Pukelis, Navickiene, 2010). Qualified career consultants have been prepared for several years already, but their status has not been legalised yet; schools delegate the responsibility for career information and counselling services to the teachers who have less hours. In the meantime the issues of career planning have already become the object of a separate field of study (career development) experiencing paradigm change (Sampson, 2009). There is a number of scientific publications about career planning, information, and employment of various means in integrating people into higher education, labour market, and continuous education (Venable, 2010; Renfuss, 2009).

Organised and formalised career counselling in Lithuania is the most actively organised in educational institutions, places for profession acquisition, labour exchanges, schools, and institutions of higher education. Talking of the mission of universities on this aspect, Zydziunaite and Crisafulli stress that "the University can help the early development of the professional identity of students (to recognise psycho-social behaviour of a person after formation of educational services, to introduce activities of institutions, important for some concrete fields of studies after giving possibilities for self-realisation, self-analysis, development and life-long learning) (Zydziunaite, Crisafulli, 2010).

The need of regional universities for making prognosis, conducting researches (especially on youth) on career expectations and their comparison with labour market demand is very reasonable bearing in mind the growing role of universities in regional development and occurring changes (universities as the agents of regional changes; Rodrigues, 2011), and the creation of knowledge society and its development (Gal, Ptacek, 2011).

# Insufficient Career Guidance within Implementation of the Youth Employment Programme

There is a lack of clear prognosis for the Lithuanian economic development for the next decade, the wider and more active explanation, introduction to and publication of the youth employment as well as the analysis of the labour market situation, offered by the Lithuanian Institute of Social Research (former name: Labour and Social Research Institute); the quota at institutions of higher education and later the structure of graduates have been determined by the selection of entrants for several years. Apparent popularity of social sciences (Tables 1, 2) in university and college studies is observed. Together with the introduction of the system of study grants, the state has initiated the regulation of students' flows, but via the state financed positions only.

Table 1

# Popularity of Areas of Studies (the First Priority) Among Entrants to Universities Operating in the Republic of Lithuania (%)

Year of En-	Area of Studies						
trance	Social Scien- ces Technologies Biomedical Sciences		Humanities	Physical Sciences	Arts		
2009	55	12	12	9	7	5	
2010	53	12	15	9	6	5	

Table 2

# Popularity of Areas of Studies (the First Priority) Among Entrants to Colleges Operating in the Republic of Lithuania (%)

Year of En-	Area of Studies						
trance	Social Scien- ces	Technologies	Biomedical Sciences	Humanities	Physical Sciences	Arts	
2009	57	21	14	2	2	4	
2010	49	28	17	1	1	4	

In 2011, over 31500 Study Contracts were signed with the first year students. Their distribution by areas of studies evidence the popularity of social sciences among entrants: Study Contracts for social sciences were signed by 35% of students in state financed positions and by 69% in paid positions, for technological sciences – by 33% and 11% respectively, for biomedical sciences – by 14% and 12%, for physical sciences – by 8% and 1%, for humanities – by 6% and 4%, for arts – by 4% and 3%.

State aid in regulating flows of students in order to correspond to the main tendencies in the joint higher education space in Europe has been started to be applied recently. Introduction of the "study grant" financed by the state and giving the possibility to receive higher quality studies as well as its distribution to spheres relevant to state development by type of institutions of higher education (universities, colleges), popularisation of technological, biomedical, physical sciences by giving additional financing for events, popularising exact sciences, organised by institutions of higher education (2010-2011, project financing); since 2007 the increase in possibilities for selecting the learning direction for schoolchildren has been implemented (*Mokymosi krypties pasirinkimo galimybiu didinimas*, 2007), after understanding that the strict school profiling "dislodged" the technological profile into the career peripheries – these are the positive endeavours of the Government of the Republic of Lithuania, but unfortunately it is not enough to re-orient the Lithuanian youth to project their own career according to real tendencies of the European labour market.

When choosing profession as well as in future the youth shall be influenced by objective and subjective factors: the profiling of schools in 2000-2007 not linked with economic prognosis of the Republic of Lithuania, the profession prestige in society, insufficient preparation of children to project own career, poorly regulated variety of study programmes offered and implemented in Lithuanian institutions of higher education, etc. In 2002 it was stated that the most popular field in gymnasiums was economic, meanwhile the most unpopular were arts, technologies, and Lithuanian philology studies (Pazyma del gimnazijos koncepcijos, 2002). Researches reveal that a minority of children tend to select technological profile (9.5%), because its selection has always been linked with vocational training, meanwhile 40% of children in grades 11-12 would like to study technological sciences (Mokymosi krypties pasirinkimo galimybiu didinimas, 2007, p. 7-11). The research carried out in 2007 has demonstrated that only 27.8% of specialists were taught all four programmes in technologies in grades 5-8 in 144 Lithuanian schools where

the teaching of technologies was offered (there were 1130 schools offering the general education in the Republic of Lithuania at that time).

Another problem is the lack of professional career guidance services in Lithuania. In 2007 it was stated that career guidance was started too late – in the  $10^{th}$  grade only and that there was a lack of trained specialists who would be able to offer high quality information and counselling services for schoolchildren; there was no joint policy on educating apt children in Lithuania (*Mokymosi krypties pasirinkimo galimybiu didinimas*, 2007, p. 8-9).

There has been no analysis performed on the effect of the higher or lower number of programmes by the areas and fields of studies introduced at www.aikos.lt on the entrant (Table 3). Career counselling specialists in schools, who do not have the special preparation, could hardly explain differences for children between such a high number of study programmes; the schoolchildren can neither understand differences between skills gained in study programmes of different fields of studies nor link them with economic development tendencies in the European Union or the Republic of Lithuania.

Table 3

	Number of study programmes on the website by fields, areas of studies, titles (units)								
Studies	Social Scien- ces, 13 fields	Technological Sciences, 15 fields	Biomedical Sciences, 14 fields	Humanities, 8 fields	Physical Sciences, 8 fields	Arts, 5 fields			
University Bachelor's Degree Studies	125	90	41	80	51	63			
Non-University Bache- lor's Degree Studies	150	98	44	16	9	27			

Variety of the First Cycle Study Programmes in AIKOS System (2011)

# **Research Methodology**

Siauliai University Marketing Group organised short interviews with children from grades 8-12 in autumn of 2010 and spring of 2011 during visits to Lithuanian schools aligned with career information hours; the questionnaire was used in which children had to mark their own interest in areas of science and studies. Meetings were organised by pedagogues responsible for career information in schools. Schoolchildren were informed that representatives of Siauliai University would introduce studies at Siauliai University, the admission procedures, labour market development prognosis; therefore children, relating their future with other Lithuanian or foreign institutions of higher education, participated in the meetings.

2957 schoolchildren from 83 Lithuanian schools (31 secondary schools and 52 gymnasiums) participated in applied diagnostic survey. Students from Siauliai (28.8%), Taurage (17.5%), Kaunas (15.2%), Panevezys (14.9%), Klaipeda (12.6%), Telsiai (8.6%) and Utena (2.4%) districts were interviewed. The majority of the respondents (82.4%) were residents of North-western region of Lithuania. Children from grades 8-12 in secondary schools and grades 1-4 in gymnasiums participated in the survey. Distribution of the respondents by their grades was as follows: grade 8: 0.4%, 9 (I): 3.9%, 10 (II): 15.3%, 11 (III): 33.1%, 12 (IV): 47%. In the school year 2010-2011, 285 secondary schools and 212 gymnasiums operated in Lithuania; therefore the survey covers 10% of secondary schools and 24.5% of gymnasiums and partially reflects career guidance of schoolchildren from higher grades in North-western Lithuanian region.

*Instrument of the Survey* is a questionnaire based on questions (with suitable answer to be marked) and spheres of interest linked with Siauliai University study programmes in all 6 areas: arts, humanities, physical, social, biomedical, and technological sciences. Areas of studies were presented popularly in the questionnaire: humanities were represented by languages and history, social sciences – by pedagogy, business, economics, and social work, physical sciences – by physics, optometry, mathematics, and informatics, biomedical sciences – by public health, arts – by theatre, music, stage art, art, and design. The list did not include the specific branch of studies – the speech therapy, the studies of which include subjects from biomedical and social sciences.

Other methods were also used during the survey, namely descriptive statistics and Pearson Chi-Square criterion. The survey was expected to indicate whether school types (gymnasiums, secondary schools), ages of children (grade), place of residence (region) have an effect on career guidance of schoolchildren and how they correlate with spheres of interest.

# **Results of the Survey of Attitude of Schoolchildren towards Career Guidance**

**Factor of school type.** The survey data reveals (Figure 1 and Table 4) that children **in secondary school** are statistically more significantly (p=0.010, i.e.,  $p<\delta=0.05$ ) interested in technologies and engineering (23.5%) than those in gymnasiums (18.5%). Meanwhile children in **gymnasiums** statistically are more significantly (0.000, i.e.,  $p<\delta=0.05$ ) interested in pedagogy (14.9%) than those in secondary schools (12.7%).



Fig. 1. Spheres of Interest of Respondents by School Type

Table 4

Statement		Type of School			
Interested in:		Gymnasium	Secondary School	χ2	р
Interested in Pedagogy	No	85.1%	87.3%	32.381	0.000
Interesteu in Feuugogy	Yes	14.9%	12.7%	52.301	0.000
Interested in Technologies, Engineering	No	81.5%	76.5%	11 260	0.010
Interestea in Technologies, Engineering	Yes	18.5%	23.5%	11.368	0.010
Interested in Physics,	No	90.6%	89.9%	2.949	0.815
Optometry	Yes	9.4%	10.1%	2.949	0.815
Interneted in Ante Design	No	76.6%	75.6%	4.011	0.260
Interested in Arts, Design	Yes	23.4%	24.4%	4.011	
Interneted in Theater Stage Art Marie	No	81.4%	82.1%	1.283	0.733
Interested in Theatre, Stage Art, Music	Yes	18.6%	17.9%		
Interneted in Dusiness Fromenics	No	71.2%	71.7%	2.08	0.555
Interested in Business, Economics	Yes	28.8%	28.3%		
Interneted in Network Spinson	No	74.1%	75.3%	2.1.40	0.542
Interested in Natural Sciences	Yes	25.9%	24.7%	2.148	0.542
Interested in Languages History	No	66.1%	68.6%	2 5 5 5	0.314
Interested in Languages, History	Yes	33.9%	31.4%	3.555	
Interneted in Mathematics Information	No	77.5%	79.9%	2 4 4 4	0.220
Interested in Mathematics, Informatics	Yes	22.5%	20.1%	3.444	0.328
Interested in Dublic Health Cosial Work	No	71.9%	74.5%	5 15(	0.524
Interested in Public Health, Social Work	Yes	28.1%	25.4%	5.156	0.524
	No	96.1%	95.8%	( 05(	0.072
Interested in Speech Therapy	Yes	3.9%	4.2%	6.956	0.073

### Spheres of Interest of Respondents by School Type

One of the tasks for schoolchildren in the questionnaire was to select the speciality which they link their future to. By school type, statistically significant (Table 5) are the following indicators (p=0.011, i.e., p< $\delta$ =0.05): children from **gymnasiums** link their future to business and economics (17.1%) and social work and public health (6.3%), meanwhile those in **secondary schools** link their future to technologies and engineering (8.6%) and sport (2.8%). In all cases it is obvious that interest in subjects and separate activity spheres is not always linked to the future profession, there is an evident gap: over 28% of gymnasium students are interested in business, economics, but only 17.1% link their future with this sphere; meanwhile of those 23% of children in secondary schools who are interested in technologies and engineering, only 8.6% (i.e. one third), plan to link their future to these sciences.

Table 5

	2	of School	Туре	Statement Link future with speciality of:	
p p	χ2	Secondary School	Gymnasium		
		8.8%	7.3%	Art, Design	
		1.6%	1.6%	Theatre, Acting	
		3.3%	3.1%	Pedagogy	
		11.7%	17.1%	Business, Economics	
		4.0%	5.2%	Natural Sciences	
0.01	54.218	4.4%	5.4%	Languages, History	
		8.6%	5.8%	Technologies, Engineering	
		2.8%	2.9%	Mathematics, Informatics	
		5.5%	6.3%	Public Health, Social Work	
		2.8%	1.7%	Sport	
		17.8%	16.9%	Other	

# Future Links to Selected Speciality by School Type

**Factor of grade (age of schoolchild).** The survey data indicates (Table 6) that when the attitude of children is compared by grades, statistically significant differences appear, with children in lower grades (8-10) being more interested in art specialities (theatre, music, stage art (p=0.002, i.e., p< $\delta$ =0.05), art, design (p=0.000, i.e., p< $\delta$ =0.05) as well as in spheres requiring more skills in exact sciences: physics, optometry (p=0.001, i.e., p< $\delta$ =0.05), mathematics and informatics (p=0.008, i.e., p< $\delta$ =0.05), technologies and engineering (p=0.014, i.e., p< $\delta$ =0.05) than those in

higher grades. The interest in exact sciences decreases with grade (Tables 6, 7). There is an evident reduction of interest in arts (Table 8).

Interest in social sciences remains similar in grades 8-10 and 11-12. A bit higher interest in humanities by children from grades 11-12 is observed (in grade 8 - 38.46%, grade 9 - 23.08%, grades 10 and 11 - 36% each, grade 12 - over 30%), as well as in public health and pedagogy. Children in grades 8-10 selected a greater variety of spheres of interest.

Table 6

Statement		Grades		χ2	р
Interested in:	8-10		11-12		_
Dedresser	No	87.2%	91.4%	12 702	0.001
Pedagogy	Yes	12.6%	8.6%	13.792	0.001
Technologias Engineering	No	71.1%	78.1%	14.963	0.000
Technologies, Engineering	Yes	28.9%	21.9%	14.905	0.000
Physics,	No	77.9%	82.9%	9.442	0.002
Optometry	Yes	22.1%	17.1%		0.002
Auto Dosion	No	86.7%	85.2%	1.056	0.304
Arts, Design	Yes	13.3%	14.8%		0.304
Theatus Stage Ant Music	No	71.8%	71.4%	0.049	0.824
Theatre, Stage Art, Music	Yes	28.2%	28.6%		0.824
Pusinas Farmanias	No	74.2%	74.7%	0.070	0.779
Business, Economics	Yes	25.8%	25.3%	0.079	0.779
Natural Sciences	No	67.2%	66.7%	0.055	0.014
Ivatural Sciences	Yes	32.8%	33.3%	0.055	0.814

# Spheres of Interest of Respondents by Grade

Continued to table 6

Languages History	No	76.9%	81.1%	6.085	0.014
Languages, History	Yes	23.1%	18.9%		0.014
Mathematics, Informatics	No	74.8%	79.5%	7.052	0.008
Mainematics, Informatics	Yes	25.2%	20.5%	7.053	0.000
Public Health, Social Work	No	75.5%	71.6%	4 (10	0.099
Fublic Health, Social Work	Yes	24.5%	28.4%	4.618	0.099
Speech Theyapy	No	95.1%	96.3%	1.997	0.158
Speech Therapy	Yes	4.9%	3.7%	1.997	0.138

Table 7

# Decrease in Interest of Children in Exact Sciences: Criterion of Grade

Grade		Children interested in (%)						
Graue	Physics, Optometry	Mathematics, Informatics	Technologies, Engineering					
8 <sup>th</sup>	0.00	15.38	15.38					
9 <sup>th</sup>	21.37	29.06	20.51					
$10^{\text{th}}$	13.23	27.80	25.34					
$11^{\text{th}}$	9.14	23.00	17.15					
12 <sup>th</sup>	8.03	18.38	20.55					
	<i>Chi square value 13.887</i> ( <i>p</i> =0.031)	<i>Chi square value 24.545</i> ( <i>p</i> =0.001)	Chi square value 14.617 $(p=0.023)$					

Table 8

# Decrease in Interest of Children in Arts: Criterion of Grade

Grade	Children interested in (%)			
Graue	Art, Design	Music, Theatre, Stage Art		
$8^{th}$	38.46	30.77		
9 <sup>th</sup>	39.32	30.77		
$10^{\text{th}}$	32.29	23.77		
$11^{\text{th}}$	23.10	19.61		
$12^{\text{th}}$	20.19	14.62		
	Chi square value 49.989 (p=0.001)	<i>Chi square value 36.657 (p=0.001)</i>		

The survey revealed that interest in public health, social work, and pedagogy increases with grade: there is a consistent growth with every higher grade (Table 9).

Table 9

# Change in Interest of Children in Public Health, Social Work, Pedagogy: Criterion of Grade

Grade	Children interested in (%)			
Graue	Pedagogy	Public Health, Social Work		
8 <sup>th</sup>	0.00	7.69		
9 <sup>th</sup>	7.69	12.82		
10 <sup>th</sup>	10.31	23.54		
11 <sup>th</sup>	12.94	28.13		
$12^{th}$	17.29	29.52		
	<i>Chi square value 24.191 (p=0.001)</i>	Chi square value 24.106 ( $p=0.020$ )		

One of the aims was to identify professions which respondents link their future with. Analysing

by grade, it can be seen that children statistically significantly (p=0.000, i.e., p< $\delta$ =0.05) link their future

with these specialities (Table 10): respondents from grades 8-10 believe that they would study specialities linked with arts (art, design (9.1%)), sports (2.8%) as well as informatics and mathematics (3.7%); respondents from grades 11-12 (I-IV) expressed the opinion that their future would be linked with business and economics (16.5%), public health, social work (7.2%). These results confirm that Lithuanian schoolchildren shall give priority to specialities of social sciences for a while, because 20% of survey participants from grades 11-12 link their future to business, economics, pedagogy, meanwhile orientation towards professions gained on the base of exact sciences and necessary for the economy of the world, the European Union, and Lithuania was expressed by the minor part (approximately 10%) of the survey respondents from grades 11-12.

It can be said that the possibility to orient children apt for technologies and engineering to prepare for interesting activity sphere via career information is lost as early as in grades 8-10, because the interest in studies requiring higher intellectual endeavours decreases in higher grades.

Table 10

Statement	Gra	ıdes		
Interested in:	8-10	11-12	χ2	р
Art, Design	9.1%	7.2%		
Theatre, Acting	1.7%	1.6%		
Pedagogy	2.6%	3.4%		
Business, Economics	12.4%	16.5%		
Natural Sciences	5.0%	4.8%		
Languages, History	4.6%	5.3%	42.173	0.000
Technologies, Engineering	7.2%	6.5%		
Mathematics, Informatics	3.7%	2.7%		
Public Health, Social Work	2.9%	7.2%		
Sport	2.8%	1.8%		
Other	16.1%	17.6%	1	

# Respondents' Future Linked with Speciality: Criterion of Grade

**Factor of region.** The research data indicates (Table 11) that in comparing the attitudes of children by their place of residence (region) statistically significant differences appeared, with children from all regions being more interested in pedagogy (p=0.021, i.e., p< $\delta$ =0.05), technologies, engineering (p=0.049, i.e., p< $\delta$ =0.05) and art (p=0.022, i.e., p< $\delta$ =0.05). Separate regions are exceptional in career guidance of children: Telsiai region is more oriented towards social sciences (pedagogy, business, economics), Siauliai region – towards physical (physics, optometry) and social (business, economics) sciences, Klaipeda region – towards humanities, Panevezys region – towards theatre, music, stage art, Utena region – to-

wards technologies and engineering, art, design, mathematics, informatics, health, Taurage region – towards humanities and natural sciences, theatre, music, stage art, Kaunas – towards health sciences, humanities, natural sciences. It therefore can be presumed that these career guidances by regions are affected by many factors: 1) active career information policies carried out by institutions of higher education operating in the region (Klaipeda, Siauliai, Kaunas, Telsiai); 2) socio-economic development of the region (Utena region and the neighbouring Ignalina region have developed industry requiring high technologies); 3) cultural traditions (cases of Panevezys, Utena, Taurage), etc.

Table 11

<b>Spheres of Interest</b>	of Respondents	by Place	of Residence	(Region)
1	1	•		· · ·

Statement		Regions								
Interested in:		Siauliai	Klaipeda	Telsiai	Panevezys	Utena	Taurage	Kaunas	χ2	р
Pedagogy	No	85.4%	85.9%	77.9%	86.7%	88.7%	86.3%	88.6%	16.449	0.021
	Yes	14.6%	14.1%	22.1%	13.3%	11.3%	13.7%	11.4%		
Technologies, Engineering	No	82.7%	78.1%	80.6%	81.0%	74.6%	77.2%	79.7%	6.434	0.049
	Yes	17.3%	21.9%	19.4%	19.0%	25.4%	22.8%	20.3%		
Physics,	No	75.0%	75.8%	78.3%	78.3%	70.1%	87.3%	76.8%	16.309	0.022
Optometry	Yes	25.0%	24.2%	21.7%	21.7%	29.9%	12.7%	23.2%		

Arts, Design	No	75.0%	92.5%	89.3%	92.5%	88.5%	85.9%	89.6%	16.738	0.270
	Yes	25.0%	7.5%	10.7%	7.5%	11.3%	14.1%	10.4%		
Theatre, Stage Art, Music	No	82.7%	84.5%	83.0%	77.6%	80.3%	81.1%	80.0%	10.195	0.178
	Yes	17.3%	15.5%	17.0%	22.4%	19.7%	18.9%	20.0%		
Business, Economics	No	69.8%	71.0%	65.6%	76.5%	71.8%	72.1%	73.3%	12.457	0.087
	Yes	30.2%	29.0%	34.4%	23.5%	28.2%	27.9%	26.7%		
Natural Sciences	No	75.0%	75.9%	78.3%	75.8%	76.1%	72.4%	69.2%	10.247	0.175
	Yes	25.0%	24.1%	21.7%	24.2%	23.9%	27.6%	30.8%		
Languages, History	No	75.0%	64.7%	68.8%	67.6%	72.2%	63.4%	65.1%	9.821	0.199
	Yes	25.0%	35.3%	31.2%	32.4%	27.8%	36.6%	34.9%		
Mathematics, Informatics	No	79.0%	76.9%	81.4%	78.5%	73.2%	75.9%	81.0%	6.434	0.490
	Yes	21.0%	23.1%	18.6%	21.5%	26.8%	24.1%	19.0%		
Public Health, Social Work	No	72.5%	74.6%	70.0%	73.8%	70.4%	74.3%	68.3%	12.442	0.571
	Yes	27.5%	25.4%	30.0%	26.2%	29.6%	25.5%	31.7%		
Speech Therapy	No	95.9%	94.8%	94.1%	96.2%	95.8%	97.3%	97.5%	8.511	0.290
	Yes	4.1%	5.2%	5.9%	3.8%	4.2%	2.7%	2.5%		

### Conclusions

The survey in higher grades of North-western Lithuanian schools having been done, it appears that fears of Lithuanian scientists expressed in 2003-2007 and related to increasing interest of children in social sciences and decreasing interest in technologies have been fully confirmed. Aids and initiatives of the Government of the Republic of Lithuania as well as the Ministry of Education and Science for motivating schoolchildren to choose physical, technological sciences are inefficient. Indicators of admission to higher education institutions in 2009-2011 as well as results of the current survey indicate that children in grades 11-12 (gymnasium grades III-IV) link their future with social sciences more than with other areas of studies. The survey revealed that in separate cases, school type (secondary school or gymnasium) and age of children (grades 8-10, grades 11-12) are also important.

Children in secondary schools are more interested in technologies and engineering than gymnasium students are. They relate their future to these sciences. Gymnasium students are significantly more interested in pedagogy than secondary school children are. There are more children in grades 8-12 in gymnasiums who link their future with business, economics, social work, public health than in secondary schools.

The variety of interest of children in grades 8-10 in sciences is wider: there are more children interested in arts, physical sciences, technologies, and engineering. In grades 11-12 the interest in public health, pedagogy, and humanities is a little higher. Interest in social sciences is similar in both age groups. The reduced interest in exact sciences (mathematics and informatics, physics) and arts is observed in higher grades. Schoolchildren in grades 8-10 are convinced that they would study specialities in arts, sports, mathematics and informatics. Respondents in grades 11-12 (I-IV) link their future with business, economics, public health, social work more than those in grades 8-10.

The comparison by regions revealed that there is some favour of students to certain areas of studies. Schoolchildren in Telsiai region are more inclined to social sciences than those in Taurage region (more towards humanities and natural sciences, theatre, music, stage art), Utena region (more towards technologies and engineering, art, design, mathematics, informatics, health), or Kaunas region (more towards health, humanities, natural sciences) are. Schoolchildren in Siauliai region are more oriented towards physical and social sciences, meanwhile in Klaipeda region – towards humanities and in Panevezys region – towards arts.

The survey results revealed the deeper need for research and exposed its possible subjects that could be expressed by problem questions: what determines the fact that interest spheres of children in some schools are linked with future plans, while in others are not? What determines that children from one region are inclined to different areas of studies?

The research highlighted the great need for the state economy prognosis and professional career guidance services for schoolchildren in early age.

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Liukineviciene, L.

### Jaunimo užimtumo politika ir Šiaurės Vakarų Lietuvos moksleivių profesinės orientacijos

#### Santrauka

2009-2011 m. Lietuvoje stebimas aukštojo mokslo siekiančio jaunimo augantis domėjimasis socialiniais mokslais ir mažėjantis susidomėjimas fiziniais ir technologiju mokslais. Tokia situacija, kai Europos darbo rinkoje nuolat auga aukštos kvalifikacijos specialistų poreikis technologijų srityje, skatina mokslininkus ieškoti susidariusios situacijos priežasčių. Viena priežasčių - vėluojantis ir nepakankamai kvalifikuotas profesinis orientavimas mokyklose, nes vis dar neiteisintas karjeros planuotojo profesijos statusas, mokyklose trūksta specialias studijas baigusių ir šia veikla gebančių kvalifikuotai atlikti darbuotojų, aukštujų mokyklų siūlomų programų įvairovė ir jose įgyjamų gebėjimų įvairovė labai didelė, sunku matyti programos susietumą su konkrečiomis veiklomis darbo rinkoje. Kita priežastis - už jaunimo užimtumo politikos įgyvendinimą atsakingos institucijos menkai inicijuoja Lietuvos Respublikos ūkio ir darbo rinko prognozių artimiausiems metais pristatymą ir viešinimą, todėl pasirenkant profesiją šiuo metu vis dar svarbesnis profesijos prestižas nei gilesnė būsimų darbo rinkų analizė.

Šiaulių universiteto Rinkodaros grupė 2010 m. rudenį ir 2011 m. pavasarį įvykusių vizitų į Lietuvos mokyklas metu greta profesinio informavimo valandos organizavo trumpa, į susitikima atvykusių VIII–XII klasių moksleivių apklausą, panaudodama anketą, kurioje žymėjo domėjimąsi mokslų, studijų sritimis, kurias galbūt ateityje jie gilins. Tyrime dalyvavo 2 957 mokiniai iš 83 Lietuvos mokyklų (31 vidurinės mokyklos ir 52 gimnazijos). Apklausta Šiaulių (28,8 proc.), Tauragės (17,5 proc.), Kauno (15,2 proc.), Panevėžio (14,9 proc.), Klaipėdos (12,6 proc.), Telšių (8,6 proc.) ir Utenos (2,4 proc.) apskričių moksleiviai. Dauguma apklaustųjų (82,4 proc.) – Šiaurės Vakarų Lietuvos regione gyvenančių. Respondentai - vidurinių mokyklų VIII–XII klasių ir gimnazijų I–IV klasių mokiniai. Respondentai pagal klases pasiskirstė taip: VIII klasės – 0,4 proc., IX (I) – 3,9 proc., X (II) – 15,3 proc., XI (III) – 33,1 proc., XII (IV) - 47 proc. klasių mokiniai. 2010-2011 mokslo metais Lietuvoje veikė 285 vidurinės mokyklos ir 212 gimnazijų; taigi tyrimas apėmė apie 10 proc. vidurinių ir apie 24,5 proc. gimnazijų ir iš dalies atspindi Šiaurės Vakarų Lietuvos regiono vyresniųjų klasių moksleivių profesines orientacijas.

Tyrimo instrumentas – klausimų pagrindu parengta anketa (žymimas tik teigiamas atsakymas), domėjimosi sritys siejamos su Šiaulių universiteto studijų programomis, kurių yra visų 6 sričių: menų, humanitarinių, fizinių, socialinių, biomedicinos, technologijų mokslų. Tyrime naudoti kiti metodai: duomenų analizės metodas – aprašomoji statistika, Pearson Chi-Square kriterijus. Tyrimu buvo ieškoma atsakymo, ar mokyklų tipai (gimnazijos, vidurinės mokyklos), moksleivio amžius (klasė), gyvenamoji vieta (apskritis) turi įtakos moksleivių profesinėms orientacijoms ir kaip jie koreliuoja su domėjimosi sritimis.

Tyrimo duomenys parodė, kad mokiniai vidurinėje mokykloje statistiškai reikšmingai labiau (p = 0.010, t. y.  $p < \delta = 0.05$ ) domisi technologijomis ir inžinerija (23,5 proc.) nei gimnazijoje besimokantys mokiniai (18,5 proc.). Tuo tarpu gimnazijose mokiniai statistiškai reikšmingai labiau (0,000, t. y. p  $< \delta = 0,05$ ) domisi pedagogika (14,9 proc.) nei vidurinėse mokyklose besimokantieji (12,7 proc.). Gimnazijose besimokantys moksleiviai labiau sieja savo ateitį su verslu ir ekonomika (17,1 proc.), socialiniu darbu ir visuomenės sveikata (6,3 proc.), o vidurinių mokyklų mokiniai - su technologijomis ir inžinerija (8,6 proc.), sportu (2,8 proc.). Visais atvejais matyti, kad domėjimasis mokomaisiais dalykais, atskiromis veiklos sritimis ne visada siejamas su būsima profesija, tad akivaizdus atotrūkis. Jeigu per 28 proc. gimnazistų domisi verslu, ekonomika, tai savo ateitį su šia sritimi sieja tik 17,1 proc. Iš 23 proc. technologijomis ir inžinerija susidomėjusių vidurinių mokyklų moksleivių tik 8,6 proc. planuoja sieti savo ateitį su šiais mokslais, t. y. trečdalis.

VIII–X klasių moksleivių domėjimosi mokslais įvairovė platesnė. Tarp jų, lyginant su XI–XII klasių mokiniais, daugiau buvo susidomėjusiųjų menais, fiziniais mokslais, technologijomis ir inžinerija. XI–XII klasėse nežymiai daugiau domimasi visuomenės sveikata, pedagogika ir humanitariniais mokslais. Domėjimasis socialiniais mokslais panašus abejose amžiaus grupėse. Pastebimas susidomėjimo tiksliaisiais mokslais (matematika ir informatika, fizika), menais mažėjimas einant į vyresniąsias klases. VIII–X klasėse besimokantieji labiau įsitikinę, kad jie ateityje studijuos su menais, sportu, matematika ir informatika susijusias specialybes. XI–XII (I–IV) klasių respondentai, lyginant su besimokančiais VIII–X klasėse, ateitį labiau planuoja sieti su verslu ir ekonomika, visuomenės sveikata, socialiniu darbu.

Pagal apskritis taip pat matyti, nors ir nežymus, bet atskirų regionų moksleivių prielankumas vienoms sritims, lyginant su kitomis studijų sritimis. Telšių apskrities moksleiviai labiau orientuoti į socialinius mokslus, lyginat jų rodiklius su Tauragės (labiau į humanitarinius ir gamtos mokslus, teatrą, muziką, estradą) ar Utenos (labiau į technologijos ir inžinerijos mokslus, dailę, dizainą, matematiką, informatiką, sveikatą), Kauno (labiau į sveikatos, humanitarinius, gamtos mokslus) apskričių moksleiviais. Šiaulių apskrities moksleiviai labiau linkę į fizinius ir socialinius, Klaipėdos – į humanitarinius, Panevėžio – į menų mokslus.

Tyrimo rezultatai parodė gilesnių tyrimų poreikį, iškėlė jų galimą kryptingumą, kurį galima išreikšti probleminiais tokiais klausimais: kas lemia, kad vienose mokyklose moksleivių domėjimosi sritys siejasi su ateities planais, o kitose ne? Nuo ko priklauso, kad vieno regiono moksleiviai labiau orientuoja save į atskiras studijų sritis? Tyrimas dar labiau užaštrino valstybės ūkio prognozių ir kvalifikuotų profesinio orientavimo paslaugų moksleiviams kuo ankstesniame amžiuje didžiulį poreikį.

*Pagrindiniai žodžiai*: jaunimo užimtumo politika, karjeros konsultavimas, profesinis orientavimas, profesinis informavimas.

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