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# Dr inż. Ireneusz Żuchowski

PBN ID: 906111

ORCID:0000-0002-3998-1892 Scopus Author ID: 57194203956

Wyższa Szkoła Agrobiznesu w Łomży - PBN ID: 2681

## Mgr Joanna Grzemska

III Liceum Ogólnokształcące im. Jana Pawła II w Grudziądzu

# MgrAnna Żuchowska

Szkoła Podstawowa w Miastkowie

# STUDENTS' POTENTIAL IN TERMS OF ENTREPRENEURSHIP AND EVALUATION OF THE ENTREPRENEURSHIP TEACHING PROCESS IN POST-PRIMARY / SECONDARY SCHOOLS IN POLAND

# Introduction

The concept of entrepreneurship in literature is analysed in many ways in three approaches (Łochnicka, 2016, pp. 14-15):

- entrepreneurship as an attitude,
- entrepreneurship as behaviour / action,
- entrepreneurship as a process.

The multidimensionality of the concept of entrepreneurship is shown by Zajdel (2016, pp. 13-15), who performs a detailed analysis of the approaches of various authors to its definition. The approach of entrepreneurship and its variables have changed over time (Table 1).

Table 1. Definitions and variables that describe entrepreneurship

Author	The concept of	Variables describing
	entrepreneurship	entrepreneurship
Schumpeter	Recognising opportunities for	The tendency to operate in
(1934)	implementation of ventures that	conditions of uncertainty
	are profitable and risk-taking to	1. Exploration and exploitation of
	implement them.	market opportunities
Churchill	The process of discovery and	Technological and organizational
(1983)	development of capabilities to	innovation
	create new value through	Exploration and exploitation of
	innovation, acquisition of	market opportunities

	necessary resources and managing the process of value creation.	
Timmons (1990)	The process of creating or identifying opportunities and using them despite of their current resources (). It is an creative act of an entrepreneur who finds in him and devotes enough energy to initiate and build a company or organization, rather than just observe, analyse and describe it.	The tendency to operate in conditions of uncertainty Exploration and exploitation of market opportunities Entrepreneurial personality of a manager
Hisrich & Peters (1992)	The process of creating something different, because of its value in the framework of which necessary time and effort is devoted to achieve this goal, assuming the accompanying financial, psychological and social risk, and expecting obtaining financial rewards and personal satisfaction.	Technological and organizational innovation The tendency to operate in conditions of uncertainty Exploration and exploitation of market opportunities Entrepreneurial personality of a manager
Frey (1993)	Starting a venture and (or) its growth, which occurs through the use of innovation, by management assuming the risk.	Technological and organizational innovation The tendency to operate in conditions of uncertainty
Piasecki (1998)	Entrepreneurship is the process: - which includes the action taken for the analysis of opportunities of start and development (or just development) of the venture, its financing and the possibility of meeting the effects of such action; - which can take many different forms and shapes, including initiation of a venture, creativity and innovation in developing new products or services, managing an existing venture in such a way that it develops quickly and continuously, seeking financial and material supply sources for potentially growing number of	Technological and organizational innovation The tendency to operate in conditions of uncertainty Market and intraorganizational flexibility Exploration and exploitation of market opportunities Entrepreneurial personality of a manager

	ventures, accepting risk in the	
	development of new or	
	expansion of existing ventures	
	(these elements are the part of	
	the entrepreneurial process,	
	although not all of them must	
	participate in each activity).	
Kraśnicka	Entrepreneurship is an activity	The tendency to operate in
(2001)	that stands out by: activity and	conditions of uncertainty
	dynamism, innovation, looking	Technological and organizational
	for changes and reacting to	innovation
	them, perceiving opportunities	Market and intraorganizational
	and their use, regardless of the	flexibility
	resources (at the moment),	Exploration and exploitation of
	willingness to take risks, which	market opportunities
	main motive is to multiply the	
	capital.	
Sudol	Feature (way of behaving) of	Technological and organizational
(2008)	entrepreneurs and companies,	innovation
	that means the willingness and	Market and intraorganizational
	ability to undertake and solve	flexibility
	creative and innovative new	Exploration and exploitation of
	problems, while taking into	market opportunities
	consideration its risks, the	Entrepreneurial personality of a
	ability to use the available	manager
	opportunities and flexibility to	
	adapt to changing conditions	

Source: (Chmielecki, Sułkowski, 2016, p. 95)

Entrepreneurship is one of the pillars of the socio-economic development of spatial systems of various scales, from local to regional, national and global (Rachwał 2017, p. 331).

Entrepreneurship performs multiple functions in the economy (Figure 1).

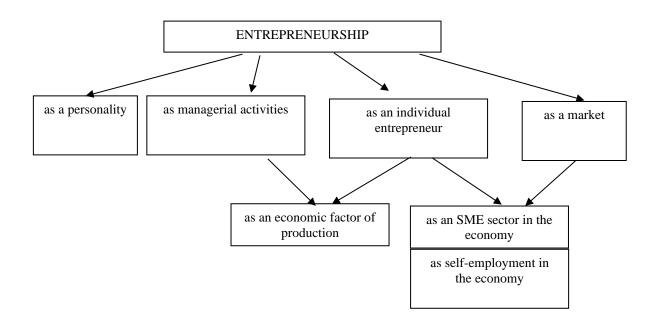


Figure 1. Basic functions of entrepreneurship in economic sciences *Source:* (Wach 2015, p. 26)

The main task of Entrepreneurship Education (EE) is to prepare young people to enter the labour market and to develop a sense of initiative and entrepreneurial skills among them. This preparation takes place primarily within the education system, by shaping entrepreneurial attitudes at all stages of a young person's development, from early education to universities (Rachwał et al., 2016).

Some studies show a positive relationship between entrepreneurship education and entrepreneurial attitudes, intentions or actions, but the evidence is still not strong (on Graevenitz 2010, p. 3).

Basic knowledge of market mechanisms and the ability to make economic decisions are necessary nowadays not only, as it is commonly believed, in the adult life of every human being, but also at the stages of childhood and adolescence, during which preparation for social and economic activity takes place (Rachwał et al. 2018, pp. 390-391).

Therefore, it is important that entrepreneurship education processes are improved at every stage of education. Research by Bae et al. (2014 p. 241) suggests that entrepreneurship education must be improved and much more targeted if its goal is to change entrepreneurial intentions.

In order to find out about the assessment of the education process from the students' point of view, the research was undertaken to determine the changes that have occurred in the process of entrepreneurship education and in shaping entrepreneurial attitudes of students of technical and high schools.

The aim of the study is to analyse the entrepreneurial potential of secondary school and secondary school students in Grudziądz and compare them with the selected research results of Grzybowska-Brzezińska (2011).

Therefore, in accordance with the research of Grzybowska-Brzezińska (2011), the following main research areas were identified:

- 1. Analysis of entrepreneurial attitudes of high school students,
- 2. Analysis of the potential of students' pro-entrepreneurial activity,
- 3. Analysis of the degree of willingness to start their own business,
- 4. Analysis of the strengths and weaknesses of teaching the subject of entrepreneurship.

## Methodology of the author's own research

Based on the research report "The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie Voivodeships. Research report" developed as part of a project financed by the European Social Fund under Sub-measure 2.2.1 "Improving the quality of services provided by supporting institutions development of entrepreneurship and innovation "of the Human Capital Operational Program, research was conducted to assess the entrepreneurial potential of upper secondary school students and to assess the entrepreneurship attitudes in secondary schools. The following specific objectives have been established:

- 1. Analysis of entrepreneurial attitudes of high school students,
- 2. Analysis of the potential of students' pro-entrepreneurial activity,
- 3. Analysis of the degree of willingness to start your own business,
- 4. Analysis of the strengths and weaknesses of teaching the subject of entrepreneurship.

Basing on the above-mentioned research was to obtain the results that would allow for their comparison with the results of the author's own research conducted among students of upper-secondary schools in Grudziądz. To ensure the comparability of the results, a questionnaire was obtained from the author of the report and the author's own research was carried out in the period 10.2018-02.2019 among 110 students. The research used the purposeful selection method, and the selection criterion was the upper secondary attendance during the research

<sup>&</sup>lt;sup>1</sup> M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrołęka, 2011

period. The study was conducted with the first 100 students who agreed to participate in the study.

The subjects of the research were students of upper secondary schools (technical secondary schools and high schools).

The research was conducted using the direct interview method. The questionnaire addressed to students consisted of 33 questions, which were grouped into the following areas:

- 1. the first area of ten questions was to collect information to identify entrepreneurial attitudes of students and to determine their activity,
- 2. the next four questions identified students' attitudes in terms of teamwork,
- 3. the next group of a few questions concerned the assessment of classes in the subject of entrepreneurship and on their basis it was possible to verify students' knowledge of the stages of starting their own business,
- 4. the next questions concerned the recognition of students' awareness of student cooperatives, their existence, tasks, assessment of the functioning of the schools in which the cooperative was present, and the determination of barriers to its establishment in institutions where there was no student cooperative.
- 5. and questions in the certificate in the following scope:
  - 1. Sex
  - 2. Age
  - 3. Grade
  - 4. School profile,
  - 5. Name of school

In the research process, apart from the commonly used methods of deduction and induction, selected qualitative, quantitative and mixed methods were used. The group of quantitative methods includes subgroups of methods: statistical, econometric,

and taxonomic. From the considerable arsenal of quantitative methods, the following measures were used from selected thematic ranges of statistical analysis:

- descriptive characteristics of distributions,
- arithmetic mean.
- median,
- analysis of a structure,
- indicator of structure,
- index of similarity of structure.

In the analysis of the test results for the comparability of the results, the methods of the analysis of the test results were used, as described by Grzybowska.

Arithmetic mean: measure of central tendency that represents the average value of a trait for individuals in a community. It is defined as the sum of the values accumulated for the measured feature by the number of all units making up

the community (sample). The analytical value of a measure may lower its sensitivity to extreme values.

Median: measure of central tendency. It is free from the disadvantages of the arithmetic mean due to the method of calculation that guarantees low sensitivity to extreme values. This is otherwise the second quartile. It divides the studied population into two equal parts in such a way that 50% of units have values lower than the median, and 50% - higher.

Indicator of structure: a measure that shows the share of a given feature variant in the structure. It is calculated as the ratio of the number of units with a given trait value to the size of the population (sample). The index level can be expressed as a percentage. The measure can take values from the <0.1> range, and in percentage terms - <0%, 100>.

Index of similarity structure: a measure that allows to determine the degree of similarity of the analyzed structures. It is calculated as the sum of the minimum index values for a given structure element in the compared groups. The index level can be expressed as a percentage. The measure can take values from the <0.1> range, and in percentage terms - <0%, 100>. Interpretation: the closer the index value is to one, the more similar the analyzed structures are.

The analysis of the results was carried out taking into account the division of respondents into voivodeships in which the research was carried out. Due to the lack of significant differences in the results, only selected problems by voivodeship were presented.

#### Characteristics of the respondents - the surveyed students.

55% of the surveyed students attended technical secondary school and 45% attended high school. In Grzybowska's research, the structure was as follows: technical school students - 64%, while high school students constituted 36% of the respondents.

Table 2 Structure of the respondents taking into account the type of school (in%).

Table 2 Structure of the respondents taking into account the type of school (in 70).				
Specification	Report * N-1169	Author's own research N-		
		110		
Technical secondary school	64	55		
High School	36	45		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

Students from four classes participated in the research. The largest number of students attended the third grade - 48%. The second largest group were students from the fourth grade - 20%. The least numerous group were students of the first grade - 15% of the respondents. The structure in Grzybowska's research was similar, as shown in Table 2.

Table 3 Level of classes attended by the surveyed students (in%).

Specification	Report * N-1169	Author's own research N-110
1st grade	11	15
2nd grade	20	17
3rd grade	46	48
4th grade	24	20

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

74% of women participated in the study, 15% more than in the study by Grzybowska, and 26% more in men, less by 15% than in the study by Grzybowska (Table 4).

Table 4 Gender of the surveyed students (in%).

Specification	Report * N-1169	Author's own research N-
		110
Female	59	74
Male	41	26

Source: Author's Own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

As emphasized by Grzybowska, a beneficial phenomenon is the fact that the vast majority of adults who will enter adulthood participated in the research, therefore, future prospects are important to them and they collect information about the possibilities of shaping their professional life, which largely depends on their entrepreneurial attitudes. The group of adults constitutes 68% of the respondents and was slightly smaller than in the cited studies (Table 5).

Table 5 Age of the surveyed students (in%).

Table 5 Age of the surveyed students (m /0).				
Specification	Report * N-1169	Author's own research N-		
		110		
15 years	1	2		
16 years	7	9		
17 years	19	21		
18 years	44	40		
19 years	27	27		
20 years	2	1		

#### **Analyzing student research results**

# Analysis of entrepreneurial attitudes among the surveyed students

Grzybowska, in order to diagnose the extent to which entrepreneurial attitudes are manifested among students of upper secondary schools and to determine the level of students' awareness of the attributes of an entrepreneurial person and to identify their activities, students were asked a few questions to verify the research goals.

In own research, the students, just like in the above-mentioned research, defined the features that distinguish an entrepreneurial person, defined what entrepreneurship means, identified what entrepreneurship can be manifested in, which contributes to the development of entrepreneurship.

Table 6 Features distinguishing an entrepreneurial person in the opinion of the surveyed students (in %)

sur veyeu students (m 70)		
Specification	Report * N-1169	Author's own research N-
		110
Intelligence	3	55
Responsibility	63	57
Agressiveness	3	1
Smartness	33	25
Ingenuity	88	91
Courage	34	5
Resourcefulness	71	62

Source: Own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostroleka, 2011

Among the features given, the students, both in Grzybowska's research and in their own research, most often indicated ingenuity in 88% and 91% of the respondents. Also, many students indicated resourcefulness (71% and 62% of responses).

As an important feature that should characterise an entrepreneurial person, students also indicated responsibility (63% and 57%).

A significant difference in the author's own research in relation to the cited studies was noted in the indications concerning intelligence. In case of Grzybowska's research, only 35 surveyed students indicated this feature. However, this feature was indicated by as many as 55% of students from Grudziądz.

Students were asked what, in their opinion, entrepreneurship means; the largest percentage of the respondents (77%) indicated a way of thinking and acting aimed

<sup>\*</sup> respondents could choose three features

at success. For the surveyed young people, entrepreneurship means success, although it should not always be mainly associated with it.

Table 7 The opinion of the surveyed students on the meaning of the word entrepreneurship (in%).

charchical ship (in 70).		
Specification	Report * N-1169	Author's own research N-
		110
Striving for success in accordance with the principle "the end justifies	13	9
the means"		
Skillful coping in various	37	14
situations		
Success-oriented mindset	50	77
and actions		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

Entrepreneurship in its wider scope means skillful coping in various situations; it is an activity that manifests itself in various areas of life. The analysis of Grzybowska's research results also included data compilation based on the voivodeships where the research was carried out, but no difference in the results was found. However, the results of author's own research carried out in Grudziądz differ significantly from those presented in the quoted research. Eight years have passed since this research, and it can be noticed that nowadays students associate entrepreneurship even more with thinking and acting towards success.

Grzybowska's research showed that 75% of the surveyed students believed that entrepreneurial attitudes could be manifested in every area of life. The results indicated a high awareness of the students. Author's own research has confirmed this. The vast majority, as many as 92% of the surveyed students from Grudziądz, also believe that the manifestations of an entrepreneurial attitude concerns every aspect of life. This shows a good understanding of the idea of entrepreneurship.

In the quoted research, taking into account the manifesting entrepreneurial attitudes, students were asked what the activities conducive to the development of entrepreneurial attitudes were. Grzybowska points out that the answers are puzzling, in which 47% of students indicate that assistance in everyday activities develops these attitudes, only 34% indicate work in a student cooperative, and only 16% see this opportunity in voluntary work. Different results were obtained in the author's own research. Students indicated that, in their opinion, contract work (40% of the respondents) and voluntary work in companies (36% of the respondents) are an important form of developing entrepreneurial attitudes.

Table 8 Manifestations of an entrepreneurial attitude in the opinion of the surveyed students (in%).

Specification	Report *	Author's own
	N-1169	research N-110
In business	21	5
At school	3	2
In every area of life: in the family, in society, at every	75	92
workplace		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

A small percentage of students (9% of respondents) believe that helping with everyday activities (cleaning, shopping, gardening, etc.) develops entrepreneurial attitudes. A small proportion of respondents, only 15%, consider work in a student cooperative or a school shop as a form of developing entrepreneurial attitudes. As stated by Grzybowska, work in shops within the school premises has been underestimated as a form of developing entrepreneurial attitudes both in her research and in the author's own research. It indicates that the students helping run the school shop learn efficient counting, customer service and responsibility you their work. Help the caregiver with theinventory. They canusethe acquired skills in the future. However, a small percentage of students perceiving work in a cooperative or a shop as a form of developing entrepreneurial attitudes may result from the small number of such organizations in schools.

Table 9 Forms of developing entrepreneurial attitudes in the opinion of the surveyed students (in%).

students (m /o).		
Specification	Report * N-1169	Author's own research N-
		110
Volunteering in companies	16	36
Working in a student	34	15
cooperative (school shop)		
Helping with everyday	47	9
activities (cleaning,		
shopping, gardening, etc.)		
Doing contract work	3	40

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

A large percentage of respondents, both in the case of Grzybowska's research and author's own research, is of the opinion that business behaviour "can be shaped by self-improvement". This was indicated by 68% and 66% of the surveyed students, respectively. Similar results obtained in both studies confirm

the stability of students' perception of this area. It is disturbing that students still do not think of school as a place of shaping entrepreneurial attitudes. As Grzybowska points out, this proves the students' lack of awareness in this regard, or the classes offered by the school are not what students consider as developing entrepreneurship.

Table 10 Sources of shaping entrepreneurial attitudes in the opinion of the surveyed students (in%).

Specification	Report * N-1169	Author's own research N-
They are congenital (inherited from ancestors)	6	9
They are acquired thanks to the environment in which people live	25	24
They can be developed through self-improvement	68	66
Others: they are shaped by the school	1	1

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

Working in a team allows you to shape entrepreneurial attitudes. Grzybowska's research showed that most students declare the ability to work in a team. The author's own research shows that these skills are being improved. The vast majority of respondents (73%) declared unequivocally that they can work in a team and 24% declare that they can rather work like this. Only 1% of respondents indicated that they cannot work in a team.

Table 11 Declaration of the surveyed students regarding the ability to work in a team (in%)

(III 70).		
Specification	Report * N-1169	Author's own research N-
		110
Yes, I can work in a team	59	73
Rather yes, I can work in a	39	24
team		
No, I cannot work in a team	2	1

Grzybowska's research has shown a large diversification of preferences in terms of the form of work. The highest percentage of students (40%) in these studies declared that the preferred form of work depends on the situation, while 39% of the respondents prefer to work in a team. The author's own research has shown greater uniqueness of preferences as regards the form of work. Most of the surveyed students of Grudziądz schools prefer to work in a team (51% of respondents), and 39% prefer individual work. Only 8% declared that the preferred form of work depends on the specific situation and 2% of the respondents did not have an opinion on this subject.

Table 12 Preferences of the surveyed students in terms of individual or team work (in%).

(III / 0):					
Specification	Report * N-1169	Author's own research N-			
		110			
Individually	17	39			
In a team	39	51			
I have no opinion	4	2			
It depends on the situation	40	8			

Source: The author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostroleka, 2011

The interviewed students, both in Grzybowska's research and in author's own research, believe that team work is more effective. This was indicated by 32% and 39% of the surveyed students, respectively. A significant percentage of 46% and 51%, respectively, indicated rather yes, but not sure. Very few people (2%) in author's own research stated that team work is not more effective. Lack of knowledge on this subject was declared by 10% and 8% of respondents, respectively.

Table 13 Assessment of team work in comparison to individual work in the opinion of the surveyed students (in%).

Specification	Report * N-1169	Author's own research N- 110
Yes, working in a team is more effective	32	39
Rather yes, it is more effective but I'm not sure	46	51
No, working in a team is not more effective	13	2
Not sure	10	8

According to Grzybowska, team work can also be a form of building entrepreneurial behaviour, which is why it is important for young people to see the advantages of this work. The vast majority of respondents see positive aspects of teamwork (over 90%) in both studies. In author's own research, only 2% of the respondents indicated that teamwork slows down the pace of work and none of the respondents indicated that it makes it difficult to perform the task.

Table 14 Assessment of team work in the opinion of the surveyed students (in%).

Table 14 Assessment of team work in the opinion of the surveyed students (in 70).					
Specification	Report * N-1169	Author's own research N-			
		110			
It enables the exchange of	41	42			
experiences					
It slows down the pace of	4	2			
work due to the difference					
of opinions of team					
members					
It makes it difficult to	2	0			
complete the task					
It increases the number of	52	56			
ideas					

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

The research shows that students do not often work in teams. Although it can be noticed that 7% more of respondents indicated that they worked in a team in selected lessons than in Grzybowska's research, a small percentage in both studies indicated that they usually worked in a team.

Table 15 The frequency of team work according to the surveyed students (in%).

table 13. The frequency of team work according to the surveyed students (iii /0).					
Specification	Report * N-1169	Author's own research N-			
		110			
Usually	11	14			
in selected subjects, e.g.	36	43			
Entrepreneurship					
Ocassionally	51	42			
Never	2	1			

Analysis of the activity of the surveyed students and the analysis of their

influence their entrepreneurship. Activity in various areas shapes the character and selected features of the student, which may be useful in professional future life, but also facilitate the decision to start a business. Both Grzybowska's and author's own research have shown that all surveyed students participate in some form of extra-curricular activities. A small percentage of the respondents participate in additional forms of classes at school. 8% of the respondents (Grzybowska's research) and 3% of the respondents (author's own research) declared active work in editing the school newspaper, and 12% and 16% of the respondents, respectively, declared activity in the school council. A significant difference can be seen in the percentage of students attending additional foreign language classes. In author's own research, this form of activity was declared by as many as 49% of respondents. This result is as much as 35% higher than in the cited studies.

Table 16 Additional forms of classes in which the surveyed students participate (in%).

Specification	Report * N-1169	Author's own research N-
		110
Editorial office	8	3
I attend a music school	2	0
I attend additional foreign	14	49
language classes		
I work in the school council	12	16
I do sports professionally	19	5
I am a member of a music	10	1
band		
I participate in interest	15	15
groups (e.g. theatre, chess,		
IT, photography)		
Volunteering in companies	6	11

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrołęka, 2011

In order to define the business activity of the surveyed students, they were asked about their experience and their knowledge of the scope of companies' functioning. In Grzybowska's research, 35% of the surveyed students declared that they had such experience. Author's own research showed that 44% of respondents have experience in business.

Table 17 Declared business experience among the surveyed students (in%).

Charification	Damant * N 1160	Author's own research N-
Specification	Report * N-1169	Author's Own research N-
		110
Yes, I have experience in	35	44
business		
I have no business	65	56
experience		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

Students who declared experience in business were asked what kind of experience it was. Seasonal work and internships are the business experience most often indicated by students, both in the cited research and the author's own research. Systematic contract work was indicated by 11% and 21% of respondents, respectively. Business experience related to the company run by parents or a family was declared by 18% and 17% of respondents, respectively.

Table 18 Declared business experience among the surveyed students (in%).

Table 10 Declared business experience among the surveyed students (m /v).				
Specification	Report * N-1169	Author's own		
		research N-110		
I was an intern	22	29		
A friend runs a business, I help	7	3		
I do contract work systematically	11	21		
I do seasonal work	26	30		
The company is run by parents or	18	17		
someone from the family				
Others - friends run a company, I often	1	0		
help them				

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostroleka, 2011

In order to define the manifestations of entrepreneurial activities, the surveyed students were asked about their interests in creating their own business activities and opinions about a full-time job or their own company and whether they had ideas and knowledge on how to create a business.

<sub>a</sub>20

	le 19 Op	oinion of t						ess (in%).		
Specification	Totally a	gree	I quite a	gree	I don't ki have no		I don't qu	ite agree	I don't ag	ree at all
	Report * N- 1169	Author's own research N-110								
Running your own business involves a greater risk than working full-time.	53	65	34	32	6	0	5	2	2	1
Working full- time is more time-consuming than running your own business.	12	9	12	11	15	10	38	37	23	33
Running your own business provides greater social recognition than a full-time job.	49	55	33	32	10	3	6	8	3	2
Working in your own company provides greater self-fulfillment than working full-time.	58	60	27	35	8	0	5	3	2	2
Working full- time provides better conditions for social security than working in your own company.	10	15	21	20	32	30	27	10	10	25
Working in your own company will provide you with a higher income than a full-time job.	48	61	33	21	11	11	6	5	2	2

In Grzybowska's research, 87% of students agree with the statement that running your own business is a greater risk than working full-time. Author's own research has shown that an even greater percentage, 97% of students from Grudziądz schools, think the same. This proves that students are very aware of the risks associated with running a business. Running your own business is a timeconsuming job that requires a lot of time. Such awareness is also shared by the respondents, which was confirmed by both the cited research and the author's own research. Most of the students stated that running their own business is a more time-consuming activity than full-time employment (61% of the cited studies, 70% of own research). In both studies, the majority of students agree that having your own company ensures greater social recognition than working full-time, and this was indicated by 82% and 77 respondents, respectively. The surveyed students also recognize that running a business allows for a much greater selffulfillment (85% and 95% of the respondents respectively). The respondents perceive work in their own company as more profitable (81 and 82% of respondents, respectively). However, the respondents did not associate running their own business with the possibility of obtaining better social security conditions.

The highest percentage of the surveyed students indicates independence as the most important benefit from having one's own business (32% of the cited studies and 44% of the author's own research). In the author's own research, a significantly greater percentage of respondents (29%), more than in the cited studies (12%), indicated satisfaction as a benefit. Interestingly, the proportion of students who point to big money as a benefit of running their own business is small and lower in current studies (10%) than in the cited studies (19%).

Table 20 Benefits of owning a business in the opinion of the surveyed students (in %).

(III %).		
Specification	Report * N-1169	Author's own research N-
		110
Independence	32	44
Satisfaction	12	29
Prestige	6	12
Real money	19	10
Hard work	18	2
Fear	0	0
Risk	10	3
Safety at work	3	2

It is necessary to agree with Grzybowska's conclusion that the main associations and attitudes of the students surveyed are positive, which may be a motive for setting up companies.

The majority of students surveyed consider setting up their own business. This percentage in author's own research is slightly higher by 4% than in the cited studies; it is generally high at about 60%. Those who did not consider this possibility accounted for 16% (cited studies) and 31% (own studies). In the studies cited almost a quarter of those surveyed and in the author's own studies 16% indicated an 'I do not know' reply.

Table 21 Are you considering starting your own business in the future? - responses of surveyed students (in %).

Specification	Report * N-1169	Author's own research N-
		110
Very likely	27	29
Rather yes	32	34
Rather not	12	11
No	4	10
I don't know	24	16

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

Students were asked about the reasons for deciding whether to start their own business. The main motive in the opinion of the respondents is the pursuit of personal fulfillment. This answer was indicated by 47% of respondents (cited) and 49% of respondents (author's own studies).

Table 22 Motives for making decisions about starting their own business in the opinion of the surveyed students (in %) \*

opinion of the surveyed students (in 70)					
Specification	Report * N-1169	Author's own research N-			
		110			
Striving for independence	47	49			
Need for decent earnings	40	44			
Fear of unemployment	14	11			
Example of friends and	8	10			
acquaintances					
Family tradition	9	16			
Others - personal fulfillment	5	7			

<sup>\*</sup> respondents could choose more than one answer.

A large percentage of the respondents indicated the need for decent earnings, respectively, 40% and 44% of the respondents. Few of the surveyed students in both studies indicate the fear of unemployment and the example of friends and acquaintances as a motive. The family tradition was indicated by 9% of the respondents in the research cited, while in author's own research the answer was indicated by 16% of students.

A large percentage of students declare their willingness to start their own business. The predicted date of implementation of these plans varies if we compare the results of the cited studies and current research (Table 20). The students participating in author's own research plan to start their own business in a more distant future than the students participating in the cited research.

Table 23 Declarations of the surveyed students as to the date of establishing their own business (in%).

Specification	Report * N-1169	Author's own research N-
below 2 years	46	33
below 5 years	22	44
below 10 years	20	7
I don't know	12	16

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

A large percentage of the respondents clearly declared that they had an idea for a company (61% of the cited studies, 59% of author's own research). 10% and 15% of the respondents, respectively, declared no idea.

Table 24 Declaration of having an idea for a business in the opinion of the surveyed students (in%)

students (III /0).		
Specification	Report * N-1169	Author's own research N-
		110
Yes, I have an idea for a	61	59
business		
Rather yes, I know what	30	26
business I'm going to start		
I have no idea for running a	10	15
business		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

As stated by Grzybowska, one of the main barriers to the creation of micro, small and medium-sized enterprises are formalities and formal and legal

requirements, which often discourage from entering a business. Most of the surveyed students declared that they knew the formal requirements to be met in order to start a business. Author's own research has shown that this percentage is higher than in the cited studies, which may prove that the school prepares students better and that students are interested in this subject.

Table 25 Knowledge of the surveyed students in the field of basic formalities

in the case of starting a business (in%)

I don't know what capital is needed

Specification	Report * N-1169	Author's own research N-110
Yes, I know what formalities need to be	51	62
done when setting up a company		
I quite know what formalities need to be	27	33
done when setting up a company		
I don't know	22	5

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostroleka, 2011

In both studies, a large percentage of students declared that they knew or rather knew what capital is needed to start their own business. This proves that the participants of the research thought out their ideas and were able to determine the costs associated with starting a business.

Table 26 Declaration of the surveyed students in terms of the knowledge of the capital needed to start a business (in%)

Specification Report \* N-1169 Author's own research N-110

Yes, I know what capital is needed 57 61

I rather know what capital is needed 28 32

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

15

The declared knowledge of the formalities necessary to set up one's own business is high. In order to verify the actual knowledge, students were asked to indicate what is needed to set up a business. It turns out that the results do not match the declarations. In the studies cited only 41% and in the author's own research only 3% more respondents correctly indicated what actions should be taken to start a business. The rest of the respondents defined the requirements incorrectly. This indicates that they do not have complete knowledge of the formal requirements for setting up a business.

Table 27 Knowledge of the formal requirements to be met in order to start a business among the surveyed students (in%).

among the sai veyea stadents (m / v).		
Specification	Report * N-1169	Author's own
		research N-110
Properly defined activities required for	41	44
establishing a business		
Incorrect definition of formal	59	56
requirements that are needed to set up a		
company		

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

The surveyed students were asked what, in their opinion, skills were necessary to run a business, and they correctly indicated the key features of an entrepreneur. The key feature, as indicated by 68%, is the ability to think creatively - creating attractive ideas and solutions. Another important feature, according to over 60% of respondents, is the ability to obtain funds that will allow for the launch and functioning of business activities and good team management, i.e. communication skills and efficient functioning in a team. Unfortunately, as it was previously analysed, students do not learn it at school.

Table 28 Key skills necessary to run a business in the opinion of the surveyed students (in%).

Specification	Report * N-	Author's own
	1169	research N-110
The use of the Internet in business	12	32
Knowledge of the law	29	41
Knowledge of a foreign language	32	31
Negotiation skills	38	28
Team management skills	61	45
Knowledge of accounting	19	15
Knowledge of marketing techniques	53	48
Knowledge of how to start a business	23	10
Fundraising skills	64	75
Ability to create a company's strategy	57	68
Ability to develop business plans	26	22
Ability to create attractive ideas	68	81
Others - skillful selection of employees	1	0

<sup>\*</sup> respondents could choose more than one answer.

According to students, the ability to create a company's strategy and knowledge of the principles of functioning and implementing marketing are the features that will allow an entrepreneurial person to start a business and run it in the market realities.

In the next chapter, students will evaluate the work during the entrepreneurship class and verify whether they have acquired the practical skills they required during their education.

# Analysis of the results of students' research in the field of work evaluation in the Entrepreneurship class

The Entrepreneurship class should provide students with the necessary knowledge and skills and prepare them for starting a business. Students were asked to evaluate the selected aspects related to teaching Entrepreneurship in their schools. Students were asked to evaluate the usefulness of the acquired skills in terms of their practical use to set up their own business.

Author's own research shows that students assess the usefulness of the acquired skills better during entrepreneurship classes than in the cited studies. A large percentage of students from Grudziądz schools (67%) assessed that they would use or might use the acquired skills in practice. This result is as much as 29% higher than in the cited studies. This shows that teaching entrepreneurship has a much more practical dimension than a few years ago.

Table 29 Assessment of the skills acquired during Entrepreneurship classes to be used in practice (in%).

Specification	Report * N-1169	Author's own
		research N-110
Yes, I will use it in practice	12	22
Rather yes	26	45
Rather not	38	13
No	14	8
Hard to say	10	12

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostroleka, 2011

Practical aspects implemented during Entrepreneurship classes are important in terms of preparing students to function on the labour market. Students were asked to indicate the activities carried out within this subject. The comparison of the results of author's own research with the results of the cited research shows that the activities carried out in the field of entrepreneurship have a much more practical dimension than a few years ago.

Table 30 Assessment of the implementation of activities in Entrepreneurship class in the opinion of the surveyed students (in%).

in the opinion of the surveyed students (in%).								
Specification	Yes	mostly	Yes, in certain No		I do not			
			lessons				remember	
	Report	Author's	Report	Author's	Report	Author's	Report	Author's
	* N-	own	* N-	own	* N-	own	* N-	own
	1169	research	1169	research	1169	research	1169	research
		N-110		N-110		N-110		N-110
Tasks were carried								
out on the basis of	25	32	43	55	17	3	15	10
business examples								
We practiced how to								
start our own	16	26	29	39	43	29	12	6
business								
We have been on								
trips in various	10	16	9	8	75	72	6	4
companies								
We learned how to								
set up a student	8	0	6	0	71	86	15	14
cooperative								
We established a	7	0	3	0	79	92	11	8
student cooperative		U		U		92		0
We mainly wrote	8	5	17	19	66	72	9	4
papers		3		19		12		4
We did tasks in	17	15	30	33	43	49	10	3
economics		13		33		49		3
We made a business	20	36	30	42	39	16	11	6
plan		30		42		10		U

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

During the classes, students work with examples of specific enterprises more often, practice starting their own business, go on trips to workplaces, develop a business plan and do economic tasks. Unfortunately, the surveyed students of Grudziądz schools did not encounter the issue of student cooperatives.

The practical number of classes is also confirmed by the answers to the question about the frequency of work in teams. A much higher percentage of respondents (64%) in author's own research indicated that team work is carried out on selected subjects, e.g. Entrepreneurship, than in the cited studies (36% of respondents). Compared to the research cited, as many as 32 students indicated that teamwork is used sporadically. These results also indicate positive changes in the use of teaching methods that shape important qualities needed and expected in the labour market.

Table 31	The frequency of	of work in team	s according to	the surveve	d students (	in%).

Specification	Report * N-1169	Author's own research N-110
		research in-110
Usually	11	16
In selected subjects, e.g.	36	64
Entrepreneurship		
Ocassionally	51	19
Never	2	1

Source: Author's own research and \* M. Grzybowska - Brzezińska, The potential of entrepreneurship in upper secondary schools in Mazowieckie and Podlaskie voivodeships. Research report, University of Economics and Social Sciences in Ostrolęka, 2011

When analyzing the results of author's own research against the background of the cited studies, it should be stated that students are getting better prepared by the school in the field of entrepreneurship. Teaching methods place greater emphasis on practical issues and shaping the skills expected on the labour market. Students notice that fact, pointing to the greater usefulness of the acquired knowledge and skills in their future professional life.

### **Summary and Final Conclusions**

The knowledge of the surveyed students in the field of shaping entrepreneurial attitudes is satisfactory, however, as the research shows, there are areas that require improvement.

Students taking part in the research aptly characterize manifestations of entrepreneurial behaviour and they can indicate the features of entrepreneurial people. They can also indicate the benefits of running their own business. The surveyed students possess skills connected with setting up their own company and they can define when it will happen. The main motive for starting a business indicated by students is the search for independence. This gives an interesting picture of young people for whom independence is more important than financial expectations.

The analysis of the research results concerning the evaluation of teaching Entrepreneurship and comparing them to the cited studies allows us to draw the following conclusions;

- the preparation of students to function on the labour market by schools is improving,
- student attitudes are more and more characteristic for entrepreneurial people,
- more and more students see the usefulness of the content and skills obtained while attending the Entrepreneurship class and indicate that it is useful in practice,
- entrepreneurship classes have a more practical dimension and are based on methods allowing to shape students' skills,

- teamwork is an increasingly popular method of teaching that allows for the development of cooperation skills,
- there is a need for further improvement of education processes in the field of entrepreneurship at the secondary school level - technical and high school.
- improving the processes of education in the field of entrepreneurship should be preceded by periodic surveys of students in order to find out their opinions on this process.

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#### **Summary:**

The article briefly discusses the concept and meaning of entrepreneurship. The results of the research were conducted among students of high schools and technicians from Grudziądz. The aim of the research was to assess the potential entrepreneurship of upper secondary school students and to assess the entrepreneurship climate in secondary schools and compare it in relation to the research conducted in 2011 by Grzybowska-Brzezińska. The research has shown that entrepreneurial students' potenial is getting higher. There is also the upper level of entrepreneurship education, but further improvement processes are still needed.

Key words: Key words: entrepreneurship, teaching entrepreneurship, display of entrepreneurship

JEL Classification: A20, L26